

Anorexia Nervosa in Wales:
Patient Treatment Experience and Healthcare Professional Awareness

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Dedicated to my Mam, Pamela Jean Cheshire

Always loved and dearly missed

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Abstract

Study one explored the service user experience of treatment for anorexia nervosa in the Welsh healthcare service. Factors such as treatment expectations, satisfaction, therapeutic alliance, motivation to change and engaging in treatment were considered by conducting in-depth interviews with participants who had a diagnosis of anorexia nervosa and were receiving secondary care.

Qualitative data were analysed using thematic framework analysis revealing six main concepts: service user description of anorexia; expectations of treatment for anorexia; the journey through the health service for anorexia; therapeutic alliance during treatment for anorexia; satisfaction with the health service; and service user recommendations to improve the health service.

Mapping and interpretation of the concepts drawn from the interviews resulted in a model exploring the relationship between expectations and satisfaction of treatment for patients with anorexia nervosa, and the effect upon motivation to engage in treatment and recover. Another model describing factors that affect therapeutic alliance was developed. The results are described with particular reference to the Self-Determination Theory (Ryan & Deci, 2000).

Study two used a four-stage, mixed-methods approach to develop and evaluate an anorexia nervosa awareness campaign for healthcare professionals. The campaign was developed using an integrative social marketing approach (NSMC: 2013): including formative research, process evaluation and outcome evaluation. Formative research included audience research (interviews and focus groups with healthcare professionals and healthcare professionals in training) in combination with theories of social cognition and persuasion to develop four posters. Process evaluation included campaign evaluation by healthcare professionals using questionnaires (open and closed ended questions). Appropriate modifications to the posters were made following the process evaluation, and two posters were chosen as the final intervention.

Outcome evaluation of the campaign was conducted by using a brief, four-item evaluation questionnaire completed by healthcare professionals (General Practitioners and nurses). Results from all phases indicated that the use of posters as the medium of the anorexia nervosa awareness campaign did not sufficiently raise awareness of anorexia nervosa, and therefore the limitations of the second study were considered.

Study three included development of a comprehensive audio-visual intervention to increase nursing students' self-efficacy regarding initial management of patients with anorexia nervosa. The intervention was developed and underpinned using the Transtheoretical Model Framework (Levesque et al., 2001), and then evaluated using a pre-post-test design. The intervention was successful in significantly increasing nursing students' self-efficacy regarding the initial management of anorexia nervosa. Furthermore, the nursing students' self-efficacy was high prior to the intervention, indicating that nursing students already feel confident to manage patients with the disorder. The methodological and theoretical implications are discussed.

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Glossary of abbreviations

AN	Anorexia Nervosa
ANAC	Anorexia Nervosa Awareness Campaign
APA	American Psychological Association
BED	Binge Eating Disorder
BMI	Body Mass Index
BN	Bulimia Nervosa
CAMHS	Child and Adolescent Mental Health Services
CBT	Cognitive Behavioural Therapy
CMHT	Community Mental Health Team
COREC	Central Office for Research Ethics Committee
CPN	Community Psychiatric Nurse
DBS	Deep Brain Stimulation
DSM IV-TR	Diagnostic and Statistical Manual of Mental Disorders (4 th edition, Revised)
DSM-5	Diagnostic and Statistical Manual of Mental Disorders (5 th edition)
ED	Eating Disorder
EDU	Eating Disorder Unit
FBT	Family-Based Therapy
GP	General Practitioner
HBM	Health Belief Model
HCP	Healthcare Professional
HSCIC	Health and Social Care Information Centre
ICD10	International and Statistical Classification of Diseases and Related Health Problems (10 th Revision)
NHS	National Health Service
NICE	National Institute for Clinical Excellence
NS	Nursing Student
NSMC	National Social Marketing Centre
NSSEIMANI	Nursing Student Self-Efficacy of Initial Management of Anorexia Nervosa Instrument
OIT	Organismic Integration Theory
PMT	Protection Motivation Theory
R&D	Research and Development
RANZCP	Royal Australian and New Zealand College of Psychiatrists

RCP	Royal College of Psychiatrists
RCT	Randomised Controlled Trial
SDT	Self-Determination Theory
SGA	Second Generation Antipsychotics
SSRI	Selective Serotonin Reuptake Inhibitor
TA	Therapeutic Alliance
TMT	Terror Management Theory
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UK	United Kingdom
US	United States
WAG	Welsh Assembly Government

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Overview of the Thesis

The current project included three main studies: the first used a qualitative design, and the second and third used mixed-methods (qualitative and quantitative).

Study 1 comprised a qualitative study which sought to explore the patient experience of treatment for anorexia nervosa. In particular, the study considered the relationship between expectations and satisfaction of treatment, the relationship of these factors with therapeutic alliance and the effect on the patient's motivation to engage in treatment and recover.

First, an overview of the literature relating to eating disorders is provided, particularly anorexia nervosa, bulimia nervosa and binge eating disorder. The aetiology, development and treatment of the disorders are described. Furthermore, the literature review visits the theoretical basis which underpins the interpretations of the AN treatment experience, in particular considering the effect of treatment expectations, satisfaction and therapeutic alliance, and the effect on the patients' motivation to engage in treatment. The methodology section of Study 1 provides a detailed description of the qualitative approach used, including the study design, participant details, materials used and research procedure.

The results section of Study 1 includes the three stages of Thematic Framework Analysis: familiarisation of data, development of the thematic framework and charting of data. Results from these stages are split into two areas: patient characteristics and health service characteristics. Later the two areas of the framework are drawn together by outlining the mapping and interpretation stages of the interview data analysis. The results are considered with particular reference to the Self-Determination Theory (Ryan & Deci, 2000). Relationships between patient characteristics and health service characteristics are explored using a novel model and thematic map. Lack of awareness regarding anorexia nervosa by HCPs was highlighted, and therefore the purpose of Study 2 was to develop and evaluate an anorexia nervosa awareness campaign aimed at HCPs using a social marketing approach.

Study 2 comprised a mixed methods study to develop and evaluate an anorexia nervosa awareness campaign. The literature review visits evidence which justifies raised HCP knowledge of anorexia. Intervention development and evaluation is considered, in particular an overview of the Social Marketing Approach. Phase 1, the formative research point of campaign development is described. Interviews, focus groups and literature relating to social cognition models and persuasion theory were used to develop the first draft of the

intervention. Process evaluation of the campaign using a mixed methods approach over Phases 2 and 3, where HCPs feedback was used to modify the campaign and provide partial evidence for the outcome evaluation. Finally, outcome evaluation was achieved by gathering quantitative data with HCPs regarding the effectiveness and appropriateness of the intervention. The results are discussed within the theoretical framework and limitations are acknowledged. Posters were deemed to be ineffective in raising a sufficient level of awareness of anorexia nervosa by HCPs. This justified a further study to develop an in-depth intervention using a stronger theoretical and developmental framework.

Study 3 comprised development of an intervention to increase nursing students' self-efficacy regarding initial management of anorexia nervosa. The intervention was developed using the Transtheoretical Model Framework. The literature regarding HCP knowledge of the disorder is reviewed briefly and the theoretical framework regarding self-efficacy is described. Attention is paid toward choosing an appropriate medium for the intervention, and the Transtheoretical Model is described.

The methodology for development of the intervention is described with particular reference to the Transtheoretical Model. The intervention was then evaluated using a pre-post test-design to establish whether the intervention was successful in increasing the nursing students' self-efficacy of initial management of anorexia nervosa. The results and limitations of the study are discussed.

An extensive reflexive chapter is provided to describe the journey of the researcher. In particular, a discussion of observations throughout the research process, including the limitations of the studies. The researcher pays particular attention to the learning process regarding research mythology, and the importance of choosing a strong psychological theoretical framework for research. The reflexive account concludes with the researcher discussing the PhD experience, and describes the valuable lessons learned.

Finally, an overview of the thesis is provided. Here the research aims of the studies are revisited, the key literature is described and the results summarised. Methodological and theoretical implications of each study are considered, and key points from the reflexive chapter are noted. Finally, future considerations are suggested and the thesis concludes.

Study 1

The Relationship between Motivation to Change, Therapeutic Alliance, Expectations, and Satisfaction of Treatment for Anorexia Nervosa: A Qualitative Inquiry

Context of the current study

Prior to data collection for the current study, the National Health Service (NHS) in Wales was criticised for lacking a comprehensive treatment strategy/care pathway for EDs (Keel, Dorer, Eddy, Franko, Charatan, & Herzog 2003; Which, 1998). In February 2004, Plaid Cymru launched a campaign to highlight the inadequate treatment available to ED sufferers. The National Assembly for Wales responded in September 2004 by acknowledging that funding was inadequate. They also acknowledged that the service failed to reflect the guidelines stipulated by the National Institute for Clinical Excellence (NICE; Plaid Cymru, 2004; National Commissioning Advisory Board, 2004; NICE; 2004). In Wales, if a person presents to a general practitioner with the criteria for AN, they are referred on to secondary care. Where treatment is available, the person will receive secondary care through an outpatient department and/or a community mental health team (CMHT). If the symptoms were life threatening (often reaching a low BMI of <15) then the patient may be hospitalised in a general psychiatric ward. If funding is awarded by the Government, then that person may be sent to England to receive inpatient treatment.

Improvements regarding the facilities to support the management of EDs in Wales were suggested, but there was no understanding of whether funding would be available to implement the proposals (National Public Health Service for Wales, 2005; National Commissioning Advisory Board, 2004). In 2006, at the request of the Welsh Assembly Government (WAG), the National Public Health Service for Wales (NPHS) prepared a draft EDs care pathway/ model of care which set out principles for an ED framework for Wales. Prior to and during data collection for the current study, Wales lacked a specialist inpatient ED service and other specialist services were in short supply (WAG, 2009).

In 2006, the All Wales Eating Disorder Special Interest Group (AWEDSIG) asked the University of South Wales, and Cardiff Metropolitan University, to explore how the Welsh service for AN could be improved. Therefore, the current study was commissioned to find out how patients perceived their care, so that future reforms of the service could include

patient recommendations for improvements. AWEDSIG planned to use the data during the development of treatment policies such as a care pathway for ED in Wales. AWEDSIG also hoped that the data from the current study could be used to secure funding for improvements to the Welsh ED service.

Literature Review for Study 1

Eating Disorders

Eating disorders (EDs) are complex, multifactorial mental health problems that have major psychological, physical and social sequelae (Hjern, Lindbergh & Lindblad., 2006). EDs are associated with poor quality of life (De la Rie et al., 2007; Pohjolainen et al., 2009) and high health burden (Mond et al. 2009). The current Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), (American Psychiatric Association (APA), 2013) distinguishes between three eating disorders: Anorexia Nervosa (AN), Bulimia Nervosa (BN), and Binge Eating Disorder (BED). Table 1 provides a comparative outline of the diagnostic criteria for each of the EDs, and a comprehensive outline of diagnostic classification and associated features will follow.

Anorexia Nervosa: Classification and Diagnosis

AN is a severe and enduring mental disorder that is difficult to treat and can often become fatal (Lowe et al., 2001; Crow et al., 2009). The current classification for AN is described in the DSM-5 (APA, 2013). The characteristics include restriction of energy intake relative to requirements, leading to significantly low body weight in the context of age, sex, developmental trajectory, and physical health. Significantly low weight is defined as a weight that is less than minimally normal or, for children and adolescents, less than that minimally expected. Individuals with AN have an intense fear of gaining weight or of becoming fat, and/or engage in persistent behaviour that interferes with weight gain, even though they are at a significantly low weight. Grilo (2006) suggests that common clinical observations indicate that this fear does not lessen with weight loss; rather it can intensify as the individual's weight decreases.

Table 1. Comparative clinical features of DSM-5 eating disorder diagnostic group (adapted from Hay et al., 2014)

	Anorexia Nervosa	Bulimia Nervosa	Binge Eating Disorder
Over evaluation of weight/shape	Required	Required	May occur
Fear of fatness and/or behaviour preventing weight gain	Required	May occur	Uncommon
Underweight	Required	NA	NA
Unmatched nutritional and/or energy needs	Required	May occur	NA
Overweight	NA	May occur	Not required but is common
Regularly (weekly) binge eating	May occur	Required	Required with distress and 3/5 descriptors
Regular (weekly) compensatory behaviours	May occur	Required	Do not occur
AN not concurrent	NA	NA	Required and no BN
Subtypes	Restricting or binge purging	None	None
Remission specifier	Partial/full	Partial/full	Partial/full
Severity specifier	BMI scale	Frequency of compensatory behaviours	Frequency of binge eating

It is the disturbance of attitude which involves the over-evaluation of weight or shape which represents the core psychopathology of eating disorders (Fairburn and Harrison, 2003). The International Classification of Diseases (tenth revision) (ICD-10) notes that people with AN may place undue influence of body weight or shape on self-evaluation, and experience denial of the seriousness of the current low body weight (World Health Organisation (WHO), 1992; APA, 2013). People with anorexia tend to judge their self-worth on their perceived ability to control their weight and eating (Grilo, 2006). This tendency differs from *normative discontent* which is the concept of widespread weight dissatisfaction among women. This concept suggests that dissatisfaction with weight has become so prevalent, that the feeling of negativity about personal appearance is the norm rather than the exception (Rodin, Silberstein & Striegel-Moore, 1985). For example, a study exploring normative discontent in the United

States found that fat and calorie restriction are normative for women more than men (Tantleff-Dunn, Barnes & Larose, 2011).

The DSM-5 distinguishes between two sub-types of AN: restricting type and binge-purging type. In order to be categorised as the restricting type of AN, an individual must not have engaged in recurrent episodes of binge eating or purging (i.e. self-induced vomiting, misuse of laxatives, diuretics, enemas) behaviour in the last three months. Weight loss is primarily achieved through dieting, fasting, and/or excessive exercise. The binge-purging subtype of AN where the individual has engaged in recurrent episodes of binge eating or purging behaviour. Although the subtypes have been distinguished, crossover between the two subtypes is not uncommon (APA, 2013).

Associated Features Supporting Diagnosis of Anorexia Nervosa

Due to the severe physical effect of the disorder on the body, the presence of AN in an individual may cause individuals with the disorder to exhibit other significant and potentially life-threatening medical conditions. These include tiredness, cardiac arrhythmias, hypotension, low blood pressure and slow heartbeats results from altered levels of body electrolytes, such as sodium and potassium; dry skin and brittle hair; kidney and gastrointestinal problems; development of lanugo (a soft, downy hair) on the body; the absence of menstrual cycles (amenorrhoea); and hypothermia, often resulting in feeling cold even in hot environments (Bryant-Waugh, 2000). In many cases, starvation has the effect of severely weakening the heart muscles as the body uses these muscles as a source of protein. Although many of the disturbances can be reversed by nutritional rehabilitation, some chronic effects, such as loss of bone mineral density, are often not reversible. While behaviours such as self-induced vomiting may result in abnormal laboratory findings, some individuals with AN may not present with any abnormal results (APA, 2013).

Prior to the reclassification of AN in the DSM-5 (APA, 2013), the DSM-IV (APA, 2000) included amenorrhea as a diagnostic criteria. In post-menarcheal females, amenorrhea may be present, i.e., the absence of at least three consecutive menstrual cycles. The amenorrhea occurs due to abnormally low levels of oestrogen secretion and diminished secretion of follicle-stimulating hormone and luteinising hormone by the pituitary gland. In prepubescent females, AN may delay the onset of menstrual cycles. The ICD-10 (WHO, 1992) is broader in description and refers to it as a widespread endocrine disorder involving the hypothalamic-

pituitary-gonadal axis. It also lists loss of sexual interest and potency in men as the equivalent of amenorrhea in women (Grilo, 2006). A difficulty with this part of the classification was that some women experienced amenorrhea before substantial weight loss. Research suggests that women who do not experience amenorrhea but who have other features of AN do not differ to those who have AN with amenorrhea (e.g. Garfinkel, Lin, Goering, Spegg, Goldbloom & Kennedy., 1996). Therefore, amenorrhea was removed as a diagnostic criteria in the DSM-5, but retained as a diagnostic marker (APA, 2013).

If the individual with AN is seriously underweight, they may also present with accompanying psychological symptoms such as depressed mood, social withdrawal, irritability, insomnia and diminished interest in sex. It may be necessary to diagnose an individual with major depressive disorder in addition to AN in cases where the person fulfils the diagnostic criteria for both (APA, 2013). Individuals with AN may also exhibit obsessive-compulsive features, both related and unrelated to food, often exacerbated by undernutrition. Other features that may be associated with AN include concerns about eating in public, feelings of ineffectiveness, a strong desire for control, inflexible thinking, limited social spontaneity, and overly restrained emotional expression. Individuals with the binge eating/purging type of anorexia are also more likely to have higher rates of impulsivity and are more likely to abuse drugs and alcohol (APA, 2013).

Some individuals who have AN engage in physical exercise to excess. The individual who uses exercise in this way may have begun exercising to lose weight prior to becoming anorexic, but may continue throughout treatment. Other individuals may misuse medications in order to lose weight. For example, patients with diabetes may omit or reduce insulin doses in order to minimise carbohydrate metabolism.

Onset and Course of Anorexia Nervosa

Fortunately, only a small proportion of the general population go on to develop AN (Neumark-Sztainer, Story, Hannan, Perry, & Irving, (2002). Onset of AN is typically in adolescence and is a disorder which most commonly affects teens and young adult females (Hoek and van Hoeken, 2003). Lifetime prevalence rate for females by the age of 20 years is 0.8 per cent, with a peak onset age of 19-20 years (Stice, Marti & Rohde, 2013), and lifetime prevalence rates for full and partial AN in the general population range between 0.9% to as high as 4.3% for females (Hudson et al., 2007; Wade et al., 2006). DSM-5 (APA, 2013) cites

a female to male ratio of around 10:1, making anorexia primarily a female disorder. The care pathway “Eating Disorders – A Framework for Wales” cites a rate of prevalence for AN of 29 persons per 100,000 among young females aged 15 to 24, which estimated to represent half of all cases (Welsh Assembly Government, (WAG), 2009).

Registered incidence of AN (new cases presenting for treatment), particularly in the 15 to 24-year-old female category has increased since 1935 (Lucas, Crowson, O’Fallon & Melton, 1999) up until the 1970s (Hoek, 2006; Hoek and Van Hoeken, 2003). Epidemiological studies confirm that overall incidence and prevalence of AN is stabilising in Western countries (Currin, Schmidt, Treasure & Jick, 2005; van Son et al, 2006) but increasingly younger people are being affected. Milos et al. (2004) explored incidence of the development of severe anorexia across the period 1956 to 1995 in Switzerland. They found a significant increase in incidence rates for the total population and the rate of population at risk between the 1950s to 1970s, but since the incidence has plateaued. Milos et al. (2004) results support to the view of Hsu (1996) who concluded that the rate of Eating Disorder (ED) incidence may have stabilised in recent years.

It has been proposed that increases in AN incidence, which were reported in several studies before the 1990s (Eagles et al., 1995; Gotestam & Agras, 1995; Lucas, Beard, O’Fallon, & Kurland, 1991; Møller-Madsen & Nystrup, 1992; Pagsberg & Wang, 1994; Willi & Grossmann, 1983), can be explained by changes that occurred between the 1930s and the 1990s, specifically changes in diagnostic practice, increased use of treatment services, and a greatly improved knowledge and recognition of the disorder (Fombonne, 1995). Increased attention to the disorder by the media would furthermore have heightened awareness in the general population. Others suggest that there is a trend in the incidence of AN to parallel changing fashion and idealized body images (Hoek, 1993; Lucas et al., 1991). Milo et al. (2004) suggests that should people need to have a vulnerability for developing AN, and that there is a limited number of people with such vulnerabilities, the effects of media-promoted beauty ideals will reach a peak in the sense of a saturation effect and then stabilise. It is difficult to determine how far the incidence increase found in Milos et al. (2004) study between the 1950s and 1970s reflects changes in response to AN, or true changes in AN incidence. Milo et al.’s (2004) results of the sampling period of the 1990s in the study however corroborate the notion that incidence rates reached a plateau.

The two-stage screening approach has been a widely accepted procedure for the identification of eating disorder cases when exploring incidence rates. First a large population is screened for the likelihood of an eating disorder by means of a screening questionnaire that identifies an at-risk population (first stage). Definite cases are established on the basis of a personal interview with subjects from this at risk population and from a randomly selected sample of subjects not at risk (second stage; Williams, Tarnopolsky, & Hand, 1980). Whilst this method of screening is intended to facilitate diagnosis of eating disorders, there can be issues with sensitivity and specificity of the screening instrument, poor response rates and restricted size of groups interviewed (Fairburn and Beglin, 1990). Furthermore, record-based studies underestimate incidence as not all subjects will be referred for (mental) health care (Hoek and van Hoeken, 2003). Therefore, the rates of diagnosis and incidence may not be a true reflection of the prevalence of eating disorders.

The course and outcome of AN is varied across individuals. Steinhausen (2002) carried out a review of 199 studies, and found that an average of less than half (46%) recovered, a third improved (33.5%) and 20% remained chronically ill. Prospective longitudinal studies have demonstrated high rates of symptom persistence and only partial recovery in many sufferers (Herzog et al., 1999; Strober, Freeman, & Morrell, 1997). Unfortunately, of those who recover, as many as one third relapse (Herzog et al., 1999; Strober et al., 1997). The DSM-5 specifies that once diagnosed, an individual can become partially or full recovered. Full remission of AN is met when the individual has not experienced any of the diagnostic criteria for a sustained period of time, whereas if an individual has gained weight to a normal level but continues to experience an intense fear of becoming fat and/or disturbances in self-perception of weight and shape, they would be considered to be in partial remission (APA, 2013).

Anorexia nervosa (AN) is a serious mental health condition that has severe physical and mental effects (Crisp & McClelland, 1996; Schoken, Holloway & Powers, 1989; Sharp & Freeman, 1993). The disorder has a high mortality rate: In a recent meta-analysis redux, the authors found that people with AN are 5.2 times more likely to die prematurely from any cause, and 18.1 times more likely to die by suicide, when compared with 15-34-year-old females in the general population (Keshaviah et al. 2014). Factors associated with the disorder, such as long duration of illness, substance abuse, low weight, and poor psychosocial functioning, raise the risk for mortality in AN (Franko et al., 2013). A recent meta-analysis

found the weighted mortality rates for AN was 5.1 (deaths per 1000 person-years) (Arcelus, Mitchell, Wales & Nielsen, 2011). The rate of mortality in AN is five times higher than age equivalent peers (Harris & Barraclough, 1998). Fortunately, the introduction of specialist services appears to have improved survival of AN (Lindblad, Lindbergh, & Hern, 2006), but this is no reason to become complacent regarding treatment.

Bulimia Nervosa: Classification and Diagnosis

The DSM-5 (APA, 2013) classify three essential features of bulimia nervosa: recurrent episodes of binge eating, recurrent compensatory behaviours to prevent weight gain, and self-evaluation that is unduly influenced by body shape or weight. The binge eating and compensatory behaviour must occur, on average, at least one time per week for at least three months. An episode of binge eating is defined as eating, in a discrete period of time (e.g. within any two-hour period), an amount of food that is definitely larger than what most individuals would eat in a similar period of time. The context in which bingeing occurs matters to whether the intake is excessive. For example, a celebration meal may mean the individual eats more than usual, but the circumstances mean that the intake is not abnormal (APA, 2013).

The occurrence of excessive food consumption must be accompanied by a sense of a lack of control during eating, where the individual may describe feeling as though they are unable to refrain from eating, or stopping eating once started. The type of food consumed during binges varies across individuals. The abnormality is usually in the amount of food eaten rather than the type, although the individual may eat foods that would normally be avoided (APA, 2013).

People with BN are usually ashamed of their eating problems and may attempt to keep their bingeing and purging behaviours secret. Bingeing occurs usually away from others, and often continues until the person is uncomfortably full. The most common precursor to binge eating is negative affect. Other triggers may include interpersonal stressors; dietary restraint; negative feelings related to body weight, body shape and food; and boredom. Binge eating may reduce negative affect in the short term, but negative self-evaluation and dysphoria often present following the binge episode.

The other essential diagnostic feature of BN is the recurrent use of inappropriate compensatory behaviours to prevent weight gain, usually described as purging behaviours.

Self-induced vomiting is the most common compensatory method as it reduces discomfort from eating large quantities of food and reduces the fear of gaining weight. At times, individuals will engage in bingeing with the goal of vomiting. People with BN use a number of different methods to induce vomiting, including the use of fingers or other objects to stimulate a gag reflex, or the misuse of syrups that induce vomiting. Other methods of purging include the misuse of laxatives, diuretics or enemas. Misuse of medications such as insulin may also be used to reduce the metabolism of food during binge episodes. Furthermore, individuals with BN may engage in fasting or excessive exercise in order to compensate for binge eating.

Associated Features Supporting Diagnosis of Bulimia Nervosa

Most bulimia sufferers are not usually overweight compared with the norm for their height (BMI ≥ 18.5 and < 30 in adults) (APA, 2013; Gordon, 2001); nor do they usually become underweight as a result of their purging – and this distinguishes them from those suffering from the binge/purging AN subtype. The disorder may also present in obese individuals, although this is not common (APA, 2013). Between binges, the individual often restrict their consumption and select diet foods, while avoiding high calorie foods that may initiate a binge.

BN displays fewer physical symptoms than AN, but the most common physical sign of BN is the permanent loss of dental enamel as a result of regular induced vomiting. In some cases, swollen parotid glands can produce a typical puffy face appearance. BN behaviours can produce menstrual irregularity or amenorrhea, although the cause (weight fluctuations, nutritional deficiencies, emotional distress) has not yet been ascertained (APA, 2013). Although rare, the consequences of BN can be fatal, including oesophageal tears, gastric rupture and cardiac arrhythmias. Individuals who misuse laxatives may become dependent on them in order to have bowel movements, rectal prolapse has been reported and gastrointestinal complaints are common.

Onset and Course of Bulimia Nervosa

BN is significantly more common than AN and the lifetime prevalence of BN is between 4 to 7% for full and partial BN (Favaro, Ferrera & Santonaso, 2003). In men, the prevalence rate is approximately ten times lower. The incidence of BN might also have decreased since the 1990s (Smink, van Hoeken & Hoek, 2012), but this is in contrast to a perceived increase in

occurrence in the decades prior to 1990. Interestingly, in a study of BN incidence in the UK from 1988 to 2000, Currin, Schmidt, Treasure & Jick (2005) found that rates of BN rose to a peak in 1996 but then subsequently declined. One explanation of this increase in rates of incidence could relate to media coverage of current role models or celebrities (e.g. Princess Diana during early 1990's and the decline in rate of BN following her death in 1997). Similar to AN, much fewer cases of BN have been reported in women who have not been exposed to some extent to Western ideals and influences (Keel & Klump, 2003), indicating that BN prevalence could be influenced by changes in social conditions. The care pathway "Eating Disorders – A Framework for Wales" cites a rate of prevalence for BN of 100 persons per 100,000 among young females aged 15 to 24, which is estimated to represent half of all cases (WAG, 2009).

Onset of BN commonly occurs in adolescence or young adulthood and presentation before puberty or after age 40 is unusual (APA, 2013). The binge eating episodes frequently begin during or after an attempt to reduce weight and/or during a stressful life event (APA, 2013). Disturbed eating behaviour persists in many individuals diagnosed with BN for several years, although long-term follow up studies suggest that approximately 75 per cent of women with BN were in remission 20 years after being diagnosed (Keel, Gravener, Joiner, & Haedt, 2010). Periods of remission longer than one year being associated with better outcome (APA, 2013). Significantly elevated risk for mortality (all cause and suicide) is seen in individuals with BN, with the crude mortality rate being reported as nearly 2% per decade (APA, 2013).

Binge Eating Disorder: Classification and Diagnosis

The DSM-5 (APA, 2013) classification for Binge Eating Disorder (BED) includes recurrent episodes of binge eating that must occur, on average, at least once per week for three months. Similar to BN, the episode of bingeing is defined as eating, in a discrete period of time, an amount of food that is more than other individuals would consider normal under the same circumstances. The context in which eating occurs will influence whether it is considered a binge. For example, a celebratory meal rather than the individual keeping the eating secret from others (APA, 2013).

The occurrence of excessive food consumption must be accompanied by a sense of lack of control, the individual often describing being unable to refrain from eating or being able to

stop once started. The type of food is not specific to the disorder. The binge eating must be accompanied by marked distress, and at least three of the following features: eating much more rapidly than normal; eating until feeling uncomfortably full; eating large amounts of food when not feeling physically hungry; eating alone because of feeling embarrassed by how much is being eaten; and feeling disgust, depressed or guilty after the episode. Individuals with BED are often ashamed and attempt to conceal their behaviours and as such, the episodes usually take place away from others. The same as BN, the common antecedent to a BED episode is negative affect, whilst other triggers include interpersonal stressors; dietary restraint; negative feelings related to body weight, body shape, and food; and boredom. Again, similar to BN, although in the short term the episodes may relieve negative affect, the episode is often followed by negative self-evaluation and dysphoria (APA, 2013).

Differentiating between a diagnosis of BED and BN is often difficult and depends on how frequently the individual indulges in compensatory behaviours such as purging. Because of this overlap in symptoms, some researchers previously viewed BED as a less severe form of BN (Hay & Fairburn, 1998; Striegel-Moore, Cachelin, Dohm, Pike et al., 2001).

Associated Features Supporting Diagnosis of BED

BED occurs in normal-weight, overweight and obese individuals, although usually associated with overweight and obese individuals seeking treatment. BED is distinct from obesity as most obese individuals do not engage in binge episodes. In comparison to individuals with obesity, individuals with BED consume more calories, have greater functional impairment, lower quality of life, more subjective distress, and greater psychiatric morbidity (APA, 2013).

Onset and Course of Binge Eating Disorder

The lifetime prevalence of BED in the general population is around 3 per cent and has a peak onset age of 16-20 years (Stice, Marti & Rohde, 2013); the disorder can be as high as 30 per cent among individuals seeking weight loss treatment (Dingemans, Bruna, & van Furth, 2002). While the majority of sufferers are women, and incidence of BED in women is only 1.5 times higher than in men (Stice, Telch & Rizvi, 2000; Striegel-Moore & Franko, 2003). BED can often be found in children and is associated with excessive weight gain, and is common in adolescents and college students (Napolitano & Himes, 2011). The disorder is also more prevalent in people seeking weight loss treatment than in the general population (APA, 2013).

BED typically begins in adolescence or young adulthood but can begin later in adulthood (APA, 2013). Remission rates in both natural course and treatment outcome studies are higher for BED than for AN or BN. BED appears to be relatively persistent, and the course is comparable to that of BN in terms of severity and duration (APA, 2013).

Comorbidity in Eating Disorders

Psychiatric comorbidity with AN and BN is present in key areas, including depressions, bipolar disorder, anxiety disorders (obsessive compulsive disorder (OCD), panic disorder, social anxiety disorder and other phobias, and post-traumatic stress disorder (PTSD) (WAG, 2009). AN is a disorder associated with significantly high comorbidity, with 56.2% meeting diagnostic criteria for at least one other illness (Hudson, Hiripi, Pope Jr, & Kessler, 2007). Comorbid illnesses include mood (Godart et al., 2007), anxiety (Swinbourne & Touyz, 2007), and substance abuse disorders (Blinder, Cumella, & Sanathara, 2006; Salbach-Andrae et al., 2008). For example, studies suggest between 50 and 68 per cent of AN sufferers also have a lifelong diagnosis of major depression (Halmi, Eckert, Marchi, Sampugnaro, et al., 1991; Herzog, Keller, Sacks, Yeh & Lavori, 1992).

Surveys suggest significant levels of comorbidity between AN and anxiety disorders (Halmi et al., 1991) such as Obsessive Compulsive Disorder (OCD) (21 per cent), panic disorder and agoraphobia (25 per cent), social anxiety disorder (30 per cent), and specific phobias (25 per cent), and with substance abuse disorders (34 per cent) (Jordan, Joyce, Carter, Horn, et al., 2008; Kask, Ekselius, Brandt, Ekblom, & Papadopoulos, 2013; Keel et al., 2003). The suicide rate amongst people with anorexia is higher than the general population and one in five people with anorexia who died had committed suicide (Pompili, Mancinelli, Girardi, Ruberto & Tatarelli, 2004; Arcelus, et al., 2011). It is important to note that the effect of starvation can have a profound effect on mood and cognition, and so this should be taken into account when considering a separate psychiatric diagnosis (Woodside & Staab, 2006).

BN is often found to be comorbid with other psychiatric disorders. Similar to AN, major depression is the most commonly diagnosed comorbid disorder; with between 36 and 63 per cent of BN sufferers being diagnosed with depression (Brewerton, Lydiard, Herzog, Brotman et al., 1995). Increases in BN during winter months also appear to be linked to symptoms of Seasonal Affective Disorder (SAD) (Lam, Lee, Tam, Grewel & Yatham, 2001), suggesting that dysphoric mood disorder is a common concurrent symptom of BN. Studies have

suggested that between 33 and 61 per cent of women with BN meet the criteria for a personality disorder (Schmidt & Telch, 1990; Carroll, Touyz & Beumont, 1996). There is evidence for a strong link between BN and borderline personality disorder (BPD) and a link between the bulimic behaviours of bingeing and purging and substance abuse, and with bipolar disorder (Jordan, Joyce, Carter, Horn et al., 2008). Substance abuse includes heavy alcohol use (Lacey, 1993), increased incidence of the use drugs compared with patients with AN and non-clinical controls (Corbridge & Bell, 1996), and the abuse of laxatives, diet pills, diuretics and emetics (Bulik, Sullivan, Epstein, McKhee et al., 1992). Suicide risk is elevated in BN compared to the normal population (APA, 2013).

BED is associated with elevated levels of psychopathology, particularly affective disorders (Mitchell & Mussell (1995) that is comparable to that of AN and BN. The most common comorbid disorders are bipolar, depressive, anxiety, personality and substance abuse disorders (APA, 2013; Becker & Grilo, 2015; Grilo, White & Masheb, 2009; McElroy et al., 2013). Psychiatric comorbidity is associated with the severity of binge eating rather than obesity (APA, 2013).

The Aetiology of Eating Disorders

The cause or origin of AN is unclear, although environmental factors are believed to be key in the development of eating disorders. It is likely, however, that EDs has other complex multi-factorial causes (Grilo, 2006). Explanations often allude to a biopsychosocial perspective, drawing upon biological, psychological, sociocultural and experiential factors (Becker, Keel, Anderson-Fye & Thomas, 2004; Bulik & Tozzi, 2004; Klump & Gobrogge, 2005; Grilo, 2006). Biological explanations include consideration of genetic influences and neurobiological factors, whilst it is also apparent that individuals who have certain personality and dispositional characteristics that put them at risk of developing an eating disorder. Substantial efforts have been made in order to ascertain prevalence, aetiology and therefore efficacious prevention and treatment for each of the disorders.

Davey (2014) suggests that the range and complexity of influences identified in the aetiology of EDs mean that some researchers have limited themselves to *definition* of the risk factors that underlie eating disorders (e.g. Polivy & Herman, 2002; Jacobi, Hayward, de Zwaan, Kraemer & Agras, 2004; Ghaderi & Scott, 2001). Therefore, explanations regarding what

risk factors that are involved in eating disorders are often presented, but there is relatively little understanding into *how* they are involved (Davey, 2014).

Biological Basis of Eating Disorders

Genetic and Neurobiological Factors

There is evidence of a genetic component to EDs (Davey, 2014). First degree relatives of females with either AN and BN were found to be significantly more likely to develop these disorders than relatives of females who have not been diagnosed with an ED (Strober, Freeman, Lampert, Diamond & Kaye, 2000). Research also suggests that if an individual with a close family member has an ED, this will raise their chances of developing AN, BN, or BED (Kendler, MacLean, Neale, Kessler et al., 1991; Wade, Bulik, Sullivan, Neale & Kendler, 2000), although this view is not shared by researchers who argue that different genes contribute to each of the EDs (Keel and Klump, 2003). Davey (2014) also identifies that community-based twin studies indicate that genetic factors account for approximately 40 to 60 per cent vulnerability to AN, BN and BED (Trace, Baker, Penas-Lledo & Bulik, 2013). Molecular genetic research has attempted to find the gene loci of genetic effects, and target genes have been identified that may affect appetite regulation (e.g. serotonergic genes), feeding and food intake (e.g. dopaminergic genes), food reward sensitivity (e.g. genes that influence opioid receptors), and weight regulation (Trace, Baker, Penas-Lledo & Bulik, 2013). Unfortunately, molecular genetic studies of eating disorders have limited sample sizes and failed replications (Sullivan, Daly & O'Donovan, 2012; Wang, Zhang, Bloss, Duvvuri et al., 2011). While twin studies indicate a moderate genetic influence, the lack of 100 per cent concordance rates also suggest a significant impact of unique environmental factors such as interactions with parents (Baker, Mitchell, Neale & Kendler, 2010), and this implies that eating disorders are developed through a complex interaction between inherited characteristics and individual experiences.

Davey (2014) notes that the hypothalamus and neurotransmitters associated with appetite have been implicated as a region of the brain that may be involved in the aetiology of EDs. Self-starvation syndrome which includes loss of appetite (similar to AN) has been observed in historical animal studies after lesions were applied to the hypothalamus (e.g. Hoebel & Teitelbaum, 1966). Combinations of brain mechanisms and reward pathways in the brain

may also contribute to the development of EDs (Berridge, Ho, Richard, & DiFeliceantonio, 2010). For example, in AN starvation may increase the level of opioids, resulting in a state of euphoria. However, because people with BN and BED are not necessarily overweight, the disorders may be accompanied by low levels of opioids, and this is known to stimulate craving (Brewerton, Lydiard, Laraia, Shook & Ballenger, 1992). Furthermore, low levels of serotonin metabolites have been noted in individuals who have AN and BN (Carrasco, Dyaz-Marsa, Hollander, Cesar & Saiz-Ruiz, 2000). Serotonin promotes satiety, and the reduction of the serotonin metabolites may contribute to binge eating. Davey (2014) notes that low levels of serotonin are also associated with depression, providing some explanation for comorbidity of EDs with mood disorders. Dopamine is a brain neurotransmitter involved in the pleasurable and rewarding consequences of food. Females diagnosed with BN show greater expression of the dopamine transporter gene DAT, which may suggest a susceptibility to the pleasurable effects of eating (Frieling et al., 2010; Thaler et al., 2012).

The reliance on animal studies should be viewed with caution, for example, explanations of lesions to the hypothalamus resulting in lack of appetite in animals does not explain why some patients with AN report intense hunger (Davey, 2014). It is also not clear whether the release of neurotransmitters are the cause or effect of the behaviours related to EDs (Stoving, Hangaard & Hansen-Nord, 1999; Chandler-Laney, Castaneda, Pritchett, Smith et al., 2007).

Sociocultural Basis of Eating Disorders

Davey (2014) notes that incidence of eating disorders appears to be affected by factors associated with culture and ethnicity as rates of EDs are often higher in cultures that have experienced Western ideals (Keel & Klump, 2003).

Media, body dissatisfaction, peers and family

AN and BN are disorders that are largely restricted to females (Striegel-Moore, 1997; APA, 2013). Davey (2014) notes that although this may point towards a physiological difference between males and females which increases the propensity for EDs, the difference between cultures and the idealised female body image in Western contexts indicates that EDs may be culture-bound. For instance, the media regularly manipulate the female image, often

preferring to include low-weight females (Polivy & Herman, 2002), resulting in a drive for thinness in young adolescent girls. For example, Body Dissatisfaction (BD) and drive for thinness correlated with watching television content that portrayed the idealised thin image (Tiggemann & Pickering, 1996; Tiggemann, 2003; Tiggemann & Slater, 2004). Higher interest in media personalities, and perception of those individuals as having a good body shape, result in increased likelihood of the viewers (adolescents aged 14-16) rating their body images as poor (Maltby, Giles, Barber, & McCutcheon, 2005). Experimental studies that controlled viewing of idealised body images versus controls report a causal association to ED symptoms such as BD, decreased self-esteem, dieting and depression (e.g. Jett, LaPorte & Wanchisn, 2010). The effect sizes of such studies are small though, meaning the effect is modest (Hausenblas, Campbell, Menzel, Doughty et al., 2013). BD might be generated through media, peer and parental influences, and this affects dieting behaviour and ED symptomology such as BN (e.g. Rodgers, Chabrol & Paxton, 2011).

Body dissatisfaction (BD) is defined as the gap between one's actual and ideal weight and shape (Polivy & Herman, 2002). Davey (2014) suggests that some models of ED aetiology associate BD as an important component of development (e.g. Stice, 2001; Vohs, Bardone, Joiner, Abramson & Heatherton, 1999; van den Berg, Thompson, Obremski-Brandon & Covert, 2002). BD may result in dieting in order to move towards the ideal body shape, and excessive dieting is a common precursor to EDs (Polivy & Herman, 1987; Stice, 2001). Davey (2014) identifies that this is confirmed partly by occupations that require an individual to control and monitor their weight having higher incidences of EDs, such as fashion models (Santonastaso, Mondini & Favaro, 2002), actors, athletes (Sudi, Ottl, Payerl, Baumgartl et al., 2004), figure skaters (Monsma & Malina, 2004) and ballet dancers (Ravaldia, Vannacci, Zucchi, Mannucci et al., 2003).

BD and dieting are important vulnerability factors of EDs (Joiner, Heatherton, Rudd & Schmidt, 1997; Steiger, Stotland, Trottier & Ghadirian, 1996; Stice, Shaw & Nemeroff, 1998) but they are not sufficient conditions for an individual to develop an ED. Many individuals experience BD or diet without going on to develop an ED (Polivy & Herman, 2002), which indicates that additional psychological factors are necessary for body dissatisfaction and dieting to develop into EDs (Davey, 2014).

Over the last few decades, food and eating fashions have become a socially relevant factor for the aetiology of EDs. Another socially relevant factor that may have contributed to the

increase in ED symptoms over the past 30-40 years is food and eating fashions. For example, individuals with an ED are considerably more likely to have been a vegetarian compared to controls (52 per cent vs. 12 per cent) (Bardone-Cone, Fittsimmmons-Craft, Harney, Maldonado et al., 2012).

As well as praise of thinness, Western cultures often criticise individuals who are obese and both implicitly and explicitly associate them with negative characteristics. Obese individuals are rated by others as less smart, lazy, and worthless compared to non-obese individuals even by health professionals who specialise in obesity (Schwartz, Chambliss, Brownell, Blair & Billington, 2003).

Davey (2014) notes that peer attitudes and views can influence an adolescent's view of their body, weight, and eating/dieting activities. Furthermore, adolescent girls may learn their attitudes to slimness and dieting through their close contact with other people (Levine, Smolak, Moodey, Shuman & Hessen, 1994). Peer pressure influences opinions on body shape and eating in a number of ways. Attitudes to eating and body shape within a peer group align with those that are socially valued (such as dieting or restricted eating) (Meyer & Waller, 2001), and this also results in the group adopting psychological characteristics (e.g. perfectionism) that may facilitate pathological eating behaviours. A study of adolescent schoolgirls found that use of unhealthy weight-control behaviours (e.g. self-induced vomiting, laxatives, diet pills, or fasting) was significantly affected by the dieting behaviour of close friends, and this influence generated unhealthy weight-control behaviours regardless of the weight of the individual (Eisenberg, Neumark-Sztainer, Story & Perry, 2005). Despite this evidence, it is difficult to ascertain whether peer influences *determine* attitudes towards eating and body shape, or have a significant role in the development of EDs. Individuals may be recruited into social groups because of their shared, established, attitudes to eating. Not all individuals go on to develop EDs despite being exposed to peer pressure, suggesting that other factors should also be considered in determining the aetiology of EDs (Davey, 2014).

Davey (2014) noted that person who has a close family member with an ED has a higher likelihood of getting an ED themselves. Even though this may be in part, due to genetic factors, it may also be related to the attitudes and behaviours of the family. In particular, Minuchin and colleagues (1975; 1978) propose the family systems theory view where a person may be embedded in a dysfunctional family structure that actively promotes the development of EDs. The family structure may inadvertently, but actively, reinforce

disordered eating, and this distracts from dealing with other conflicts within the family. Davey (2014) notes that the theory suggests that families of individuals with EDs tend to be intrusive, overly involved in their children's affairs and dismissive of their children's emotions and emotional needs (Minuchin, Rosman & Baker, 1978), or over-protective, where members of the family are overly concerned with parenting and with one another's welfare. This can often be viewed by the child as coercive parental control (Shoebridge & Gowers, 2000; Haworth-Hoepfner, 2000). Davey (2014) notes that the theory identifies the tendency to maintain the status quo within the family, and a lack of successful conflict resolution. The issue of how a dysfunctional family environment may generate an ED is still unclear, but it may do so by generating specific psychological characteristics that play an active role in the development and continuation of the ED (Polivy & Herman, 2002).

Davey (2014) notes that parents may have an influence on the development of EDs in their children, as parents of individuals with an ED are themselves more likely to have dysfunctional eating patterns and psychiatric disorders (Hill & Franklin, 1998; Hodes, Timimi & Robinson, 1997). Problematic parental eating patterns appear to produce feeding problems in the children at a young age (Whelan & Cooper, 2000) some of which may contribute to weight gain and disordered eating in those children later on (Easter, Naumann, Northstone, Schmidt et al., 2013). Mothers of people with EDs also tend to be overly critical the child's appearance, weight and attractiveness significantly more than mothers of non-sufferers (Hill & Franklin, 1998; Pike & Rodin, 1991). Davey (2014) notes that there is a significant inverse relationship between a mother's critical comments and her daughter's chances of successful recovery following treatment (van Furth, van Strien, Martina, Vanson et al., 1996).

Although research may indicate the involvement of familial factors in the aetiology of eating disorders, Polivy & Herman (2002) argue that most studies are retrospective and correlational, and so do not imply causation. Therefore, although there may indeed be some transmission of disordered eating patterns within families, it is quite likely that some other factor (biological, psychological or experiential) may be necessary to trigger symptoms that are typical of a diagnosable ED (Stieger, Stotland, Trottier & Ghadirian, 1996).

Experiential Factors of Eating Disorders

Davey (2014) notes that there is evidence that adverse life experiences may act as a vulnerability factor and as a trigger for the development of EDs. Individuals with EDs report significantly more life stresses and difficulties prior to onset than do healthy controls (Raffi, Rondini, Grandr & Fava, 2000). The number of adverse life events has been shown to differentiate between individuals with AN and healthy controls (Horesh, Apter, Ishai, Danziger et al., 1996). Rastam & Gillberg (1992) found that 14 per cent of people with AN (versus 0 per cent of healthy controls) had experienced a negative life event (e.g. loss of a first degree relative) within three months prior to development of ED. Similarly, individuals with BN report significantly more adverse life events prior to symptoms than age-matched, healthy controls (Welch, Doll & Fairburn, 1997; Carretero-Garcia, Planell, Doval, Estragues et al., 2012). Davey (2014) maintains that like the research on the role of familial factors, such studies are difficult to interpret because they are retrospective and correlational in nature.

Davey (2014) also highlights that one form of negative life experience that has been consistently identified as a risk factor in EDs is childhood sexual abuse (Polivy & Herman, 2002). A longitudinal study of a large community-based sample of mothers and their children suggests that sexual abuse or physical neglect during childhood placed the children at elevated risk for EDs (Johnson, Cohen, Kasen, Smailes & Brook, 2002). Further evidence can be found in studies that have reported higher levels of childhood sexual abuse in the history of people with AN or BN than in healthy controls (Steiger, Leonard, Kin et al., 2000; Garfinkel, Lin, Goering, Spegg, et al., 1995; Welch & Fairburn, 1994; Brown, Russell, Thornton & Dunn, 1997). Conversely, this is not a finding that has been reported in patients with BED (Dansky, Brewerton, Kilpatrick & O'Neal, 1997). Childhood sexual abuse is a risk factor for a wide range of psychiatric disorders (Chou, 2012), and so a possible explanation is that adverse early experiences generate other forms of psychopathology that mediate the development of EDs (Casper & Lyubomirsky, 1997; Steiger, et al., 2000; Rorty & Yager, 1996).

Experiential explanations of the development of EDs suggest that eating disordered behaviours help the individual to cope with mood and identity difficulties, sometimes related to earlier adverse life experiences (Davey, 2014). AN allows the person to gain control over one part of their life (i.e. their eating) in situations where they may have experienced extreme

parental control (Troop, 1998). People with BN may gain emotional relief by bingeing and purging (Davey, 2014). EDs also allow the sufferers to construct a clear sense of self by focussing attention on one limited aspect of their lives. Davey (2014) suggests that this could be by attaining self-determined weight control goals and experiencing rewards, and by providing a very narrow life focus that may help them to avoid dealing with more ingrained psychological difficulties (Polivy & Herman, 2002).

Psychological and Dispositional Factors of Eating Disorders

So far, a number of risk factors for eating disorders have been identified, but none of these risk factors appear to be a sufficient condition for developing AN, BN or BED. Furthermore, individuals who develop EDs appear to have particular personality and dispositional characteristics that have been widely implicated in the origin of those disorders. It may therefore be the case that specific risk factors interact with personality traits to produce an ED (Davey, 2014). Implicated personality traits include, shyness, dependence, neuroticism, low self-esteem, high introspective awareness, perfectionism, negative affect, and non-assertiveness (Vitousek & Manke, 1994; Leon, Fulkerson, Perry & Earlyz-Zald, 1995).

ED are associated with negative affect (usually depressed mood) and mood disorders are frequently comorbid with both AN and BN (Braun, Sunday & Halmi, 1994; Brewerton, Lydiard, Herzog, Brotman et al., 1995). Although negative mood and stress is a commonly reported precursor of EDs (Ball & Leo, 2000), it is unclear whether negative affect is a cause or consequence of the disorder (Davey, 2014). Experimental studies have suggested that induced negative mood increases BD and body-size perception in sufferers with BN (Carter, Bulik, Lawson, Sullivan & Wilson, 1996), and it may contribute in part to EDs. Negative affect has been noted to increase consumption of food in people who are on diets or who have distorted attitudes about eating. (Davey, 2014). This indicates a role for negative affect in the initiation of bingeing and purging typical of BN (Herman, Polivy, Lank & Heatherton, 1987). Davey (2014) notes that this supports laboratory-based studies that report that people with BN show lower anxiety, tension and guilt following the binge-purge period (Sanftner & Crowther, 1998).

A second characteristic of individuals with EDs is low self-esteem (Davey, 2014). This low self-esteem may simply be a consequence of the specific negative views that people with EDs

hold. However, there is evidence to suggest that low self-esteem may have a role to play in the aetiology of EDs (Davey, 2014). It is a significant predictor of EDs in females (Button, Sonugabarke, Davies & Thompson, 1996). EDs, particularly AN, are viewed by some researchers as a means of combating low self-esteem by demonstrating control over one specific aspect (eating) of the person's own life (Troop, 1998).

Davey (2014) notes that people diagnosed with AN and, to a lesser degree, those with BN both score high on measures of perfectionism, and this personality trait has regularly been noted in the development of EDs (Garner, Olmsted, & Garfinkel, 1983; Bastiani Rao, Weltzin & Kaye, 1995). Perfectionism is multifactorial and can be either aimed at the individual or others, and can be adaptive or maladaptive (Bierling, Israeli & Antony, 2004). Perfectionism is a significant predictor of BN symptoms in women who perceive themselves as overweight (Joiner, Heatherton, Rudd and Schmidt, 1997), and both self-oriented and other-oriented perfectionism have been found to predict the onset of AN (Tyrka, Waldron, Graber, & Brooks-Gunn, 2002). Furthermore, perfectionism is one of the few personality characteristics that predicts the maintenance of EDs at 10-year follow-up (Holland, Bodell & Keel, 2013). The perfectionism traits displayed by individuals with EDs may actively contribute to their disordered eating. Strober (1991) argues that self-doubting perfectionism puts individuals at risk of EDs. Perfectionism is highly associated with measures of BD and drive for thinness (Ruggiero, Levi, Ciuna & Sassaroli, 2003), and so it is not difficult to see how perfectionism may be an indirect causal factor in the aetiology of ED. It encourages the person to strive for the perfect body shape or to achieve strict, self-directed dieting goals (Keel & Forney, 2013).

Summary

Davey (2014) notes that there are a number of psychological and cognitive processes that may be important common factors in the development and maintenance of all EDs, and these psychological factors include the defining of self-worth in terms of control over-eating, low self-esteem, perfectionism, negative interpersonal relationships and negative affect. Many of these psychological factors may be influenced by exposure to media ideals of body shape, peer attitudes to controlled eating, and familial factors – such as family conflict or negative parent-child interactions. Traumatic life events also appear to be risk factors for EDs,

particularly childhood sexual abuse. There is an inherited component to EDs, although this is modest and twin studies have tended to emphasise that unique environmental experiences are equally as important as genes in the origin or development of EDs. Finally, Davey (2014) concludes that ED symptoms have been found to be associated with a number of brain mechanisms and reward pathways, including opioid, serotonin and dopamine pathways, but it is still unclear whether these neurobiological processes are causes of ED symptoms or are themselves consequences of those symptoms.

Assessment of Eating Disorders in the UK

There is evidence that patient who go on to develop very serious EDs are likely to have attended their GPs or other health services on a number of occasions without their disorder being reported by the patients or detected by the HCPs (Ogg et al., 1997; NICE, 2004). Surgenor and Maguire (2013) reviewed the literature available on specialist assessment of AN, focusing on several areas including common trajectories into assessment and obstacles accessing assessment. They found that despite primary care being the context of most presentation (Dooley-Hash, Lipson, Walton, & Cunningham, 2012; Hudson et al., 2007), comprehensive assessment of AN still remains largely at the remit of the specialist ED clinician. Characteristics of the disorder also cause problems in diagnosis, as patients often do not admit that they have an ED (WAG, 2009). NICE (2004) suggests that assessments of EDs should be cumulative, that is that they build upon one another. According to the care pathway for Wales (WAG, 2009), community, primary and secondary care staff should be able and confident to carry out assessments at varying depths. For example, primary care HCPs should be able to assess general psychiatric and psychological dimensions of EDs, with the intent to refer on to specialist services if necessary. A more comprehensive assessment of ED may be carried out by a mental health professional who has received relevant training. The Welsh care pathway (WAG, 2009) states (as noted in the diagnostic criteria section of the thesis), the weight of the patient is not the only indicator for a person to be diagnosed with an ED. Level of risk will vary, such as the rate of weight loss, intensity of vomiting or laxative use, cardiovascular abnormalities or electrolyte imbalances. Other comorbid disorders also increase the level of risk.

Treatment for Eating Disorders in the UK

Since the 1970s, there have been significant advances towards a scientific understanding of EDs, including aetiology, treatment and public awareness (Treasure, Claudino & Zucker, 2009). Unfortunately, there has been a delay in progress regarding improved care and service provision for ED patients (Treasure & Schmidt, 1999). Access to evidence-based treatments and high quality specialist care remains inconsistent or non-existent in many areas of the UK (Royal College of Psychiatrists, 2001). Nishizono-Maher et al. (2011) suggests that attempts to deal with inconsistent, low quality care in ED services is urgently needed. Furthermore, while there is a growing evidence base for treatments of BN and BED, and although the evidence base for AN has improved (Hay, 2013), a paucity of high quality research regarding treatment for AN still remains (Lock, 2009).

The Royal College of Psychiatrists (RCP) (CR170, 2012) published their most recent report regarding ED service distribution, service development and training for the UK. In order to review national provision for EDs, a survey was undertaken by the RCP of services providing specialist treatment for patients with EDs in the UK and the republic of Ireland, including services for children, adolescents and adults in the National Health Service (NHS) and the private sector. Overall, 83 services participated, 62 (75%) being NHS services.

The therapeutic approaches used by the services varied depending on the type of ED. AN was treated most often with individual CBT (84%), nutritional advice and monitoring (82%) and family-based treatment (77%). BN was treated most often by individual CBT (79%), self-help literature (67%) and selective serotonin reuptake inhibitors (SSRIs) (65%). For BED patients, self-help interventions (58%), nutritional advice and monitoring (54%) and individual CBT (54%) was administered most often. For inpatients of EDs, the treatment most often provided was nutritional advice and monitoring (63%), individual CBT (58%) and anxiety management/relaxation (54%). Of the 447 inpatient beds identified in the UK (226 NHS, 221 private sector), 330 were in specialist units (166 NHS, 164 private sector). Some parts of the UK had little or no inpatient provision for EDs.

Eating Disorder Pathway through Primary Care

Currin (2006) carried out a survey of GPs in the South Thames Region and found that a quarter of all ED patients were managed exclusively in primary care. The GPs reported having many conflicting clinical and services priorities and feel overwhelmed by the number

of guidelines distributed to primary care, resulting in low levels of awareness and utilisation of formal guidance on EDs. Many GPs were dissatisfied with the care they were able to give to patients with EDs and feel inadequately trained in effective treatment strategies. Only 4% of GPs reported using a published guideline or protocol for managing EDs, mainly following the recommendation to measure the patients' height and weight. The perceived role of primary care is to identify ED cases, offer patients a supportive environment and refer them on for treatment to specialist services.

Eating Disorder Pathway through Secondary Care

The RCP (2012) report that very little is known about the pathways of patients with EDs through secondary care. Many people with EDs are treated within CMHTs and in some areas this may be the majority of those presenting, even if a specialist service is available. As there are often significant competing priorities in general adult psychiatry, the issue of capacity and competence for dealing with individuals who have an ED in secondary care is important. If secondary care has either problems of capacity or competence, the stepped-care, patient pathway models of care will have a gap and will be compromised.

ED Pathway through Specialist Care

The RCP report (CR170, 2012) state that only a minority of services in the UK meet all four criteria for a specialist service (i.e. in terms of seeing ≥ 25 newly referred patients per annum, the multidisciplinary staff required, the provision of outpatient and inpatient treatment and the availability of both individual and family interventions). Although the current report (RCP, 2012) demonstrates an increase in the number of ED services since the last report (RCP, 2001), it appears that the increase is explained by a growth in small services that do not fulfil the criteria of a specialist service. This has implications for the quality of care provided, such as confidence of services in dealing with severe or complex presentations, access to a range of evidence-based treatments and transitions between services.

The report found that the average length of stay for patients in specialist ED Units (EDUs) was 18.2 weeks (s.d. = 8.4) and 18.4 weeks in child and adolescent mental health (CAMH) inpatient units (s.d.= 12.9). Severely medically ill patients were most commonly admitted to a medical ward with involvement of ED staff (62%) or to a paediatric ward (47%), or treated in a specialist EDU with medical input (25%). A study that prospectively followed pathways through care of over 1000 patients referred to the St George's Hospital and the South London

and Maudsley NHS Trust's EDUs (Waller et al., 2009). Key findings were that 41 per cent of patients referred for specialist treatment did not take up treatment and of those who did start treatment, about half dropped out. Those who entered treatment showed significant improvement in the ED and comorbid symptoms and quality of life.

Figures for England which related to October 2012-13 from the Health and Social Care Information Centre (HSCIC, 2014) showed a national rise of 8 per cent in the number of admissions to hospital for an ED. In the 12 months to October 2013 hospitals dealt with 2,560 ED admissions, 8 per cent more than in the previous 12 months (2,370). Patients admitted to hospital for an ED were more likely to stay in hospital for a longer period of time compared to all other admission episodes. Length of stay was known in 2,189 cases and of these about one in five patients with an ED were admitted and discharged on the same day (21 per cent or 470 admissions) compared to two in three of all admission cases (63 per cent). One in 17 patients with an ED stayed in hospital for longer than six months (six per cent or 130 admissions) compared to three in 10,000 of all admission cases (0.03 per cent). Three in four were admitted for AN (76 per cent or 1,940), one in twenty for BN (five per cent or 130) and other EDs accounted for one in five admissions (19 per cent or 500), which is similar to the same period in 2011-12 (77 per cent, 6 per cent and 17 per cent respectively). Twenty-three admissions were treated by 'intubation of the stomach'.

Due to the complex nature of EDs, the patient pathway through care is often not straightforward, as there are typically a number of transitions, including those between general and specialist services, child/adolescent and adult services, student health and home services, paediatric/medical and psychiatric services (Treasure, Schmidt & Hugo, 2005). Initial treatment for AN should be provided by a specialised HCP, starting with weight gain and healthy eating, and preferably delivered via an outpatient facility (NICE, 2004; Fairburn and Harrison, 2003). There is limited evidence to suggest that inpatient treatment at a national tertiary ED centre is less acceptable than tertiary outpatient psychological treatments at the same centre (Crisp et al., 1991).

Weight gain often results in moderate improvement in overall mental status (Grilo, 2006). It is critical to prevent further weight loss, as not only will it improve the physical and mental wellbeing of the patient, but it also improves eventual outcome (Castro, Gila, Rodrigues, & Toro, 2004). Treatment of AN typically involves a multidisciplinary and multimodal approach (nutritional, psychological and psychopharmacological intervention) and have been

developed for outpatient, inpatient and partial hospitalisation (day care) settings. Medical care comprises physician and nursing management of physical aspects of EDs. For example, in the case of AN this includes refeeding but also focuses on osteopenia and other effects of starvation.

Quality of Eating Disorder Services in the UK

The most recent NICE guidelines (2004) for ED outline 102 clinical recommendations, with key priorities for implementation including the following: treatment near the patient's home; the use of appropriate, evidence-based psychological therapies delivered by specialists with experience in ED; involvement of families; medical monitoring of patients; involvement of multidisciplinary services; and treatment by staff with an appropriate range of skills and competencies (NICE, 2004). This is in stark contrast to the findings of two previous Royal College of Psychiatrists surveys of services for patients with EDs published in 1992 (Council report CR14) and 2001 (Council report CR87). Both identified poor provision of specialist ED and that patients often had to travel long distances from home for treatment.

Recent research has begun to investigate what constitutes a high-quality ED service from the perspective of a range of stakeholders, including patients, carers and various HCPs (ED Association UK, 2005, 2008). In a recent internet based survey, the views of US and UK services users were sought regarding the provision and quality of ED treatment and services (Escobar-Koch et al., 2010). Findings highlighted five essential aspects of care as follows: good therapeutic relationship, holistic approach, specialised treatment, client-centred care and support. In a second study, these data were triangulated with view of US and UK carers and HCPs (Nishizono et al., 2010). The stakeholders agreed that professional qualities of staff, support for carers, psychological interventions and rapid access to care are key indicators of a high quality service for EDs: views which are largely in line with good practice recommendations. Similarly, Koskina et al. (2012) asked clinicians about their perceptions of the characteristics of a high quality ED service. Five main strengths of a service were identified: quality of treatment, staff skills, continuity of care, family involvement and accessibility and availability. The guidelines suggest that physical monitoring, nutritional rehabilitation and psychological treatment should be offered to people with anorexia at the earliest opportunity. Physical risks should be assessed, and the serious nature of the illness emphasised (Fairburn and Harrison, 2003).

Family members, including siblings, should normally be included in the treatment of children and adolescents with EDs. Interventions may include sharing of information, advice on behavioural management and facilitating communication (NICE, 2004). The guidelines discuss the transition from Child and Adolescent Mental Health Services (CAMHS) to adult services and states that patients have the right to receive age-appropriate services which are responsive to their special needs as they grow into adulthood (NICE, 2004). Furthermore, the standards also include that multi-agency services should collaborate so that they are able to provide early intervention and meet the needs of children and adolescents that have established or complex problems. Patients and their families should be able to receive treatment that is derived from the best possible evidence in an age-appropriate environment (NICE, 2004).

Inpatient programmes are usually multidisciplinary (where treatment providers include psychologists or psychiatrists (or both), dietitians, nurses and other allied healthcare specialists and involve a programme of counselling and supervised meals, combined with individual and group psychotherapy and medical care (La Puma, 2009). Clinical practice guidelines have been developed and usually depend upon current recommendations, but there is consensus that people with AN most often require inpatient care as they are most often at risk of medical and/or psychological compromise (NICE, 2004; Royal Australian and New Zealand College of Psychiatrists, (RANZCP), 2004, 2014; Hay et al., 2014), in comparison to patients with BN or BED who usually only require hospitalisation when there are medical complications such as hypokalaemia (reduced levels of potassium in the blood) or risk of suicide (NICE, 2004; RANZCP, 2004; APA, 2006).

In a review of records of 1185 subjects in a one-day programme during a 15-year period Wiseman and colleagues noted a positive correlation between the duration of the inpatient stay and the amount of weight gain, findings that implicitly support the use of behavioural programs for ensuring weight gain (Wiseman, Sunday, Klapper, & Harris, 2001). Clinical tube feeding is useful for those patients who cannot eat, and to produce rapid initial weight gain in those with severely low weight (Robb, Silber, Orrell-Valente, Valadez-Meltzer, Ellis, Dadson & Chatoor 2002; Zuercher, Cumella, Woods, Eberly, and Carr, 2003). Zuercher et al. (2003) concluded that tube feeding represented a safe method for enhancing outcomes for AN when used in intensive inpatient facilities that can manage medical risks associated with

rapid weight gain and tube feeding. Grilo (2006) reports that relatively little research has examined the effectiveness of tube-feeding.

Both the American Psychiatric Association (APA) in the United States and the National Institute for Clinical Excellence (NICE) in the United Kingdom have established guidelines for the treatment of AN that supports the use of behavioural refeeding programs. Both sets of guidelines endorsed use of such interventions for patients who have not had a response to less intensive treatments and note that a combination of medical and psychological features of the disorder determines the need for a structured treatment. The APA guidelines recommend hospitalization for patients who are significantly underweight and give this recommendation their highest grade. Similarly, the NICE guidelines advise that most patients should be treated on an outpatient basis, reserving inpatient treatment for those who have not had a response to outpatient therapy, those with a significant risk of suicide or self-harm, and those with a moderate or high physical risk. These recommendations are noted to be based on expert opinion in the absence of available scientific evidence.

Partial hospitalisation is similar to inpatient programmes with regard to multidisciplinary care, intensity of therapy, the capacity or regular supervision of meals and the direct provision of meals (Thornton, 2009). However, there is no overnight stay with partial hospitalisation. Outpatient care includes psychotherapy, though less frequently (one or two times a week) and care is less likely to include therapists of multiple disciplines, sometimes only being delivered by a single HCP. Figure 1 shows the usual pathway, including assessment, of care for people who may have AN (Attia & Walsh, 2009).

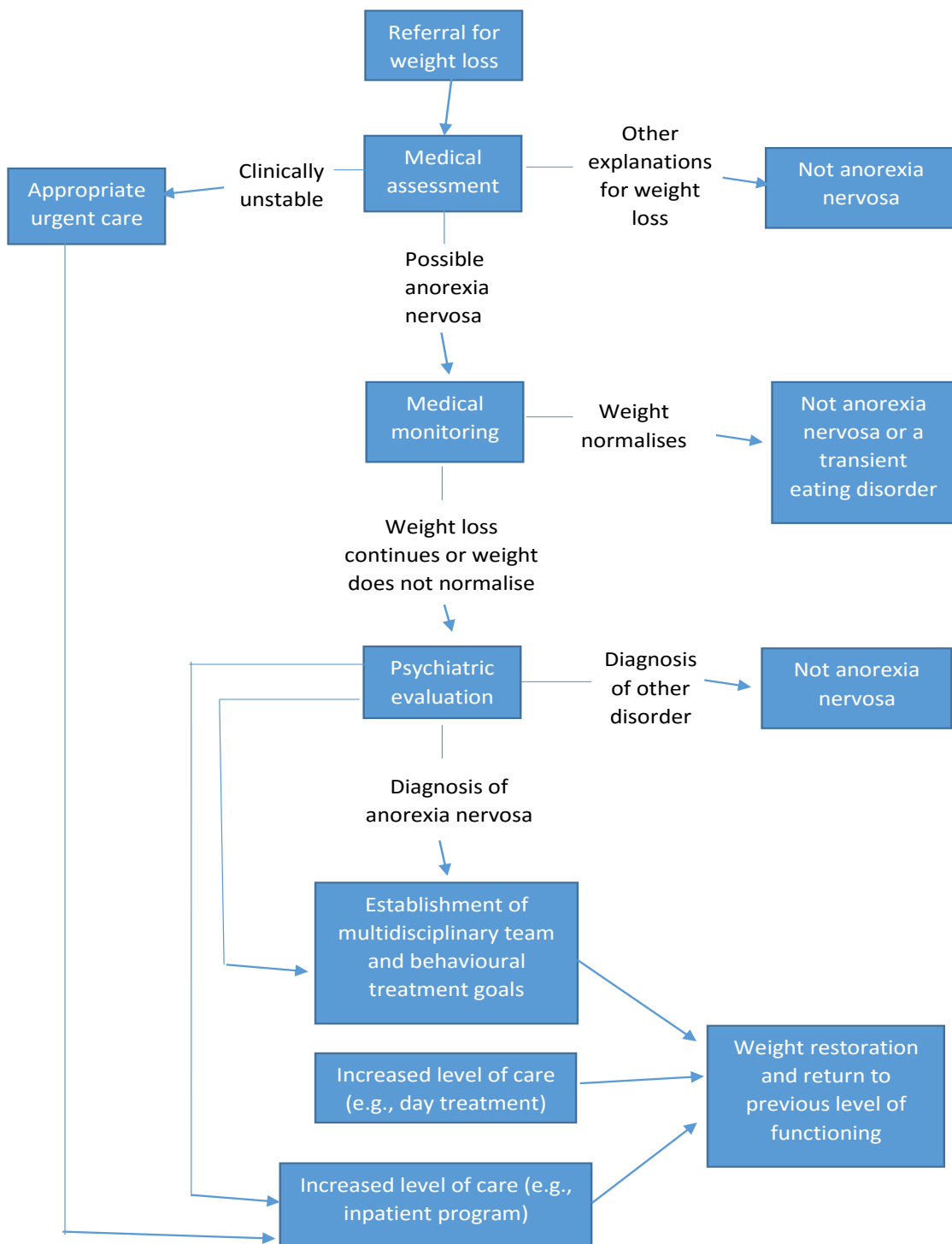


Figure 1. Usual pathway, including assessment, of care for people who may have AN (Attia & Walsh, 2009)

Psychotherapeutic Treatment of Eating Disorders

In adolescents and children with AN, a family-based therapy (FBT) is regarded as the first line in treatment (NICE, 2004; Kass, Kolko, & Wilfley, 2013; Watson & Bulik, 2013). It is superior to 'treatment as usual' but there is insufficient evidence for any single form of family therapy (Fisher, Hetrick, & Rushford, 2010). The Maudsley Model (LeGrange, 2005; Rhodes, 2009) has gained popularity worldwide as a frequently used version of FBT. Couturier, Kimber & Szatmari (2012) carried out a systematic review and meta-analysis of 3 studies that evaluated the efficacy of family based treatment (FBT) compared with individual treatment among adolescents with EDs. They found that end of treatment data indicated that FBT was not significantly different from individual treatment. However, they did find that there were significant benefits of FBT at 6-12-month follow-up. The authors suggest that those who received individual treatment no longer received the support of their therapist and may have reverted back to ED behaviours, yet those who had engaged in FBT had the support of their family. An earlier systematic review by Berkman et al. (2006) found that some forms of FBT (e.g. Maudsley FBT) are efficacious in treating adolescent AN. A Cochrane review by Fisher, Hetrick and Rushford (2010) indicated that FBT for individuals with AN of all ages may be more effective than treatment as usual, but that there is not enough evidence to determine whether family therapy is effective compared to other psychological interventions for rates of remission.

For adults with AN, there is a paucity of high quality evidence for psychotherapeutic treatment. A recent review by Hay (2013) found only six new AN follow-up and treatment trial studies since 2005, but noted that the quality of research for the disorder is improving. In an earlier RCT by Dare, Eisler, Russell, Treasure and Dodge (2001), patients who received family therapy and psychodynamic psychotherapy was found to have significantly higher improvements than the control group. Conversely, a later systematic review of randomised controlled trials (RCTs) found no supportive evidence for family therapy (Bulik, Berkman, Brownley, Sedway & Lohr, 2007).

Cognitive Behavioural Therapy (CBT) is generally the recommended treatment for AN, despite limited evidence (NICE, 2010; RANZCP, 2005), reflecting the findings of the recent RCP report (2012) which demonstrates that the majority of services choose CBT as the treatment of choice for AN. CBT has shown to improve treatment adherence and dropout (Galsworthy-Francis & Allan, 2013), reduce relapse in weight-restored AN patients (Hay,

Touyz & Sud, 2012; Berkman et al., 2006; Pike, Walsh, Vitousek, Wilson, & Bauer, 2003; Carter et al., 2009; Bulik, et al., 2007) and achieve 'good' outcome for 66% of patients who had completed the treatment (Fairburn et al., 2009). A systematic review by Hay et al. (2015) found limited evidence that focal psychodynamic therapy might be superior to treatment as usual, but found that this was in the context of treatment as usual performing poorly. The authors concluded that they could not come to any firm conclusion regarding the effects of specific individual psychotherapies for AN in adults or older adolescents.

There is no one psychotherapeutic approach that is applied consistently in outpatient care worldwide, although CBT has the best evidence for BN and BED (Brownley, Berkman, Sedway, Lohr, & Bulik, 2007; Kass, Kolko & Wilfley, 2013; Hay, Bacaltchuk, Stefano & Kashyap, 2009; NICE, 2004; Shapiro, Berkman, Brownley, Sedway & Lohr, 2007). Individual or group CBT reduces the core behavioural symptoms and psychological features in both the short and long term (Berkman et al. 2006). In BED, individual or group CBT reduces binge eating and improves abstinence rates for up to 4 months after treatment; however, CBT is not associated with weight loss. The Royal Australian and New Zealand College of Psychiatrists (RANZCP) most recent clinical practice guidelines also state that in BN and BED the best evidence points towards a therapist-led cognitive behavioural therapy (CBT). For BED, inclusion of an adapted Motivational Interviewing (MI) session to CBT and self-help significantly improved outcomes, and improvements also generalised to other domains including mood, self-esteem and quality of life (Cassin, van Ranson, Heng, Brar & Wojtowicz, 2008).

In addition to FBT and CBT based treatments for EDs, clinicians have also advocated the use of self-help and alternative delivery systems, and the NICE (2004) and RANZCP (2014) guidelines include self-help programmes as an important component of the treatment provision for both BN and BED. For example, Beintner, Jacobi & Schmidt (2014) carried out a systematic literature review and meta-regression analysis exploring dropout, treatment participation, association with intervention characteristics and association with treatment outcomes for manualised self-help interventions for BN and BED. They found publications reporting 50 different trials of manualised self-help interventions for BN and BED. The authors concluded that self-help interventions have a place in the treatment of BN and BED, especially if the features of their delivery (i.e. CD ROM, internet) are considered carefully. BED patients complete self-help more often and benefit more than BN patients. For BN

patients, guidance can reduce study dropout and enhance treatment outcome. Other studies have found that BN self-help groups can be equally or more effective than CBT in establishing remission from bingeing and purging symptoms (Cooper, Coker & Fleming, 1994). Hay et al. (2009) carried out a review in which they found that self-help approaches that used highly structured CBT treatment manuals were promising.

Perkins, Murphy and Schmidt reviewed the literature regarding pure self-help (PSH) and guided self-help (GSH) interventions for people with BN and BED in people of all ages and genders. Fifteen trials were identified that used manualised self-help. There was some evidence that PSH/GSH reduced ED symptoms in comparison to waiting list or control treatment, and may produce comparable outcomes to formal therapist-delivered psychological therapies. Allen & Dalton (2015) carried out a systematic review of the literature which evaluated psychological treatments for AN, BN and BED conducted in primary care. They found that guided self-help therapy may be a beneficial, first line treatment for reducing bingeing and purging symptoms.

Alternative methods of delivery may allow people who would prefer not to have face-to-face treatment to access to care. These include treatment and support via telephone therapy, e-mail, the internet, computer software CD-ROMS, and virtual reality techniques. The initial assessment of the effectiveness of these is encouraging, particularly with BN and BED (Mitchell et al., 2008; Aardoom, Dingerhans, Spinhoven & van Furth, 2013; Myers, Swan-Kremeier, Wonderlich, Lancaster & Mitchell, 2004; Wagner, et al., 2013; Graham & Walton, 2011; Schmidt et al., 2008). The RANZCP clinical practice guidelines (2014) also suggest there is a role for CBT for BN or BED which is adapted for internet delivery.

Pharmacological and Surgical Treatment of Eating Disorders

During the last few years, psychotropic drugs, in particular, antidepressants (AD) belonging to the class of selective serotonin reuptake inhibitors (SSRI) and antipsychotic (AP) drugs, and second generation antipsychotics (SGA) have played a relevant role in the management of a number of psychiatric disorders. Both AN and BN are frequently comorbid with depression, and so eating disorders have tended to be treated pharmacologically with antidepressants such as fluoxetine (Prozac) (Kruger & Kennedy, 2000).

There is some evidence that pharmacological treatments can be effective with BN when they are compared with placebo conditions, but this evidence is still far from convincing (Grilo,

Pagano, Skodol, Sanilow et al., 2007). Some studies have indicated a modest reduction in the frequency of bingeing and purging with such antidepressants with placebo controls (Wilson & Pike, 2001; Bellino & Merli, 2004), but drop-out rates can still be unacceptably high (Bacaltchuk & Hay, 2003). A review by Berkman et al. (2006) found that fluoxetine (60 mg/day) reduces core bulimic symptoms (binge eating and purging) and associated psychological features in the short-term. Similarly, Flament, Bissada & Spettigue (2012) and Hay and Claudino (2012) and Arbaizar, Gomez-Acebo & Llorca (2008) reviewed the evidence for drug treatments for EDs, and found that there was support for high dose antidepressants (Fluoxetine) in BN, and anticonvulsants (Topiramate) and anti-obesity agents (Sibutramine) for BED. This provides support for an earlier systematic review by Brownley, Berkman, Sedway, Lohr and Bulik (2007) which found that both Topiramate and Sibutramine were found to be promising in achieving weight reduction for BED. Lisdexamfetamine Dimesylate (LDX) is a central nervous system stimulant indicated for the treatment of moderate to severe BED. It has received regulatory approval and is currently pending long term clinical trials (Citrome, 2015).

The results from a Cochrane review by Hay, Claudino and Kaio (2001) found that about 20% of patients who presented with BN and treated with antidepressants were free of binge-eating episodes at the end of the short term trials. This is similar to an earlier meta-analysis comparing different classes of antidepressants with placebo (Bacaltchuk, Hay & Mari, 2000).

Pharmacological treatments with AN have tended to be significantly less successful than with BN, but the studies assessing drug treatment with AN have been relatively limited in number (Pederson, Roerig & Mitchell, 2003; Claudino, Silva de Lima, Hay, Bacaltchuk, Schmidt & Treasure, 2006). For example, a systematic review by Claudino and colleagues that included four small RCTs found that antidepressant treatment in acute AN did not improve weight gain, ED or associated symptoms.

Psychotropic drugs are often prescribed by clinicians for symptomatic treatment of comorbid conditions in AN (Couturier & Lock, 2007). Clinicians sometimes prescribe psychotropic drugs when the patient presents with intense/irrational beliefs about weight and food intake, and distorted body image, and this could be interpreted as psychosis (Fazeli et al., 2012). Court et al., (2008) conducted a systematic review and found only four randomised controlled trial comparing typical or atypical antipsychotic medication to other interventions. Overall, they found that there is insufficient evidence to either support or refute the use of

antipsychotic medication in AN. Flament (2012) and Hay (2012) reported that the evidence of the efficacy of drug treatments was mostly weak or moderate, with low recovery rates. A review by Hay, Claudino & Kaio (2001) also found high drop-out rates for antidepressants when compared to psychotherapy.

Balestrieri, Oriani, Simoncini and Bellantuono (2013) reviewed the literature relating to the use of antidepressants and antipsychotics in adults and adolescents with AN, and reported that there was no strong evidence of beneficial effects of using antidepressants and antipsychotics in either group. Balestrieri et al., (2013) conducted a systematic review and concluded that research in drug treatment of AN is still far away from finding univocal conclusions. Most studies focused on the efficacy of SGA both on the perception of body shape and on obsessive symptoms should not be considered strong enough to clearly support the use of such drugs in routine clinical practice.

A small number of publications regarding deep-brain stimulation (DBS) treatment for AN have been reviewed by Lipsman, Woodside, Giacobbe & Lozano (2013). The authors note that DBS remains under active investigation and is only available in the context of experimental trials, as the safety and efficacy of the procedure remains under investigation. The research usually includes case studies and therefore no conclusions regarding the usefulness of DBS as surgery for AN can be made at this time.

Combined Psychotherapy and Pharmacotherapy

Medication is frequently proposed as a supplement to education, nutritional rehabilitation and psychotherapy. Hay and colleagues (2009) review found that psychotherapy alone is unlikely to reduce or change body weight in people with BN or similar EDs. Medications for physical or psychological comorbidities aren't often used as the sole treatment for EDs, but are often used in either inpatient or outpatient settings. More significant treatment gains are reported if antidepressant medication is combined with psychological treatment such as CBT (Pederson, Roerig & Mitchell, 2003). The benefits with joint drug and CBT programmes appear to be reciprocal in that CBT helps to address the core dysfunctional beliefs in BN, and antidepressant drug treatment appears to reduce the tendency to relapse following cognitive behavioural treatment (Agras, Rossiter, Arnow, Schneider et al., 1992). A RCT compared two treatment conditions: manual-based CBT for 20 sessions over 18 weeks with fluoxetine given to non-responders after 6 sessions; or a stepped-care approach starting with supervised

self-help, with the addition of fluoxetine in participants who were predicted to be non-responders after six sessions, followed by CBT for those who failed to achieve abstinence with self-help and medication. At the end of 1-year follow-up, the stepped care condition was significantly superior to CBT (Mitchell et al., 2011).

Hay and colleagues (2001) reviewed the literature regarding use of antidepressants and psychological treatments in the treatment of patients with BN. They found that a combination of antidepressants and psychological treatments was more effective in reducing BN symptoms than either treatment in isolation. A review by Bacaltchuk et al. (2000) found that remission rates for BN were 23% for antidepressants alone versus 42% when combined with psychotherapy. Flament and colleagues (2012) also reviewed clinically relevant RCTs in the treatment of AN and found that Olanzapine demonstrated an adjunctive effect for inpatient treatment of underweight patients, and fluoxetine helped prevent relapse in weight-restored AN patients in half of the studies. Low-dose antipsychotic medication has been suggested as an adjunct treatment for AN, particularly where there is high anxiety and obsessive eating-related ruminations (Hay & Claudino, 2012).

For BED, Carter et al. (2003) recommend the use of a SSRI at the upper dose approved for major depressive disorder; for patients unresponsive or intolerant to SSRIs, they suggest topiramate, starting at 25 mg nightly, then increased by 25 mg weekly. Reas & Grilo (2008) reviewed eight studies, including a total of 683 BED patients, studying the effects of pharmacotherapy combined with psychotherapy. Combined treatment failed to significantly enhance binge outcomes, although specific medications (orlistat, topiramate) enhanced weight losses achieved with CBT. Further evidence for Topiramate for BED can be found from a review conducted by Leombruni, Lavagnino & Fassino (2009) who found that Topiramate appears to have a weight loss effect greater than that of other treatments such as CBT, interpersonal therapy, SSRIs and Sibutramine.

To date, research has confirmed that medication alone is insufficient as a treatment option for BN. Nakash-Eisikovits and colleagues (2002) calculated the rate of post-treatment symptoms based on 10 RCTs: at treatment termination, bulimic patients still binged, on average, 4.3 times per week, and still purged 6.2 times per week. For those receiving both pharmacotherapy and psychotherapy (nine studies), the average rates were 2.5 for both binge and purge frequency. Although these data indicate substantial improvement over conditions prior to treatment, they do not constitute a return to mental health. According to Whittal et al.

(1999), the effect size of combined treatment for BN (based on three trials) was significantly better than that of medication alone, and significantly better than the effect size of CBT for binge frequency, but not purge frequency. Nakash-Eisikovits et al. (2002) demonstrated a small advantage for combined BN treatment over medication for binge episodes, and a moderate advantage for purging episodes.

Summary of Treatment for Eating Disorders

Table 2 provides a concise summary of the treatments that have been outlined for AN, BN and BED. In particular, it is important to note that for AN, no psychological treatment has received unequivocal support as the literature on medication treatments and behavioural treatments for adults with anorexia nervosa is sparse and inconclusive (Bulik, Berkman, Brownley, Sedway & Lohr, 2007; Kass, Kolko & Wilfley, 2013; Herpertz-Dahlmann, van Elburg, Castro-Fornieles & Schmidt, 2015; Berkman et al. 2006). Some forms of family based therapy are efficacious in treating adolescents with AN (Berkman et al. 2006), and medication as an adjunct therapy during inpatient care of AN has been proposed (Hay & Claudino, 2012).

Table 2. Summary of Recommended Treatment for Eating Disorders (adapted from Wilson & Shafran, 2005; NICE, 2004).

Recommended treatment for eating disorders	
Pharmacological	Psychological
<p>Anorexia Nervosa Drugs should not be used as sole or primary treatment for AN. Antidepressants, antipsychotics/antipsychotropic have insufficient evidence regarding efficacy in recovery. Olanzapine as adjunct to inpatient treatment. Fluoxetine as relapse prevention. All patients with AN should have alert placed on their prescribing record about risk of side effects.</p>	<p>Consider cognitive-behavioural therapies, Psychodynamic psychotherapy, focal dynamic therapy, or family interventions focussed on EDs. Family interventions that directly address the ED should be offered to children and adolescents.</p>
<p>Bulimia Nervosa Trial of antidepressant as alternative to, or in addition to self-help programme. Patients should be informed that antidepressant drugs can reduce frequency of binge-eating and purging, but long term effects are unknown. Selective serotonin reuptake inhibitors (fluoxetine) are drugs of first choice for BN in terms of acceptability, tolerability and reduction of symptoms. No drugs other than antidepressants are recommended. Drugs in combination with psychotherapy recommended.</p>	<p>As a possible first step, patients with BN should be encouraged to follow evidence-based self-help programme, which may improve outcomes and be sufficient for limited subset of patients. Specifically adapted CBT should be offered to adults with BN; 16-20 sessions over 4-5 months. Dietary counselling should not be provided as sole treatment. Guided or pure self-help and alternative approaches should be available.</p>
<p>Binge-Eating Disorder Patients should be informed that selective serotonin reuptake inhibitors can reduce binge eating, but long term effect are unknown; antidepressants may be sufficient for some patients. Anticonvulsants and anti-obesity agents have received support but more research is required.</p>	<p>Specifically adapted CBT should be offered to adults with BED. Self-help including CBT approaches. Motivational interviewing can enhance the success of CBT and self-help treatment. Guided or pure self-help and alternative approaches should be available.</p>
<p>Physical Management of weight gain in Anorexia Managing weight gain In most patients, the aim should be average weekly weight gain of 0.5-1.0 kg as inpatient and 0.5 kg as outpatient. Regular physical monitoring, and oral multivitamin/multimineral supplement in some cases, is recommended for inpatients and outpatients. Total parenteral nutrition should not be used, unless there is significant gastrointestinal dysfunction. Managing risk Healthcare professionals should monitor physical risk. If risk increases, frequency of monitoring and nature of investigations should be adjusted accordingly. Pregnant women with current or remitted AN should be considered for more intensive care to ensure adequate prenatal nutrition and fetal development. Oestrogen should not be given for bone-density problems in children and adolescents, because such treatment may lead to premature fusion of epiphyses. Feeding against the will of the patient This should be an intervention of last resort.</p>	

Establishing Efficacy of Treatment for Eating Disorders

In the treatment literature, the largest deficiency rests with treatment efficacy for AN where the literature was weakest. It is often acknowledged that the treatment of AN is particularly poorly studied with rigorous systematic reviews consistently concluding there is little evidence for any therapy (Lock & Fitzpatrick, 2009; NICE, 2004; Fairburn and Harrison, 2003). For example, the Cochrane review by Fisher et al. (2010) states that although there is some limited evidence to support the use of FBT in patients with AN, that the results are based upon few trials that include only a small number of participants, all of which had issues regarding potential bias. Research centres experience difficulty in recruiting patients for treatment studies (Agras et al., 2004). When treatment studies have been conducted, they suffer from serious methodological limitations such as lack of control conditions, poorly defined treatments, small sample sizes, high drop-out rates, poor assessments and small follow-up rates (Grilo, 2006).

Indeed, guidelines that were given by NICE (2004) for treatment of AN were graded at C level, where evidence was obtained from expert committee reports or clinical experience. This grading is the bottom of the evidence hierarchy for the NICE Guidelines (2004), and indicates that there were no randomised controlled trials or meta-analyses of randomised controlled trials (Grade A), and no well-designed, controlled clinical or quasi-experimental studies (Grade B) that explore treatment for AN prior to publication of the guidance. Appropriate treatment (inpatient vs. outpatient) for AN remains unclear, as no randomized controlled studies have addressed this question (Grilo, 2006). There are mixed findings in reviews produced by programs of different intensities in terms of their outcomes (Ben-Tovim et al., 2001). There are few controlled studies with any clearly defined interventions for AN that address the core cognitive features and psychosocial deficits (NICE, 2004; Hay, Bacaltchuk, & Stefano, 2004). Therefore, there is insufficient evidence for the recommendation for outpatient treatment by NICE (2004).

Treatment acceptance is a major challenge in the management of patients with AN (Dejong, Broadbent & Schmidt, 2012). The main reason for this difficulty is typically the patient's high ambivalence and lack of acceptance of the seriousness of their illness. Thus, HCPs not only have to cope with a frequently difficult therapy process but also must take responsibility for management of physical and psychiatric complications of this potentially fatal disorder. In conclusion, the literature regarding treatment efficacy and outcome for AN, BN, and BED is

of highly variable quality (Berkman et al., 2006). AN is a disease characterized by denial of illness, frequent treatment refusal, and non-compliance with pharmacological treatment due to fear of gaining weight (McKnight & Park, 2010).

Treatment trials with AN patients are challenging. Recruitment is trying; prevalence is low, and ambivalence and reluctance to engage in treatment are common. The medical compromise associated with the illness precludes allocation to a control group without proper treatment (i.e. waiting list, placebo); hence all treatment trials for AN begin methodologically penalized. As a result, treatment trials for AN are unable to determine whether treatment produces improvement beyond what the passage of time alone would produce. Nor are they able to determine whether improvement extends beyond the impact of non-specific factors, such as the care provider–patient relationship, treatment expectations, or medically necessary background treatments (e.g. hospitalization), which are typically uncontrolled and possibly unbalanced across comparison arms. Drop-out rates are inordinately high compared with many psychological conditions and even other EDs (Halmi et al. 2005; Berkman et al. 2006; Halmi, 2008), posing problems for cost, attainment of sufficiently powered samples, and interpretation of findings. A further difficulty facing treatment research is that treatment as usual in clinical practice involves multidisciplinary approaches and choices about level of care (Watson & Bulik, 2013).

The Challenges of Providing Treatment for People with Eating Disorders

As noted in the Treatment for Eating Disorders section of this thesis, interventions for AN have received little empirical support. Research regarding the efficacy of treatments for the disorder is fraught with difficulty, including homogeneity of samples and small sample sizes, lack of control or comparative conditions, low rates of uptake and high dropout. It is also important to note that the recovery process in AN is not only affected by the type of treatment offered, but by a complex set of factors including the patient’s environment and personality (Garrett, 1997; Keski-Rahkonen & Tozzi, 2005; Matusek & Knudson, 2009; Nilsson & Hagglof, 2006; Noordenbos & Seubring, 2006; Pettersen & Rosenvinge, 2002; Tozzi, Sullivan, Fear, McHenzie & Bulik, 2003; Vanderlinden, Buis, Pieters, & Probst, 2007). Therefore, HCPs who may face challenges that affect the likelihood of patient recovery that are not just related to the type of treatment. Despite decades of theoretical progress and research, many questions still remain with regard to psychological mechanisms that explain *why* and *how* some AN patients respond to treatment whereas others do not (Wollburg,

Meyer, Osen & Lowe, 2013). Therefore, it is important to carry out further research regarding factors, other than treatment type, that may affect recovery from anorexia.

Extreme fear of eating and weight gain are core symptoms in AN and treatment aimed at helping the patient to overcome the illness will usually raise ambivalence and fear related to loss of control (Cockell, Geller, & Linden, 2003; Tan, Hope, Stewart, & Fitzpatrick, 2003). Although evidence on the role of cognitive processes in AN is generally limited (Woolrich, Cooper, & Turner, 2006), certain dysfunctional cognitions have repeatedly been found, such as importance of body shape for self-esteem, need to control thoughts, helpfulness of body checking in terms of weight control, or fear of losing control (Serpell, Teasdale, Troop, & Treasure, 2004; Cooper, Grocutt, Deepak, & Bailey, 2007; McDermott & Rushford, 2011).

Studies exploring treatment dropout suggest that a patient's high impulsivity, low cooperativeness, low perceived freedom, low readiness to change dietary restriction, lack of trust and experiencing treatment as too difficult affects the likelihood of dropout occurring (Eivors, Button, Warner, & Turner, 2003; Fassino, Abbate, Daga, Piero, & Rovera, 2002; Geller, Drab-Hudson, Whisenhunt, & Srikaneswaran, 2004; Vandereycken & Devidt, 2010; Wallier et al., 2009). Relapse to eating disordered behaviour is associated with the patients' low tolerance of unpleasant feelings, low self-esteem, lack of structure, identification with the disorder, lack of social support, need for control, interpersonal conflicts and negative treatment experiences (Cockell, Zaitsoff, & Geller, 2004; Darcy et al., 2010; Federici & Kaplan, 2008). Recovery has been associated with a number of factors including internal motivation, self-acceptance, body satisfaction, developing a new identity and maturation, (Garrett, 1997; Keski-Rahkonen & Tozzi, 2005; Matusek & Knudson, 2009; Nilsson & Hagglof, 2006; Noordenbos, 1992; Pettersen & Rosenvinge, 2002; Tozzi et al., 2003).

Researchers have also explored dropout and relapse in relation to the patient's perceived psychosocial functions of symptoms, and the decision processes of changing behaviour. The psychosocial functions of AN have been addressed in several studies, that is, the idea that AN patients tend to appreciate their symptoms in spite of the seriousness of their condition (Nordbo, Espeset, Gulliksen, Skarderud & Holte., 2006, 2008; Serpell, Treasure, Teasdale & Sullivan, 1999; Vitousek, Watson & Wilson, 1998; Williams & Reid, 2009; Cockell, Geller, & Linden, 2002; Geller & Drab, 1999; Rieger et al., 2000). Serpell et al. (1999) found that people with AN perceived the benefits of AN to be that they felt protected. The disorder also gave them a sense of confidence and feeling different. Similarly, Nordbo and colleagues

(2006) also found that the disorder made people feel as though they developed a new identity and it made them feel secure, mentally strong, and self-confident. They reported that the disorder helped people to avoid negative emotions and allowed them to communicate difficulties. Whilst the disorder was positive and elicited care, they also felt as though they were fulfilling a death wish. Therefore, by working as an internal rather than a social reinforcer, it is hypothesised that the positive value of the AN symptoms to the patient constitutes a significant contribution to the maintenance of AN (Vitousek et al., 1998), and presents a challenge to HCPs when attempting to help a patient recover from the disorder.

Nordbo and colleagues (2012) carried out a further study which described the core obstacles that interfered with patients' wishes to recover from AN. Patients confirmed that the positive benefits of living with AN, such as the feeling of security or feeling as though they had meaning and purpose in life. If participants failed in other areas of life, such as school or relationships, AN was a protected area in which they succeeded. Denial of the disorder would make them feel as though they had nothing to recover from. Distress, difficulty in both eating and putting on weight would decrease their desire to recover. When patients were exposed to other people's expressed (or unexpressed but perceived) opinions about them, they felt extremely sensitive to the comments. For example, people's utterances about the participant's appearance or weight could significantly affect the participant's wish to lose more weight. Conversely, absence of concern about the participant's weight might also make the participant think that the other person (e.g. therapist) was no longer concerned and the wish to lose weight would increase. Participants described feeling stuck with AN and feeling as though recovery was impossible.

Motivation during Treatment for Anorexia Nervosa

The psychosocial benefits reported by patients with AN (Nordbo, Espeset, Gulliksen, Skarderud, & Holte, 2006; Serpell, Treasure, Teasdale, & Sullivan, 1999; Vitousek, Watson, & Wilson, 1998) provide a partial explanation as to why individuals receiving treatment for the disorder may dropout, relapse, and not engage with treatment. The strong reluctance to recover from a serious illness like AN has prompted researchers (Vansteenkiste, Soenens & Vandereycken, 2005; Geller & Drab, 1999) to study motivational processes in patients that are related to AN maintenance versus recovery.

Motivation has been identified and widely acknowledged as being critical to treatment success and recovery from EDs (Clausen, Lubeck, & Jones, 2013; Espindola & Blay, 2009; Federici & Kaplan, 2008; Geller, 2002; Keski-Rahkonen & Tozzi, 2005; Tierney, 2008). The NICE guidelines state that motivation is a key factor to be considered when implementing treatment for EDs (NICE, 2010), and Fairburn, Cooper, & Shafran, (2008) suggest that without sufficient motivation, “treatment stands little chance of succeeding” (Fairburn, et al., 2008, p. 147). Issues related to motivation and readiness to change are essential in AN treatment (Geller, Brown, Zaitsoff, Goodrich & Hastings, 2003). Higher motivation at baseline has been linked to improved outcome (Herzog, Sacks, Keller, Lavori, & et al., 1993). Moreover, a move from low readiness to change to high readiness to change in patients predicted significantly better outcome and eating pathology at follow up (Wade, Frayne, Edwards, Robertson, & Gilchrist, 2009).

Unfortunately, motivation to engage in treatment and recover in patients with AN is notoriously difficult to both foster and maintain (Vitousek, et al., 1998), and it has also been reported to be a difficulty in treatment for BN and BED (Carter & Kelly, 2015). Low motivation to change has been hypothesised to produce high rates of treatment avoidance (Rosenvinge & Kuhlefeldt-Klusmeier, 2000), dropout (Mahon, 2000; Wallier et al., 2009), relapse (Fichter, Quadflieg, & Hedlund, 2006; van Son, van Hoeken, van Furth, Donker, & Hoek, 2010) and poor treatment outcome (Fairburn, 2005; van Son et al., 2010). Low motivation is also associated with ambivalence towards recovery, something which is considered typical in presentations of AN (Vitousek, et al., 1998; Geller, Srikameswaran, Zelichowska, & Williams, 2012). Low motivation has been associated with greater attrition (Kahn & Pike, 2001), and greater hospitalisation in adolescents (Ametller, Castro, Serrano, Martinez, & Toro, 2005). In a prospective study, reductions in levels of motivation during treatment as well as lower post-treatment motivation were identified as risk factors for relapse in AN (Carter et al., 2012), as patients who drop out of treatment are likely to engage in a cycle of ineffective behaviours which continue to maintain the ED (Geller, Williams, & Srikameswaran, 2001).

Various models that highlight factors associated with motivation to change during the therapeutic process for EDs have been proposed. Motivational Interviewing (Miller & Rollnick, 1991; Vitousek, Watson, & Wilson, 1998) the transtheoretical model (TTM) of readiness to change (Prochaska & DiClemente, 1982) and the readiness and motivation

interview (Geller, 2002) emphasize interventions that encourage the patient to take an active role in therapy and assume that the patient possesses the power for change (Vansteenkiste, Soenens, & Vandereycken, 2005).

A recent systematic review of studies regarding the effectiveness of motivational enhancement interventions found that self-reported motivation to change increased and some improved outcomes in terms of change in binge eating behaviour were observed. Unfortunately, the review found no evidence of improved outcomes for dietary restriction or purging behaviours. Such mixed findings have implored researchers to explore different types of motivation among individuals with EDs. Arguing that the field lacked an overarching theoretical framework, Vansteenkiste and Vandereycken (2005) suggested that self-determination theory (STD; Ryan & Deci, 2000; Ryan & Deci, 2008) might represent a useful model for conceptualising the motivational process involved in influencing motivation to change in EDs, as studies on readiness to change have often explored the amount rather than the types of motivation to recover that were held by individuals with EDs.

The Application of Self-Determination Theory to Eating Disorder Treatment

Self-determination theory (SDT), a macro-theory on human motivation and behavioural change, states that patients not only need to need help but also need to want help (Ryan & Deci, 2000; Miller & Rollnick, 2002). Vansteenkiste and colleagues (2005) argue that patients are more likely to express a willingness to undertake change if they have come to fully endorse and understand (i.e., internalized) the personal significance of change. Without understanding the change, the patient may be externally motivated (e.g., pressure to change from the family). This is supported by Geller (2002) who distinguishes between whether ED patients make changes for themselves (internal motivation) or for others (external motivation). The term extrinsic motivation refers to the performance of an activity in order to attain some separable outcome and, thus, contrasts with intrinsic motivation, which refers to doing an activity for the inherent satisfaction of the activity itself.

Comparisons between people whose motivation is authentic (literally, self-authored or endorsed) and those who are merely externally controlled for an action typically reveal that the former, relative to the latter, have more interest, excitement, and confidence, which in turn is manifest both as enhanced performance, persistence, and creativity (Deci & Ryan, 1991; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997) and as heightened vitality (Nix, Ryan,

Manly, & Deci, 1999), self-esteem (Deci & Ryan, 1995), and general well-being (Ryan, Deci, & Grolnick, 1995). Research revealed that threats, deadlines, directives, pressured evaluations, and imposed goals diminish intrinsic motivation because they conduce toward an external perceived locus of causality. In contrast, choice, acknowledgment of feelings, and opportunities for self-direction were found to enhance intrinsic motivation because they allow people a greater feeling of autonomy (Deci & Ryan, 1985). Specifically, within the ED context, both Kaap-Deeder and colleagues (2014) and Rieger and colleagues (2000) found that relative increases in self-endorsed motivation related to increases in BMI in the group of patients with AN.

Unlike some perspectives that view extrinsically motivated behaviour as invariantly non-autonomous, SDT proposes that extrinsic motivation can vary greatly in its relative autonomy (Ryan & Connell, 1989; Vallerand, 1997). Rather than treating motivation as a unidimensional concept that varies in amount, Deci and Ryan (1985) introduced a sub-theory, called organismic integration theory (OIT) to distinguish between different types of motivation (Vansteenkiste et al., 2005; Ryan & Deci, 2000). Vansteenkiste et al. (2005) elaborate the concept further, using SDT to describe five different types of motivation, ranging from a-motivation to internal motivation. These different forms of motivation are said to fall along a continuum of increasing internalization or self-endorsement (Figure 2).

At the far left of the self-determination continuum is amotivation, the state of lacking the intention to act. When amotivated, people either do not act at all or act without intent--they just go through the motions. Amotivation results from not valuing an activity (Ryan, 1995), not feeling competent to do it (Bandura, 1986), or not expecting it to yield a desired outcome (Seligman, 1975). To the right of amotivation in are five classifications of motivated behaviour. External regulation refers to the pursuit of therapeutic change to meet external expectations, to obtain promised rewards or to avoid threatening sanctions. The patients feel like they have no other choice but to pursue change. Second, in the case of introjected regulation, the therapeutic change is pursued to avoid feelings of guilt, shame or anxiety, or to prove oneself and to bolster one's self-worth. Although the reason for change has been taken in, the patients are not pursuing change completely willingly. Instead, the change is accompanied with feelings of internal conflict and tension. Only when patients see the personal relevance of the change, its pursuit is self-endorsed and, hence, enacted more willingly. Identified regulation constitutes a third type of regulation, referring to the

identification with the personal value of change. When patients not only value the change by itself but see how the change fits with other personally endorsed values and convictions, the reasons for change are said to be integrated. Integrated regulation represents the fourth type of regulation. These four types of regulation are said to lie on a continuum of increasing internalisation (i.e. self-endorsement) of change, with external regulation representing the complete absence of internalisation and integrated regulation representing full internalisation.

In the therapeutic context, patients may undertake change to meet external pressures, including demanding expectations, threats of punishment, and criticism. As the reason for change is situated completely outside the patient, external regulation is characterized by a complete lack of acceptance (i.e., internalization) of the reason for change. A patient with an eating disorder who enters treatment as a result of parental demand displays external regulation. Patients can also pursue change to meet internal (rather than external) pressures. Such internal pressures involve the avoidance of shame, guilt, and anxiety, or the attainment of regard and esteem. This form of motivation has been labelled introjected regulation.

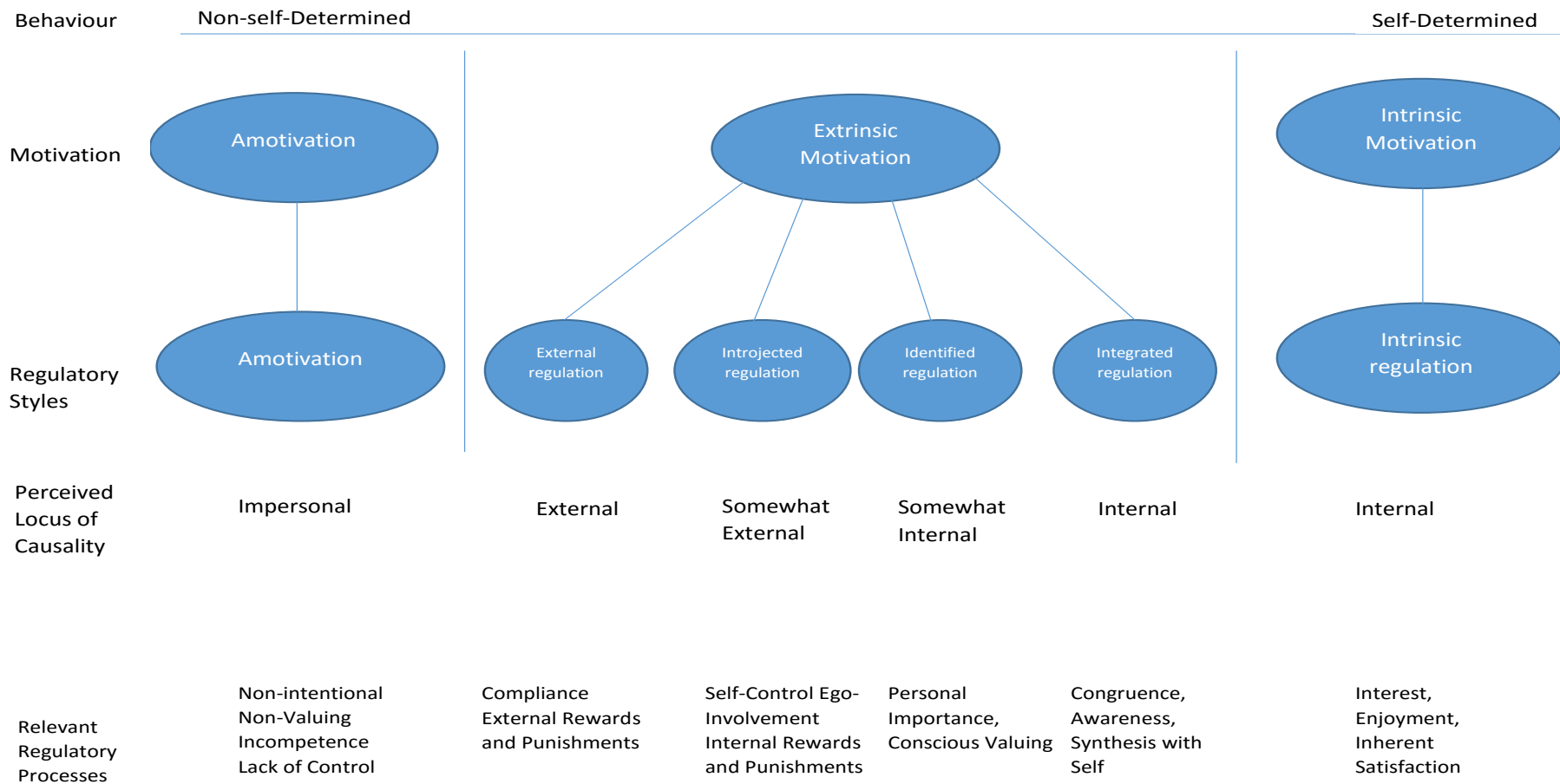


Figure 2. The self-determination continuum showing types of motivation with their regulatory styles, loci of causality and corresponding processes (Ryan & Deci, 2000)

A patient with an eating disorder who enters the clinic because otherwise they would feel guilty and thus feels as if they 'should' pursue change displays introjected regulation. Although the patient's motive for change is now internal to the person, the reason for change has not yet been fully accepted, as the change goes along with feelings of inner conflict and compulsion. A fuller form of self-endorsement is achieved when patients come to identify with the importance of change for oneself. In the case of identified regulation, a patient feels the personal relevance and necessity of change such that change is pursued more willingly. A patient with an eating disorder who enters treatment because they believe it is critical for her health concurs with the decision to change. Finally, when change is not only valuable by itself, but is perceived to be congruent with other important life values and interests a patient holds, the patient is said to display integrated regulation. A patient who pursues change because they feel as if important goals and values in her life (e.g., intimate relationships, studies) are negatively affected by her eating disorder fully endorses the decision to change. The decision to change is anchored within other important life aspirations. Such an integrated regulation represents the fullest form of self-endorsed motivation (Ryan & Deci, 2000).

In the area of health care, greater internalization has been associated with greater adherence to medications among people with chronic illnesses (Williams, Rodin, Ryan, Grolnick, & Deci, 1998), better long-term maintenance of weight loss among morbidly obese patients (Williams et al., 1996), improved glucose control among diabetics (Williams, Freedman, & Deci, 1998), and greater attendance and involvement in an addiction-treatment program (Ryan, Plant, & O'Malley, 1995). The advantages of greater internalization appear to be diverse (Ryan et al., 1997), including more behavioural effectiveness, greater volitional persistence, enhanced subjective well-being, and better assimilation of the individual within his or her social group.

Extrinsic or insufficiently internal motivation for change is known to be a common problem in AN treatment (Mansour et al. 2012; Carter & Kelly, 2015; Casasnovas et al., 2007; Bewell & Carter, 2008). Many of the characteristic AN symptoms are experienced as consistent with the patient's self-image and, therefore, patients are reluctant to take active steps towards changing them; some even refuse completely (Tan, Stewart, Fitzpatrick, & Hope, 2007; Bissada, Tasca, Barber, & Bradwejn, 2008). If they are willing to enter treatment, then this is often motivated by the desire to please others, yield to their pressure, or avoid even more

severe health consequences (Toman, 2002; Nordbo et al., 2008; Vandereycken & Vansteenkiste, 2009; Vitousek et al., 1998).

An important challenge in AN treatment is to shift patients towards increasing the perceived personal importance of change (Vansteenkiste et al., 2005). Results from Bewell and Carter's (2008) study indicate that readiness to change mediates the effects of eating disorder severity on outcome, underlining the importance of motivation facilitation in treatment. Many studies have shown that behaviour change tends to be more effective and longer lasting to the extent that the motivation for change is internal or, ideally, intrinsic rather than external or controlled (Geller, Drab-Hudson, Whisenhunt, & Srikameswaran, 2004; Bewell & Carter, 2008). Evidence to support this theory comes from a recent case series where patients admitted to an inpatient service under a standard procedure were compared to patients who were engaged in such a way that aimed to maximize a sense of volition and personal responsibility (Vandereycken & Vansteenkiste, 2009). Patients engaged within the latter strategy had lower rates of short-term dropout but longer-term dropout remained similar to that in the former strategy (Vandereycken & Vansteenkiste, 2009). There is some evidence suggesting that it may be possible to promote internal motivation and thereby improve outcome in the course of eating disorder treatment (Geller, Zaitsoff, & Srikameswaran, 2005).

Past research has shown that a self-endorsed rather than a pressured pursuit of change yields multiple benefits, including better treatment adherence (Zeldman, Ryan & Fiscella, 2004) lower depressive symptomatology in patients with a depression (Zuroff, Kostner, Moskowitz, McBride, Marshall, & Bagby, 2007) and less eating preoccupation in a group of outpatients with bulimia-spectrum symptoms (Mansour et al., 2012). Fostering self-endorsement of change is critical as it has been found to relate to various beneficial therapy outcomes, including satisfaction with therapy and the importance attached to therapy (Pelletier, Tuson & Haddad, 1997), medication adherence (Williams, Rodin, Ryan, Grolnick & Deci, 1998), therapy attendance (Ryan, Plant, & O'Malley, 1995) and increased change (Michalak, Klapheck, & Kosfelder, 2004).

Specifically, with regard to EDs, Vansteenkiste, Claes, Soenens and Verstuyf (2013) found that external pressure to change was particularly elevated in patients with an eating disorder who engaged in non-suicidal self-injurious behaviours. Furthermore, Mansour and colleagues (2012) showed that more self-endorsed forms of motivation at pre-treatment predicted lower

levels of eating preoccupation and binge eating at post-treatment in a group of outpatients with bulimia-spectrum symptoms, even after controlling for pre-treatment levels of binge eating and psychiatric symptoms.

According to the SDT, the social context can stimulate or hinder the gradual acceptance of change by, respectively, supporting or thwarting innate and basic psychological needs (Vansteenkiste & Ryan, 2013). Basic psychological needs can be defined as those “nutriments from the social environment that are essential or necessary for the processes of growth, integrity, and wellness to ensue” (Ryan & Deci, 2008, p.189). In SDT (Deci & Ryan, 2008), the basic needs approach suggests that humans are said to share innate needs for competence (feeling capable, efficacious and able to seek to control the outcome and experience mastery), relatedness (feeling emotionally connected and cared for by others), and autonomy (feeling free to make important decisions about one’s own life). If a person’s environment facilitates the satisfaction of these needs, well-being is thought to result; if the needs are thwarted, then ill health and pathology may ensue. When applied to the treatment of AN, SDT suggests that patients who feel that HCPs genuinely care about them (i.e. meeting their need for attachment), who feel capable rather than incompetent in the treatment process (meeting their need for competence), and who feel that they can make important choices concerning their treatment (meeting their need for autonomy) tend to achieve better outcomes than patients whose respective needs are not supported as strongly.

According to Ryan and Deci (2000), extrinsically motivated behaviours are not typically interesting to the person performing the action. Ryan and Deci (2000) explain that the primary reason a person are initially willing to perform such actions is because the behaviours are prompted, modelled, or valued by significant others to whom they feel (or want to feel) attached or related. This suggests that relatedness, the need to feel belongingness and connectedness with others, is centrally important for internalization. Thus, OIT proposes that internalization is more likely to be in evidence when there are ambient supports for feelings of relatedness. The relative internalization of extrinsically motivated activities is also a function of perceived competence. People are more likely to adopt activities that relevant social groups value when they feel efficacious with respect to those activities. As is the case with all intentional action, OIT suggests that supports for competence should facilitate internalisation (Vallerand, 1997). Finally, the experience of autonomy facilitates internalization and, in particular, is a critical element for a regulation to be integrated.

Contexts can yield external regulation if there are salient rewards or threats and the person feels competent enough to comply; contexts can yield introjected regulation if a relevant reference group endorses the activity and the person feels competent and related; but contexts can yield autonomous regulation only if they are autonomy supportive, thus allowing the person to feel competent, related, and autonomous.

To integrate a regulation, people must grasp its meaning and synthesize that meaning with respect to their other goals and values. Such deep, holistic processing (Kuhl & Fuhrmann, 1998) is facilitated by a sense of choice, volition, and freedom from excessive external pressure toward behaving or thinking a certain way. In this sense, support for autonomy allows individuals to actively transform values into their own. Within SDT, autonomy refers not to being independent, detached, or selfish but rather to the feeling of volition that can accompany any act, whether dependent or independent, collectivist or individualist.

Satisfaction of these three needs promotes positive outcomes including persistence, performance, and well-being (Ryan & Deci, 2000). An increasing number of recent studies have examined the role of need satisfaction in eating-related outcomes in non-clinical samples. For instance, need satisfaction was found to relate negatively to body image concerns (Thogersen-Ntoumani & Ntoumanis, 2007), and unfulfilled basic needs significantly predict binge eating (Schuler and Kuster, 2011). Verstuyf and colleagues (2012) proposed that an association between eating regulation and bulimic symptoms might be due to experiences of need frustration, and the data in their study confirmed this expectation. For example, eating regulation may result in feelings of incompetence and disappointment because eating regulation is sometimes difficult and inevitably results in failure. This then increases the likelihood of binge eating as a compensatory way to restore positive affect (Ryan, Deci, Grolnick, & La Guardia, 2006; Stice, 2001). Need frustration (i.e., feeling controlled, feeling like a failure, and/or feeling socially isolated) related positively to binge-eating symptoms, both at the level of inter-individual differences (Verstuyf, Vansteenskiste & Soenens, 2012) and at the level of day-to-day fluctuations within individuals (Verstuyf, Vansteenskiste, Soenens, Boone & Mouratidis, 2013).

Wollburg and colleagues (2013) suggest that if basic psychological needs are supported early on in treatment, patients might go on to develop increasingly positive attitudes towards the treatment, which may result in further positive consequences, such as increased psychological flexibility or openness towards change-facilitative experience and engagement with treatment

aspects that alter the cognitions and behaviours that maintain AN symptoms. As a consequence of such openness and acceptance of difficult experiences, efficacy beliefs, approach-related moods, and general well-being are expected to improve. Once disorder-maintaining beliefs and behaviours are altered, Wollburg and colleagues (2013) suggest that internalised motivation for healthy self-management tends to strengthen.

Basic needs fulfilment might also set other, change facilitative processes in motion. Patients who experience the treatment context as one that satisfies important needs may go on to develop positive expectancies regarding the treatment's potential benefit. An important expectancy that patients often have prior to treatment is with regard to forming a successful relationship with the HCP and the patients' motivation to change (Federici & Kaplan, 2008). If basic needs are met, then the patient may form stronger Therapeutic Alliances (TAs) which then might instigate further therapeutic gains.

Motivation and Therapeutic Alliance

According to Grawe (2007), treatment outcome will be better when patients feel valued by the HCPs, when they experience the treatment as pleasurable rather than aversive, and when they develop an emotional bond with the HCP and regard the challenges of treatment as one they can master. In other words, when patients' basic psychological needs are satisfied in the treatment process, they may tend to open up emotionally and be more willing than before to approach the difficult task of engaging with images, memories, emotions or ideas that they would normally avoid. Such psychological flexibility may be a characteristic that is somewhat opposite to the rigid and perfectionist tendencies documented among many AN patients (Halimi et al., 2000; Bond, Hayes & Barnes-Holmes, 2006). Therefore, provision of need-satisfying experiences might facilitate psychological flexibility and openness to change during treatment for AN.

The TA is the relationship between the HCP and the patient. Building a strong TA early on in treatment is predictive of positive symptom change (Baldwin, Wampold & Imel, 2007) and the NICE guidelines (2004) for EDs emphasise the importance of the patient experience in building a good therapeutic relationship and improving engagement with treatment goals. The degree to which patients felt a sense of safety, support and acceptance by HCPs either helps or hinders recovery, and the perceived quality of the alliance plays a significant role with regard to recovery and treatment satisfaction (Escobar-Koch et al., 2010; Constantino,

Castonguay, & Schut, 2002; Horvath & Bedi, 2002; Loeb et al., 2005; Comerci & Gerydanus, 1997; Kaplan & Garfinkel, 1999; Garrett, 1997; Noordenbos, Jacobs, & Hertzberger, 1998; Rosenvinge & Kluismeier, 2000; Tozzi, Sullivan, Fear, McKenzie & Bulik 2003; Federici & Kaplan, 2008).

Dropout from treatment is an inherent problem in treating ED patients and it is usually viewed by HCPs as non-compliance, resistance or treatment failure (Vandereycken & Vansteenkiste, 2009). Studies that have explored dropout have often focused on patient characteristics and symptoms as predictors, yet few studies have explored factors relating to the treatment environment or therapeutic relationship, despite research confirming that difficulties in developing the relationship may contribute to high dropout rates (Halimi et al., 2005; Morlino et al., 2007; Clinton, 1996; Vandereycken & Pierloot, 1983). For example, Darcy, Katz, Fitzpatrick, Forsberg, Utzinger & Lock (2010) carried out focus groups and interviews with 20 female participants regarding how they engaged in treatment and defined recovery. The most commonly cited reason for dropping out, or the desire to do so, was a specific therapist or therapeutic rupture.

In order to develop a successful therapeutic relationship, the HCP should be able to develop a rapport with the patient using high quality communication and interpersonal skills. Establishing trust is crucial to the relationship (McQueen, 2000; Irwin, 1993), and patients emphasise the importance of good generic psychotherapeutic skills and knowledge of the disorder in facilitating the development of the alliance (Roots, Rowlands & Gowers, 2009; Pereira, Lock & Oggins, 2006). The degree to which patients feel a sense of safety, support, optimism and acceptance by their therapists can either help or hinder recovery (Robinson, 2000; Federici & Kaplan, 2008). Evidence supports the idea that therapeutic relationship grows stronger to the extent that therapist fulfils the basic needs. For example, throughout different therapeutic modalities and disorders, the TA is rated more positively when HCPs are viewed as empathic, clear, warm, and flexible rather than cold, disinterested, or rigid (Grawe, 2007). This supports the concept that relatedness is an important factor in developing a TA, and may in turn, increase the patients' motivation to engage in treatment and so the likelihood of recovery.

Patient autonomy can be encouraged within a TA, and Robinson (2000) emphasises the patient's right to make their own choices during treatment. Darcy et al., (2010) also found that a lack of sense of volition in engaging in treatment was related to poor motivation among

former AN patients. A recent review of the literature in which adolescents with AN were consulted about their views of their treatment found that young people with AN want clinicians to look after them, but at the same time they may resent it when clinicians tell them what to do. However, once they have recovered they often report feeling that they needed firm treatment in order to get better (Westwood, & Kendal, 2011). This provides support for the SDT suggestion that the HCP should meet the patient's basic needs (relatedness, autonomy and competence) in order to increase motivation to recover from the disorder.

Nordbo and colleagues (2012) found that establishing a TA with patients who feel they benefit from their AN symptoms is extremely challenging (Skarderud, 2007; Vitousek et al., 1998; Westwood & Kendal, 2012; Skarderud, 2007). Difficulties can appear at the very beginning of treatment, where patients may deny having AN and feeling as though they have nothing to recover from. Building a strong TA is especially challenging working with underweight patients since the HCP has to find a good balance between the major physical outcome, namely weight gains, and psychological need fulfilment (Kaplan & Garfinkel, 1999; Wright & Hacking, 2012).

Lack of motivation to engage in treatment and recover by the patient with AN presents a challenge for clinicians (Geller, et al., 2001; Vitousek, et al., 1998), and active attempts by patients to avoid treatment have contributed to the general perception amongst clinicians that AN patients are difficult and frustrating to treat (Geller, et al., 2001; Kaplan & Garfinkel, 1999; Pereira et al., 2006; King & Turner, 2000; Ramjan, 2004; Hepworth, 1999). For example, nurses who cared for adolescents with AN reported feeling as though they were in a power struggle with their patients, and as such found it difficult to develop the therapeutic relationship (Ramjan, 2004). Grawe (2007) warned that subtle signs of therapist rejection tend to be noticed by patients, who are often sensitively attuned to such signals because of histories of rejection insecure attachment (Shorey & Snyder, 2006). The frustrations of caring for patients with AN may prompt HCPs to act in a less supportive manner than they might otherwise behave.

Paulson Karlsson (2012) found that examining expressed motivation and expectations at both initial assessment and during treatment helps to enhance the therapeutic relationship and affect the treatment process in a positive way. The obligation to examine patients' expectations lies with the therapist at the start of treatment and continually throughout regular treatment planning (Paulson Karlsson, 2012).

The importance of ascertaining expectations as early as possible is important, as patients are often resistant at the beginning of treatment. Dissimilarity or inappropriateness of expectations may affect the TA in a negative way, create dissatisfaction or even lead to premature termination of treatment or poor outcome (Paulson Karlsson, 2012; Hansen, Hoogduin, Schaap, & de Haan, 1992; Joyce & Piper, 1998). Fulfilment of expectations depends upon the effectiveness of communication between the patient and the HCP. It also depends upon the appropriateness of expectations and the ability of the HCP to fulfil them or to refer to secondary care if necessary (Williams, Weinman, Dale & Newman, 1995).

Positive expectations, as well as the TA, have found to be significant predictors of better outcome, accounting for up to a third of the variance (Meyer et al., 2002; Joyce, Ogrodniczuk, Piper, & McCallum, 2003; Dinger, Strack, Leichsenring, Wilmers, & Schauenburg, 2008). Positive treatment expectancies have been shown to be linked to more constructive engagement in therapy, a facet of the TA, which then might account for symptomatic improvements (Meyer et al., 2002; Joyce et al., 2003). The association between need-fulfilling experiences and positive alliance/expectancy ratings seems plausible and evidence-based, but specific research examining this link in AN treatment is still lacking (Wollburg et al., 2013).

Importantly for service evaluation, patients with AN report that the perceived quality of the TA play a significant role with regard to recovery and treatment satisfaction (Escobar-Koch et al., 2010; Constantino, Castonguay, & Schut, 2002; Horvath & Bedi, 2002; Loeb et al., 2005; Comerci & Gerydanus, 1997; Kaplan & Garfinkel, 1999; Garrett, 1997; Noordenbos, Jacobs, & Hertzberger, 1998; Rosenvinge & Kluismeier, 2000; Tozzi, Sullivan, Fear, McKenzie & Bulik 2003; Rentrop et al., 1999; Williams et al., 1995). Callan and Littlewood (1998) study found a relationship between high levels of divergence between the patient and the consultant view of illness and lower levels of satisfaction. Sixma, Spreeuwenberg & van der Pasch (1998) found that those who had previous experiences with the HCP in the forms of misunderstandings or incidents expressed dissatisfaction. Therefore, a successful therapeutic relationship which is based upon the basic needs of the patient may increase motivation, and therefore satisfaction, with treatment.

Exploring Patient Perceptions of Treatment for EDs

The British Government has stated that Service Users (patients) should play a role in the development of healthcare. For example, the discussion document “working for service users” encourages the use of satisfaction surveys as a way of monitoring NHS performance and improving services in future (Department of Health, 1989). Policy directives include valuing patients’ experience by working collaboratively with them during service improvement (Department of Health, 2001, 2005, 2007, 2013). The Government also emphasised the importance of active involvement of patients during management of their condition. As well as influencing the healthcare agenda, the person is then empowered to take control of their own health needs, and this leads to a better mutual understanding between patients and Health Care Professionals (HCPs) (Simpson, 2006). When patients are involved in decisions about their own care and treatment, and have more knowledge and confidence, they have better treatment outcomes (Expert Patients Programme, 2010) and are less likely to be hospitalised (Hibbard & Green, 2013). Specifically, within ED treatment, a collaborative approach is preferred by patients who would like a combination of choice and guidance during treatment (Darcy et al. 2010; Westwood & Kendall, 2012). Self-Determination Theory suggests that if a person has autonomy during their treatment, that they are more likely to have internal motivation to engage in treatment and recover (SDT: Ryan & Deci, 2000).

Although the involvement of patients has become popular, it is a relatively new concept in the development of health services. Traditionally within the field of psychiatry, it was stated that a lack of insight invalidated the opinion of some patients (Jones, 1962). For example, there was a reluctance to actively involve patients when training junior doctors (Crawford and Davies, 1998; Entwistle, Renfrew, Yearsley, Forrester & Lamont, 1988). Treatment satisfaction has been defined as the relationship between expectations at the start of treatment and experience of treatment received (Rentrop, Bohm & Kissling, 1999). During the nineties, clinicians were reluctant to become involved in studies of treatment satisfaction, as they questioned the reliability of satisfaction as a valid measure of service outcome (McAuliffe & MacLachlan, 1992). Such reservations were later overcome and satisfaction began to be considered as an indicator of care quality and an essential aspect of outcome (Williams, 1994).

The importance of improving patient satisfaction is clearly stated in the UK Government's 'Involving Patients and the Public in Healthcare' paper (Department of Health, 2001). The demand for assessment of consumer satisfaction as a quality parameter in health services for EDs has increased recently (Doran & Smith, 2004; Watson & Leatham, 1996; Swain-Campbell, Surgenor & Snell, 2001; Newton, 2001) and treatment satisfaction has been reported as central to treatment compliance (Rentrop, Bohm & Kissling, 1999). Low levels of satisfaction and ambivalence with ED treatment is reflected in high rates of dropout (Button, Marshall, Shinkwin, Black, & Palmer, 1997; Kahn & Pike, 2001), and dissatisfaction with treatment may cause treatment delay, failure to engage, and withdrawal from treatment (Bell, 2003; de la Rie, Noordenbos, Donker, & van Furth, 2006). Therefore, better knowledge of patient expectations and satisfaction could help when developing existing or new treatment models and planning for individuals with EDs (Clinton et al., 2004; Le Grange & Gelman, 1998; Mahon, 2000).

The Mental Health Action Plan for Europe stated that surveys regarding patient expectations of treatment for mental health problems should be carried out (WHO, 2005). Expectations should be taken into account when planning treatment, developing services, including receiving new patients, providing information and the standards required for treatment in future (Paulson Karlsson, 2012; Crawford & Kessel, 1999; Faller, 1998; Safren, Heimberg, & Juster, 1997). Results from a study by Clinton (1996) suggest that the treatment process can be jeopardised when the expectations of patients and HCPs diverge. The authors note that regardless of the type of treatment, it may be crucial for HCPs to listen carefully to the expectations of their patients, and consider their own when planning and providing treatment.

The National Institute for Clinical Excellence (NICE: 2004) has provided a document for patients that tell them what to expect from the healthcare service. This includes primary care, secondary care, inpatient care and support after treatment. For example, the patient is told that the service should provide good information and support, that treatment should happen at the earliest opportunity and a list of possible treatments are given. They are also informed that HCPs that provide treatment should be competent and experienced.

If patients are severely ill and refuse treatment that is considered essential, the NICE guidelines states that they may be 'sectioned' under the Mental Health Act (1983). If the patient is sectioned, then they may be admitted to hospital whether or not they agree to it, as the legal authority for the admission comes from the Mental Health Act (1983) rather than

from their consent. This is usually because they are thought to have a mental illness which is sufficiently serious that it is necessary for the safety of the patient and/or protection of other people that the patient be detained. The patient is deemed to require hospital treatment but is unable or unwilling to admit themselves. A patient can be detained on an emergency basis (up to 72 hours), Section 2 (up to 28 days) and Section 3 (up to 6 months and can be renewed) (Royal College of Psychiatrists, 2013). Patients are advised that if they require inpatient treatment for AN, it should consist of a structured psychological treatment that will help them to gain weight and they could be fed against their will. Therefore, should patients read these recommendations prior to receiving treatment, they may have preconceived expectations of what they should expect.

Treasure and Schmidt (2001) state that there are assumptions which underlie assessment interviews in healthcare services which should be acknowledged. The first assumption is that the patient with the ED has decided they would like a diagnosis or treatment and recognizes that they are ill and would like to improve their health. The second assumption is that the health provider should give information or treatment which may result in improvement to the patient's health. In most treatment situations this indeed would be the desired outcome, but when working with eating disordered patients, these assumptions may be inappropriate. For example, when young adults with AN enter treatment, relatives or friends have generally persuaded them, and, if not, they often come because they are experiencing the negative effects of the illness (Paulson Karlsson, 2012). As already discussed in the section regarding Self-Determination Theory (SDT), if patients have entered treatment for such reasons, this may indicate that they do not have internal or internalised extrinsic motivation to recover. This lack of internal motivation may lead to premature termination of the treatment, or to patients being in treatment for reasons than to recover from AN (Vandereycken & Vansteenkiste, 2009; Vitousek et al., 1998).

Williams, Weinman, Dale and Newman, (1995, p. 194) attempted to define treatment expectations as “the individual's stated reasons for the visit...that often relate to a symptom or concern, for which an acknowledgement or a response is anticipated from the physician”. Unfortunately, the definition does not account for the problem that people with AN may want neither diagnosis nor treatment (Treasure & Schmidt, 2001; Eivors, et al., 2003; Robinson, 2000). Reid, Burr and Williams (2008) found that patients with EDs are fearful of attending treatment. Resistance to weight gain and denial of the seriousness of the problem are

hallmark characteristics of the illness (APA, 1994) and thus treatment for AN can be cast as immediately at odds with the wishes of the patient. The perceived control of dietary restriction and exercise is seen by individuals as success rather than a factor resulting in the illness becoming worse (Grilo, 2006). Furthermore, expectations of treatment can be multi-faceted when it comes to eating problems and can vary in relation to age, symptoms, the need for control and personality (Vitousek, Watson, & Wilson, 1998).

Coyle and Williams (1999) explain that the treatment expectations of patients can be negative as well as positive. When a patient's fears and anticipations are conceptualised as expectations, then an inverse relationship is identified between expectations and satisfaction. Therefore, satisfaction is best achieved when these expectations are not met. Furthermore, patients with AN differ in terms of psychiatric symptomology and personality structure compared with those who do not have the disorder. For example, patients frequently expect to be helped with the negative consequences of the disorder and become healthy whilst continuing to lose control their weight (Colton & Pistrang, 2004; Treasure & Schmidt, 2001; Vitousek et al., 1998). There exists a denial of the illness and a refusal to acknowledge distress, thinness, hunger and fatigue, fear of weight gain, dietary rituals and laxative abuse. This often results in ambivalence towards engaging in treatment, as the core symptoms of their disorder are perceived as both negative and positive (Clinton, 1994).

A dichotomy arises when considering treatment satisfaction of patients with EDs. Treatment satisfaction has been defined as the relationship between patients' expectations at the start of treatment and experiences of treatment provided (Rentrop, Bohm & Kissling, 1999) and the appraisal of the extent to which the care provided has met the individual's expectations and preferences (Brennan, 1995). Regrettably this definition is flawed when considering people with EDs. Their expectations of treatment may be positive or negative, and therefore this explanation of the relationship between expectations and satisfaction may be too simplistic. A patient can have *expectations* about how a doctor will behave yet not necessarily desire what is expected (Noble, Douglas & Newman, 2001; Coyle & Williams, 1999). When fears and anticipations are conceptualised as expectations, then an inverse relationship is identified between expectations and satisfaction. Satisfaction is then best achieved when these expectations are not met. Indeed, some patients may want neither diagnosis nor treatment for anorexia nervosa (AN) (Treasure & Schmidt, 2001; Eivors, Button, Warner & Turner, 2003; Robinson, 2000). Therefore, there is a lack of clarity regarding the relationship between

expectations and satisfaction, and is not surprising that people with EDs represent a unique group of healthcare consumers whom dissatisfaction tends to be high (Rosenvinge & Klusmeier, 2000). Furthermore, previous experience of treatment can influence the patients' opinions of their treatment in future (Williams et al., 1995; Babiker & Thorne, 1993; Roots et al., 2009).

Research exploring the positive expectations of treatment reveal that young adult women with anorexic symptoms were found to have a positive attitude towards attending treatment and an intention to recover (Paulson Karlsson, 2012). Patients who were asked about treatment suggested that they would like achieve control of their eating habits by planning meals; to receive appropriate therapy; to be treated by HCPs that are respectful and knowledgeable; to be involved in treatment decisions; to experience alleviation of symptoms; to be informed about their current condition; and be given the opportunity to discuss any problems (Paulson Karlsson 2012; Clinton, 2001; Bowling et al., 2012).

Literature exploring satisfaction with treatment for EDs yields conflicting results. Some studies suggest that ED patients are satisfied with treatment (Lloyd, Fleming, Schmidt, and Tchanturia; 2014; Clinton, Bjorck, Sohlberg & Norring, 2004; McLellan & Hunkeler, 1998; Nabati, Shea, McBride, Gavin & Bauer, 1998; Gerber & Prince, 1999; Rosenvinge & Klusmeier, 2000; Collin, Power, Karatzias, Grierson & Yellowlees, 2010), yet patients with EDs often report negative treatment experience (Rosenvinge & Klusmeier, 2000; Newton, Robertson & Hartley, 1993; Brinch, Isager, Tolstrup, 1988; Noordenbos, Jacobs, & Hertzberger, 1998; Clinton, et al, 2004; Offord, Turner & Cooper. 2006). For example, Roots and colleagues (2009) suggest that the literature often reveals negative experiences of inpatient treatment. A postal survey of members of the Eating Disorders Association (Newton, Robinson, & Hartley, 1993) revealed mixed experiences, with slightly more respondents feeling this made the situation worse, than found it very helpful.

Unfortunately, the literature regarding satisfaction of treatment has more often focused on the rates of those who were satisfied rather than those who were not. Clinton and colleagues. (2004) highlighted this when they found that although 38 per cent of ED patients were highly satisfied 39 per cent were satisfied with treatment, almost a quarter of patients (23 per cent) were unsatisfied. A further problem with previous studies of satisfaction is the high level of satisfaction expressed in studies using brief rating scales, which is in stark contrast to many of the descriptions given by individuals (Gask, 1997). The multifaceted nature of patient

perceptions of healthcare does not lend itself to a solely quantitative approach. It has been maintained that satisfaction is a complex concept and that the quantitative measures used in many studies may actually underestimate dissatisfaction (Williams, 1994; Williams, Coyle & Healy, 1998). Satisfaction measures that have small numbers of items with closed responses (e.g. Clinton et al., 2004) fail to enable the respondent the ability to give an account of the reason why they are or are not satisfied.

Newton, Robinson and Hartley (1993) surveyed 1,638 British patients and found that whilst perceived helpfulness varied considerably for different interventions, all interventions were rated as *unhelpful* or *making the situation worse* by at least 17% of respondents. Worryingly, that figure rose to 69% for out-patient behaviour therapy. Later research by Clinton et al. (2004) found that almost a quarter were unsatisfied with treatment after 36 months. It is unclear whether people were satisfied with their treatment or whether they were satisfied with certain aspects of their treatment and not satisfied with others. This is supported by literature which suggests that such studies may underestimate dissatisfaction, and that satisfaction is in fact a complex concept that cannot be reduced to a simple definition and warrants further investigation (Rosenvinge and Klusmeier, 2000; Williams, 1994; Williams, Coyle & Healy., 1998; Crawford & Kessel, 1999).

In study by Button and Warren (2001) thirty-six anorectic patients were followed up 7.5 years after presentation at a specialist EDs service for adults. Patients were asked about their experience of the disorder, in particular the helpfulness of treatment. Views as to the helpfulness of treatment varied considerably, with only one third giving an unqualified reply that treatment had been broadly helpful, and about one-fifth expressing negativity about treatment. Finally, a further one-third saw some aspects as helpful and some not. In this case, both positive and negative aspects of the treatment were mentioned and participants indicated their opinion had varied throughout treatment.

Current qualitative studies looking at the perspectives of those who have experienced an ED have identified common themes pertaining to the treatment of EDs. First, supportive, understanding relationships during treatment are important (Bell, 2003; Cockell, Zaitsoff & Geller, 2004; Le Grange & Gelman, 1998; Matoff & Matoff, 2001; Tozzi, Sullivan, Fear, McKenzie & Bulik, 2003). Studies of patient satisfaction in EDs indicate that patients who are satisfied tend to refer to a positive TA (Swain-Campbell et al. 2001; de la Rie et al., 2006; Noordenbos et al. 1998). Clinton (2001) developed a questionnaire relating to patients'

expectations and experiences of treatment in EDs. Patients' receiving support from the HCP was associated with satisfaction at follow-up, emphasising the importance of personal involvement on the part of the HCP during treatment. This provides further support that by meeting the basic needs of the patients through relatedness, autonomy and competence, the patient will be satisfied with treatment and may have more positive treatment expectancies in the future. Meeting the patients' basic needs may increase the patients' internal motivation, they are more likely to engage in treatment and recover from the disorder.

In particular, being able to talk about issues was felt to be an alternative coping mechanism in place of previously used ED behaviours (Cockell et al., 2004; Le Grange & Gelman, 1998). Williams et al. (2008) found that a practical and caring approach by HCPs was preferred by patients receiving outpatient treatment for AN or BN. Reid et al. (2008) found that empathy with the HCP was important and characterised by feelings of caring and security. Effective communication between the HCP and patient is therefore important, including staff allowing patients the space to talk and being willing to listen. This resulted in the patients feeling cared for, and although the authors do not allude to SDT, this provides support that meeting basic needs are valued by patients during treatment.

Therapist expertise was valued, including the importance of expressive qualities of staff particularly physicians and nurses (De la Rie, Noordenbos, Donker, & van Furth, 2006; Yarnold, Michelson, Thomson and Adams, 1998;). Reid and colleagues (2008) support this finding and elaborate by stating that staff lacking the specialist expertise to appreciate that sensitivity, ambivalence and conflict is part of the ED may alienate patients, even with slight or passive remarks or behaviours. Furthermore, knowledge of the disorder by the HCP facilitates development of TA between the HCP and patient (Pereira, Lock & Oggins, 2006; Gulliksen et al., 2012).

According to McQueen (2000) and Button and Warren, (2001) a successful therapeutic relationship requires high quality communication, interpersonal skills, development of rapport and trust. Lose and colleagues (2014) sought to ask patients about their experiences of outpatient treatment for anorexia. Patients reported positive characteristics of the HCP as being encouraging, approachable, empathetic, understanding, supportive, flexible, patient, calming, constructive, and professional and having expert knowledge.

In order to identify patient satisfaction with HCPs, factors that impede the patient-HCP relationship should be considered (Clinton et al., 2004; Rentrop et al., 1999; Williams, Weinman, Dale & Newman, 1995). De la Rie, Noordenbos, Donker and van Furth (2006) sought to explore the perspective of patients regarding treatment for EDs in the Netherlands, including those diagnosed with AN and BN. They found that when seeking help from a GP, patients described a lack of knowledge, empathy, understanding or delay of referral as important causes of dissatisfaction. In the same study, a lack of understanding of EDs by nurses in the general hospital setting was seen as a negative aspect of care. Similarly, a study by Escobar-Koch et al. (2010) recently found that patients expressed concern about GPs' lack of knowledge about EDs and failure to perform timely diagnoses, which result in marked delays in referring patients to specialist services. The patients also reported feelings concerned about the 'gate-keeping' role of the GPs, that is that the GP is usually the HCP that decides whether the patient is referred for specialist support. A report from the UK ED charity beat (beating eating disorders) found that only 15% of patients felt their general practitioner (GP) understood their ED, or knew how to help them (b-eat, 2009). GPs themselves often have a sense of 'not doing a good job' for their eating disordered patients because of a lack of training and lack of suitable interventions available to them (Currin, 2006).

An earlier study by Button and Warren (2001) patients with AN noted that the most unhelpful aspects of treatment were perceived as the negative attitudes of some members of staff. Patients stated that there was a need for better awareness of anorexia and a more sympathetic approach. De la Rie, Noordenbos, Donker and van Furth (2006) sought to explore the perspective of patients regarding treatment for EDs in the Netherlands, including those diagnosed with AN and BN. When they dropped out of treatment, they mentioned lack of perceived helpfulness, including no trust or not feeling understood.

Patient reported that interventions that addressed psychological issues and developed a psychological understanding of EDs were preferred over more medicalized treatments focused on food, weight and eating (Lose et al., 2014; Bell, 2003; Cockell et al., 2004; Le Grange & Gelman, 1998). Furthermore, a systematic review examining dropout rates from outpatient treatment for AN found that dropout was highest in purely educational interventions (100%) whereas individual psychotherapy dropout was much lower (20-40%) (Dejong, Broadbent & Schmidt, 2012). Psychological approaches focus upon the

psychological factors associated with EDs. In AN, this includes factors such as the fear of gaining weight or becoming fat, control, body dissatisfaction, negative affect and perfectionist and obsessive/compulsive tendencies. In BN and BED this may include the feeling of loss of control, disgust, body dissatisfaction and negative affect. Lose and colleagues (2014) sought to ask patients about their experiences of outpatient treatment for anorexia. They found that patients valued a structured and flexible approach to the treatment, relating to both the treatment and the HCPs they were working with.

Individuals who express less satisfaction with the suitability of treatment approach offered were more likely to drop out in comparison to those with higher levels of satisfaction (Bjork, Bjorck, Clinton, Sohlberg & Norring, 2009). In particular, patients who received treatment for EDs are often less satisfied with approaches aimed at restoration of physical health (Swain-Campbell et al. 2001; de la Rie et al., 2006; Noordenbos et al. 1998). For example, approaches that use tube-feeding as a means of weight restoration were not appreciated (Rosenvinge & Klusmeier, 2000; Noordenbos et al., 1998). Instead, treatment focused on psychological interventions were preferred (Nishizono-Maher et al., 2011)

Control is an important factor during treatment for many individuals with EDs (Malson, 1998). Nishizono-Maher et al., (2011) found that patients UK patients valued a flexible approach to care. Unfortunately, some ED treatment can diminish perceived control and exacerbate the disorder (Bell, 2003; Eivors, Button, Warner, & Turner, 2003). Conversely, despite their ambivalence or resistance, patients with EDs often rely upon treatment and become fearful that it will be withdrawn and subsequently fear the anticipated negative effect it will have on the symptoms of their disorder (Reid et al. 2008). Patients report purposely losing weight as a coping mechanism when treatment was going to end. Reid et al (2008) suggest that this is contrary to the Interactional Model of Control (Eivors, Button, Warner, & Turner, 2003), where patients may drop out of treatment in order to maintain control. Instead, patients use control over their disorder in order to continue treatment rather than to avoid it.

The concept of ambivalence has been found to play a role in patients' perspectives of treatment where the patient is unsure about whether their ED is a 'friend' or 'enemy' (Colton & Pistrang, 2004) or whether or not it is a problem that needs to be treated (Colton & Pistrang, 2004; Malson, Finn, Treasure, Clarke, & Anderson, 2004). A recent study exploring ED patients (AN and BN) views on outpatient treatment (Reid, et al. 2008) found that patients

expressed ambivalence about control and its role in treatment. That is that the disorder made participants feel as though they wanted to maintain control but that overall the disorder was in control of them. Although autonomy during treatment was desirable, patients also reflected upon the need for guidance from the HCP. Therefore, a combination of autonomy and direction was the balance that constituted a successful approach, providing further support that for a treatment to be perceived as useful, a patient's basic need of relatedness and competence (by providing guidance) and autonomy (allowing freedom to choose) should be met.

The RCP (2012) report that the majority of patients needing to be seen urgently are seen in less than one week. Routine assessments are offered within four weeks by (57%) of services, and the remainder of patients wait for 12 weeks or more. Further waits are then incurred between assessment and treatment. Services are trying to prioritise treatment for AN with 37 per cent of services offering treatment within a week and 87 per cent offering treatment within a month. About 83% of NHS services offer treatment of AN within a month compared to 100 per cent of independent and voluntary sector services. For BN, the respective figures are 60 per cent vs 100 per cent, and for BED 58 per cent vs 100 per cent.

Timely intervention appears to be a problem for patients with EDs. In the UK, patients with ED expressed concern over long waiting lists for specialist services (Escobar-Koch et al., 2010). De la Rie, et al. (2006) also found that ED patients experienced delays in treatment relating to waiting lists, delay of referral or being sent from one facility to another. Patients in Reid and colleagues (2008) study reported that waiting for treatment, including long referral times and limited contact caused concern for patients. Similarly, Lose and colleagues (2014) found recently that patients receiving outpatient treatment for EDs did not appreciate delays or disruptions to treatment.

Economic burden has been highlighted as a key issue in ED service provision by a variety of publications, as accurate estimations of the cost of treatment is essential if any changes in clinical practice and patient care are to take place (Royal College of Psychiatrists, 2001). Unfortunately, little attention has been paid to the cost of Eating Disorders (RCP, 2012). Escobar-Koch et al. (2010) found that UK patients raised concerns about the lack and inequity of availability of services. Koskina et al. (2012) explored clinicians' perceptions of ED service strengths and the components of a high quality service. Ten per cent of clinicians explicitly referred to a need for increased financial input for ED services, including funding

for NHS patients, recruitment of staff and more generalised improvements to the service. The lack of resources implied a barrier to advancing services, especially with regard to improving continuity of care and accessibility and availability. Unfortunately, a recent study by Reid and colleagues (2008) noted that patients also appear to be aware that funding was a problem in the provision of services. This may have implications on the way that HCPs and patient perceive treatment accessibility.

Using Qualitative Methods to Explore Patients' Experiences of Treatment for EDs

It is important to consider the patient's perception of treatment, as their unique perspective may enable clinicians to have a deeper understanding on how patients perceive their care. The potential benefits of involving people in the management of their care includes empowering them to take control of their health needs, better mutual understanding between them and HCPs, and the ability for them to influence the healthcare agenda (Simpson, 2006). The use of quantitative questionnaires regarding expectations and satisfaction has yielded conflicting results. In a research article by Collin, et al., (2010) patients reported a high degree of satisfaction with an inpatient programme. The authors used a self-report questionnaire which asked whether specific aspects of their treatment were helpful or not (e.g. after meal supervision, anxiety management, art therapy etc.). Although the larger proportion of participants answered 'moderately helpful' or 'markedly helpful' to most of the statements, in some cases, a large proportion of participants reported the aspects as being 'not at all helpful' or 'slightly unhelpful'. The aim of a quantitative analysis is to provide an overview of levels of satisfaction is useful in identifying the need for qualitative research, but quantitative analysis is unable to explore patient satisfaction at the level required to make changes to health services or provide recommendations for change. Therefore, participants who express that they do not find treatment helpful should be asked, qualitatively, what could be improved and what they were not satisfied with.

Expectations and satisfaction with treatment has been explored by researchers, but often with short questionnaires that ask for an overall assessment (e.g. Clinton, 2001). Unfortunately, high levels of satisfaction expressed in studies using brief rating scales contrast sharply with many of the descriptions given by individuals (Gask, 1997). Clinton's (2001) expectation questionnaire included closed questions with statements of expectations that the respondents had to agree or disagree with. This leaves no option for the participant to reveal other expectations. Often such questionnaires only include the positive

expectations of treatment and what helped them to recover. It does not include the things that participants may find helpful to maintain their disorder, or the negative expectations of treatment such as being made to eat and becoming fat. While the quantification of information through standardised instruments is congruent with the methodology employed more generally within biomedical research, the complexity of views about health care do not lend themselves to this type of reductionist approach. The variation in levels of satisfaction using quantitative measures suggests that attention to qualitative accounts of patient perspectives on treatment may be valuable in improving ED healthcare services (Malson, Finn, Treasure, Clarke and Anderson, 2004; Le Grange & Gelman, 1998; Mahon, 2000).

In order to ascertain how patients experience the Welsh healthcare service, it was important to employ a method of data collection in the current study that yielded appropriate results. The aim of this study was to explore patients experiences of treatment and research must be conducted to explore the ways in which those people view and evaluate health care services (Williams, Noel, Cordes, Ramirez and Pignone, 2002). Analysing data quantitatively can answer specific questions using structured questionnaires, attitude scaling, and measurements of outcomes such as mortality, morbidity etc. However, this only answers part of the question and may lead the researcher to make assumptions about the results. In order to find out about the concepts in more details, researchers may talk in-depth to participants to find out about the area in more detail (Lacey & Luff, 2007).

Qualitative research exploring patients' views of treatment of EDs could inform the therapeutic process and provide a greater understanding of recovery (Le Grange & Gelman, 1998) as it can reveal participants' meanings and experiences of treatment (Bell, 2003; Helworth, 1994). The importance of considering the types of expectations a patient had of treatment, and the relationship between expectations and satisfaction is crucial for future service evaluation. Furthermore, it is important to explore this in light of how a patient develops a TA. It was important to consider these concepts together, in detail, before developing hypotheses that can be tested systematically using quantitative approaches. A qualitative approach was utilised to provide an in-depth exploration of the patient experience of the Welsh healthcare service, including how the concepts interacted with one another. Mahon (2000) suggests that qualitative, interview-based research is central to clarifying the causes of dropping out in ED treatment. Interestingly, qualitative research about satisfaction

of people who are still in treatment is scant. This is an important gap in service evaluation as a patient might persevere with treatment but may not be satisfied with the service.

Unravelling the complexities of treatment for anorexia will be aided by in-depth qualitative studies which elicit the patients' experience of treatment and reasons for recovery and relapse. To date, only a small number of studies have examined AN using this qualitative methodology. Qualitative studies enable researchers to explore the issues and experiences of importance to those being interviewed rather than exploring pre-determined constructs decided by the research team (Reid, Williams & Burr, 2010). Although qualitative studies have been carried out, many of them focus on adolescents, or only focus on one aspect, for example inpatient treatment (e.g. Colton & Pistrang, 2004) or relapse and recovery (Federici & Kaplan, 2008).

Summary of the Literature for Study 1

The DSM-5 refers to three main eating disorder categories, namely AN, BN and BED. Anorexia Nervosa is a severe and enduring mental health disorder, characterised by restricted eating behaviour, a fear of gaining weight and distorted body image. Two subtypes (binge-purge and restricted) of AN have been described. Onset of AN is typically during adolescence, and most commonly affects girls and women than men. The symptoms associated with the disorder can become chronic, and can result in the death of the patient. Evidence for a suitable treatment for adults with AN has not yet been found, although psychodynamic and focal dynamic therapy has received some support. FBT for adolescents with AN is recommended. Antidepressants, antipsychotics/antipsychotropics are often prescribed but the evidence is almost non-existent.

Bulimia Nervosa is an eating disorder that is characterised by recurrent episodes of binge eating, where the person feels as though they have lost control of eating during the episode. The individual engages in recurrent inappropriate compensatory behaviours, such as self-induced vomiting, in order to prevent weight gain. The binge eating and compensatory behaviours must take place, on average, at least once a week for three months. Self-evaluation is unduly influenced by body shape and weight. Onset is similar to AN, although BN is more prevalent. Treatment for BN is usually CBT, self-help and dietary counselling in conjunction with antidepressants.

BED is similar to BN in that it is characterised by recurrent episodes of binge eating, where the person feels as though they have lost control of eating during the episode. The binge episodes are usually associated with eating much more quickly than normal, eating until feeling uncomfortably full, eating large amounts of food when not feeling physically hungry, eating alone because of embarrassment, and feeling disgusted with oneself. The individual must experience marked distress regarding the binge eating, and the episodes must occur, on average, at least once per week for three months. Dissimilar to BN, the binge episodes are not associated with any compensatory behaviours. Treatment for BED includes self-help, CBT and dietary counselling in combination with antidepressants, anticonvulsants or anti-obesity medication.

Biological, sociocultural, experiential, psychological and dispositional approaches in isolation do not explain why an individual may be more at risk of developing EDs. Instead, a multi-factorial approach to the risk factors of EDs has been proposed. Comorbidity between EDs and other psychiatric disorders are common, with some difficulty in establishing the primary condition.

Treatment efficacy for AN is still being established, as research is plagued by small, often heterogeneous samples, lack of adequate comparison or control groups, low uptake and high drop out. Family-Based Therapy has to date, received the most support for the treatment of adolescents with AN, although further research is necessary. CBT for BN has been supported by RCTs and review consistently confirm that this is the most efficacious treatment currently available. Treatment for BED is also in its infancy but CBT has already received support.

Research regarding treatment efficacy for anorexia has not yet established a preferential type of treatment. There are methodological limitations to the current research evidence that may be addressed to improve our understanding of which treatment is useful for AN. Nevertheless, it may be useful to explore psychological mechanisms that may contribute to recovery from AN, including motivation to change and expectancies such as the TA. The Self-Determination Theory suggests that all individuals must have three basic needs fulfilled; relatedness, autonomy and competence. If these needs are met, then intrinsic, or extrinsic internalised motivation will be increased. In the case of treatment for AN, the TA, including patient choice and ability to carry out the behaviours associate with treatment, may facilitate the fulfilment of the basic needs of patients with the disorder. According to SDT, this will therefore the patients' motivation to engage in treatment and increase the likelihood of

recovery. Furthermore, from a health service improvement perspective, meeting patients' expectations of treatment and developing a successful therapeutic relationship will increase satisfaction with the health service.

Aims of Study 1

The principle research question in this exploratory study asked 'What was the patient experience of treatment for AN in the Welsh Healthcare service?' In particular, the aims of the study were to focus on patients' motivation, perceptions of treatment including expectations and satisfaction, and the interaction of TA using the overarching framework from Self-Determination Theory (SDT). From a health service development perspective, participants were also asked how the healthcare service could be improved. A qualitative approach was utilised to provide an in-depth exploration of the patient experience of the Welsh healthcare service, including how the concepts interact with one another.

Methodology

Ethical Considerations

NHS ethical approval: Participants of Study 1 were patients of the NHS and were recruited and contacted using demographic information held by the NHS. Therefore, ethical approval from both the local and central NHS committee was required. To obtain approval, a full proposal with supporting documentation was submitted to a number of departments at the NHS. Prior to submission of the application, the research team (Laura Rees-Davies, Dr Bev John, Dr Susan Faulkner, and Dr Caroline Limbert) confirmed with the local Research and Development (R&D) office if the study was classified as audit or research. The data protection officer from the local NHS service was then contacted and a reference was issued by the officer to declare that the study complied with the Data Protection Act (1998). The application was sent to the local R&D ethics committee for approval. Finally, subject to satisfying amendments and clarifying required information, the application was sent to the Central Office for Research Ethics Committee (COREC) for approval. Amendments and clarification of information were requested, and following completion of the suggestions, ethical approval was granted by the committee on 11th April, 2008 (Appendix 1).

University of South Wales Ethical approval: The University of South Wales used the British Psychological Society standards for ethical considerations. The participants in the study were classed as vulnerable due to their current diagnosis of anorexia nervosa. They were currently receiving secondary care, and so careful consideration was required as to how to interact with them. The researcher was an experienced healthcare practitioner who had worked as an assistant clinical psychologist and carer to vulnerable groups prior to the research. Therefore, she was familiar with the need to be sensitive with the interview questions, especially to be perceptive to any questions that cause any emotional harm. Should the participants feel they required extra support, they were given the contact details of their psychology department at the hospital who had agreed to be contacted during the study. The inclusion criterion was that the participants were adults over eighteen years of age. This avoided any consent issues and need for another person to be present during interviews (which may have affected the information participants divulged).

Informed consent was required by participants. Information sheets and consent forms were sent to potential participants prior to recruitment, and before the interview, participants were

required to sign the consent form (including initialling to agree to statements giving explicit consent). On the consent form, the right to withdraw was noted, and the participants were told clearly that their care would not be affected if they decided they did not want to participate. They were also reminded at the start and end of the interview that they were able to withdraw their data even after day of the interview. Participants were debriefed by reminding them of the purpose of the study and who they should contact should they require any further information (all details were on the information sheet).

The researcher was not allowed to access data regarding participants unless they gave their address for the interview to be held at their home address. The potential participants were contacted on their phones, and the information packs were sent out by the psychology department so the researcher did not have access to their address before recruitment. All personal data (address and telephone number) were destroyed after the interviews. The interviews were anonymised, participant names kept in a secure location (password protected computer) and the consent forms kept in a locked cabinet. The data from the interviews were also kept on a password protected computer.

Design

Qualitative methodology was applied in order to produce large volumes of rich, detailed data (Pope, Ziebland & Mays, 2000) from interviews with patients with AN regarding their treatment experience, expectations, satisfaction, motivation to change and therapeutic alliance. A semi-structured interview schedule was designed and used in the interviews to elicit participants' responses. A detailed description of the qualitative analysis used is outlined later in the chapter.

Participants

Twenty-nine people with anorexia (diagnosed by clinician) were receiving secondary care treatment at local adult services for AN on the 1st April 2008. Limiting the sample to adults with AN enabled the researcher to ask questions during the interview that may not be understood by children or adolescents. This also avoided the need for parental consent and/or accompaniment which may inhibit the preferred in-depth discussion with patients during the interviews.

Potential participants were sent information packs so they could read about the study and were then contacted a week after the information packs were sent. Out of the twenty-nine

potential participants, twelve could not be contacted or were no longer receiving treatment. Seventeen people remained on the potential participants list, and the first seven were contacted and subsequently agreed to take part in the research. All were white females, ages ranged between 20-31 years for six of the seven. One person was in her forties (exact age unknown).

Data collection commenced and saturation of themes was achieved. Offord, et al. (2006) included seven participants in their qualitative study. Using such studies as a guideline, the researchers were able to justify that this was an acceptable number needed to gain theoretical saturation. Theoretical saturation for this study was defined as the maintenance of sampling and data collection until no new conceptual insights were generated. At the point of theoretical saturation, the researcher provided repeated evidence for her conceptual categories (Bloor & Wood, 2006). Therefore, the researcher continued to collect data until these conditions were met. Had theoretical saturation not been achieved at seven participants, then some, if not all of the remaining ten people would have been contacted/recruited for the study.

Materials

An information pack was sent to prospective participants, which included a letter of invitation (Appendix 2), a consent form (Appendix 3), and a participant information sheet (Appendix 4). An Olympus DS-2300 recording device was used to audio record the interview. A semi-structured interview schedule was chosen as the most suitable method to elicit data during the interviews (Appendix 5). The focus of the interview schedule was designed by the researcher (Laura Rees-Davies) with the following points in mind (Dyer, 2006). Firstly, the problem area/statement was identified. In this study the overall statement was “what does the service user with AN experience when receiving secondary care from the Welsh healthcare service?” Key themes or ideas were identified from the problem statement and questions based on previous psychological theory and research of the topic area were included. The questions were considered to explore expectations (e.g. Coyle & Williams, 1999; Williams et al. 1995) and satisfaction with treatment (e.g. Rentrop, Bohm & Kissling, 1999; Brennan, 1995; Noble et al. 2001), their treatment experience (e.g. Reid et al., 2008), and factors such as therapeutic alliance (e.g. Vandereycken & Vansteenkiste, 2009; Darcy, Katz, Fitzpatrick, Forsberg, Utzinger & Lock, 2010) and motivation to change within the broader theoretical framework of SDT and OIT (Ryan & Deci, 2000). Broad

questions were also included which asked the participant to describe her journey through the healthcare service. The questions were designed to follow a logical order so participants were not frustrated or confused, and prompts were included to allow the researcher to pursue lines of inquiry that were of interest.

A number of the questions were based on the Working Alliance Inventory (WAI: Horvath and Greenberg, 1989) to include appropriate terminology and subject matter. According to Martin, Garske and Davis (2000) the WAI was developed using techniques that focused on content validity so that it would measure Bordin's (1979) three aspects of therapeutic alliance: the bond, the agreement on goals, and the agreement on tasks. Horvath and Greenberg (1989) found that the WAI's reliability ranged from $r = .85$ to $r = .93$ and therefore it was a reliable questionnaire to gather terminology and ideas from.

Different types of questions were included in the schedule. For example, closed questions may be used firstly to decide in which direction the questions would go such as "*Did you expect the health service to be good?*" Depending on the answer, open ended questions would then be used. General open questions invited the patient to make statements about the topic, such as "*Please describe to me the aspects of the service you feel could be improved and why*". Descriptive questions included when participants were asked to describe a situation or event. This could include narrative accounts of events that occurred, such as "*Were there times when you didn't follow advice given by this person?*"; "*Can you tell me about a time when this happened?*" Lastly, some questions were designed to explore associations between themes, such as "*Do you feel like your expectations affected how satisfied you were with the service?*"

The wording and type of question was important as the researcher wanted to elicit rich personal accounts of treatment. The researcher avoided questions that were too wordy or complex, double-barrelled questions that asked two questions in one (although if this did occur during prompt questions, the researcher was aware and so picked apart responses to both), and leading questions that influenced the response. Questions were designed to be open and relevant to the specific area of their experience of treatment. Particular attention was paid to making the questions more conversational thus creating an environment in which the participant felt comfortable. The purpose of this was to elicit full, in-depth answers to the researcher's inquiries. Some of key questions were featured more than once using different wording. This approach enabled the researcher to confirm their

interpretation of the participants' responses. Each member of the research team (Dr Bev John, Dr Susan Faulkner, Dr Caroline Limbert) reviewed the interview schedule and found that the questions adequately reflected the area of interest. One lay person was asked to review the questions on the schedule and reported that they were clear and could be understood. Therefore, the interview schedule was relevant to the aims of the study.

The researcher kept a reflective journal throughout data collection to record her own personal thoughts and feelings about the interviews (Appendix 6). Reflection should be undertaken by the researcher regarding the impact of the research design and approach to analysis on the results presented. Highlighting the perspectives of the researcher themselves is important when attempting to demonstrate the credibility of the research (Rheinharz, 1992). Qualitative analysis is an interpretative process and so the preconceptions, assumptions and *worldview* of the researcher may influence the process of analysis and any emerging theory (Lacey & Luff, 2007). The researcher needed to demonstrate her part in the analytic process, usually by engaging in reflexivity. The reflexive account was an honest attempt by the researcher to declare her conceptual journey through the research, perhaps by including sections of her own reflective diaries as she undertook research (Lacey & Luff, 2007). In this study, reflection helped to contribute to further development of the interview schedule, and the skills required in gathering rich detailed data. It also allowed the researcher to explore the possible impact of her own thoughts and feelings on data collection. The reflection chapter later in the thesis includes a thorough account of the researcher's experience and development of interviewing skills.

Procedure

A pilot interview was conducted with a person who had been diagnosed with AN. Unfortunately, the interview was difficult to manage, and data gathered were limited. The researcher acknowledged that this may be due to her own limitations and the interview schedule. As a consequence, the interviewer engaged in training to develop interview skills centred on Dyer's (2006) guide to research interviews.

The researcher aimed to develop a relationship with participants from first contact. Each person was sent the information pack so she could consider if she would like to participate. The researcher then followed this with a phone call, asking if she each had any questions and to assure her that all information was confidential from first contact. Each participant

was asked if she would be willing to participate, and given the opportunity to choose whether she would prefer the interview at her home or at the hospital where the Psychology department was based.

The researcher acknowledged that motivation of each participant to take part in the research was crucial to the information they chose to share. Motivation to participate in the interview was first confirmed by agreement to participate in the research. In the information pack, the information sheet included a section where it described the benefit of participation:

“A benefit of taking part would be that you are able to tell of your particular experiences of the Welsh healthcare service. You will be asked to discuss your initial expectations of the healthcare service and whether these expectations matched the outcomes. You will be able to talk about your experience in terms of satisfaction. You will be able to discuss your relationship with your therapist and your motivation and ability to change. You are free to highlight the parts of your journey through the Welsh healthcare service that you felt were either good or bad.”

(Appendix 4: Participant information sheet)

Wherever possible, the researcher assured the patient that her data would be useful to the study. When speaking to each participant, the researcher reminded her why she were chosen in order to demonstrate the value of her participation (e.g. the researcher wanted to know her personal account of the journey through the Welsh healthcare service and to give her a voice).

The researcher was aware that the way she presented herself in the interview was likely to influence the way she developed a rapport with the participant. The researcher positioned herself at the same height as the participant, as she was aware that height may be seen as an indicator of status (Dyer, 2006). This also enabled eye contact to be made, which helped establish a rapport.

When exploring the impact of attire at interviews, the researcher found that smart-casual was a typical choice of interviewers (Carter & Delamont, 1996; Hepburn & Potter, 2006; Barbour, 2013; Bernard, 2011; Tracy, 2012), and was preferable over formal attire in eliciting personal accounts rather than formal ones (Hillyard, 2010). Although differences between the patient and researcher dress may have still remained, the alternative of formal attire was not preferable as this may have caused the patient to perceive the researcher to be of a higher status, and possibly align the researcher with the medical staff that provided her

treatment. This may have caused the patient to withhold information. For example, if the researcher was considered to be a member of staff at the hospital at which the patient received treatment, then responses may be congruent with that expected in a treatment session. The researcher therefore chose to dress in smart-casual attire (neat, yet informal clothing). The choice of smart-casual dress, although considered prior to the interview, was not guaranteed to be appropriate and may have still causes a status differential. Therefore, the impact of dress is considered in the reflective chapter of this thesis.

When the interview commenced, the researcher clarified the aim of the study and asked the participant to give informed consent by signing the consent form. The patient was informed that the recording device was switched on. She was also informed about her right to withdraw, and that this right could be exercised at any time. The schedule contained warm up questions to allow the patient to start talking and develop a relationship with the researcher. This was beneficial to the researcher as most participants often described their hobbies, sometimes within the context of the eating disorder. This allowed the researcher to find a link between the general information discussed and the specific information needed for the purpose of the interview. The rest of the interview was then carried out. The researcher also made notes throughout the interview in order to remember key comments and to refer to them throughout.

The researcher approached questions by consciously thinking of the participant as the expert in the subject area. Therefore, the researcher tried to reflect this in the way the questions were asked. The researcher was also aware that the patient may not understand some of the questions, or that her cognitive ability may be compromised by anorexia. Therefore, the researcher regularly confirmed with the participant that she had understood the question. The researcher also reassured her that should she not understand something or disagree with a question, she could make the researcher aware at any time. This hopefully minimised the effect of social desirability or response bias. This was further mediated by the researcher making the patient aware that there is no right or wrong answer to the researcher, and that she only wanted her personal opinion of the experience.

The researcher made an effort to show respect at all times by being aware of the patient's unique knowledge of the subject area. The researcher tried to acknowledge the participant's feelings, in particular that the subject may cause her distress when recalling experiences. Throughout the interview the researcher was aware of her facial expressions and

gesticulation, and so smiled or other appropriate responses when necessary in order to try and reflect the patient's mood or type of topic being discussed. The researcher felt that when a better rapport was built, a higher level of information was disclosed. This created an environment where the participant was active in the interview process, rather than passive. Throughout the interview, the researcher asked the patient if she was happy to proceed, especially when the interview went over the previously agreed end time. This opportunity allowed the participant to exercise her right to withdraw from the study following the initial introduction should she so wish. She was also made aware that the results from the study would be available to her after analysis. Towards the end of the interview, the researcher used open-ended questions to ask if there was anything else the participant would like to add. At this point the researcher asked the patient if she was okay and referred her to appropriate mediums of support should she require care after the interview. The researcher assured the patient that her contribution was worthwhile to the study and that the researcher was grateful for her input.

The researcher made a conscious effort to return to everyday conversation such as general statements about weather, or a return to a comment about hobbies that were discussed at the beginning of the interview. The participant was debriefed by reminding her about the aims of the study, and that she would be able to access a transcript of the findings should she wish to see the data. The researcher described what would happen to the data after the interview was complete (e.g. transcription, anonymity, confidentiality, dissemination). She was thanked for her participation and reminded that she could withdraw from the study at any time.

Almost all qualitative research studies involve some degree of transcription (Lacey & Luff, 2007) and this was carried out concurrently with the interviews to allow emerging themes to be explored during further data collection and check for saturation of themes. Non-verbal cues in the transcript such as silence (which may indicate embarrassment or emotional distress or simply a pause for thought) and non-words such as "um", "err" etc. were included as they are important elements of a conversation. In case of more detailed analysis, laughter and gestures were included as they gave context to the words transcribed (Lacey & Luff, 2007). When transcription was complete the data were analysed using an inductive method of analysis to develop theories, concepts and ideas about patient experience of treatment for anorexia.

Analysing the data: Framework analysis

There is no one agreed way to analyse data as qualitative approaches are diverse, complex and nuanced, and multiple research models exist and sometimes conflict with one another (Holloway & Todres, 2003). Framework Analysis (Ritchie & Spencer, 1994) is a systematic approach to qualitative analysis, developed in the context of large-scale policy research. It is now becoming increasingly popular in health-related research (Gale, Health, Cameron, Rashid & Redwood, 2013; Smith & Firth, 2011; Lacey & Luff, 2007). Framework Analysis allows the researcher to systematically reduce the data, and is therefore appropriate for managing large scale datasets where obtaining a holistic, descriptive overview of the datasets is desirable (Gale et al., 2013).

Although framework analysis shares many of the common features of thematic analysis (Smith & Firth, 2011), applied research aims to meet specific information needs and provide outcomes or recommendations. The aims of Framework Analysis include creating a definition of the phenomena; categorizing areas by creating typologies; theorizing, explaining and exploring; and mapping the range, nature and dynamics of the phenomena. The general approach in framework analysis is inductive, but this form of analysis allows for the inclusion of *a priori* knowledge in emergent concepts. This will allow the results of the study to be compared to prior psychological theory and research relating to treatment of EDs and factors that may affect the experience of treatment (e.g. motivation to change; OIT, a subtheory of the SDT macro theory). Therefore, it contrasts with entirely inductive approaches (e.g. grounded theory) where the research is an iterative process and develops in response to the data obtained and on-going analysis (Smith & Firth, 2011). This is important in applied studies where specific issues, such as motivation during treatment for anorexia, need to be addressed.

The benefit of thematic framework analysis is that it provides robust, systematic and visible stages to the analysis process so that it is clear about how the results have been obtained from the data (Pope et al., 2000; Ritchie & Lewis, 2003; Braun & Clarke, 2006; Smith & Firth, 2011). The framework approach is suited to analysing cross-sectional descriptive data, enabling different aspects of the phenomena under investigation to be captured (Ritchie & Lewis, 2003). The interconnecting stages enable the researcher to move back and forth across the data until a coherent account emerges (Ritchie & Lewis, 2003). This results in the constant refinement of themes that aids the development of a conceptual framework (Smith

& Firth, 2011). Qualitative research is an interpretative exercise, and the researcher is intimately involved in the process, not aloof from it (Pope & Mays, 2006). In framework analysis, the researcher's interpretation of the data is transparent as the analysis process is recorded (Ritchie & Lewis, 2003).

Framework analysis has five key stages: Familiarisation; identifying a thematic framework; indexing; charting; and mapping and interpretation (Ritchie & Spencer, 1994).

Familiarisation

The researcher first became familiar with, and gained an overview of the data. It was likely that any recollections were partial, and therefore the researcher became immersed in the data by listening to the audio recordings whilst reading the transcripts. This was crucial to understanding the meaning of statements through tone, pitch and pauses. Notes were made as to the themes that were emerging and the range of responses that were given to questions asked by the researcher. Transcriptions were also checked for incorrectly transcribed data. This stage was important as although the researcher collected all of the data and had some ideas about emergent categories, this needed to be confirmed by exploring the whole data set.

Identifying a Thematic Framework

After the data were reviewed, the researcher returned to their own notes and identified the key issues, concepts and themes. A basic thematic framework was then developed and the data were sorted into themes. The first version of the framework was largely descriptive and contained themes similar to that of the original aims of the research, such as expectations and satisfaction with treatment. The initial framework was then applied to a few transcripts and throughout the process, categories were refined, and emergent themes that represented the range of attitudes and experience were included. Therefore, when sorting data and developing the framework further, the researcher considered the original research aims, but also noted emergent issues raised by the respondents themselves that were not expected.

Indexing

Indexing is the process where the thematic framework or index is systematically applied to the data in its textual form. All data from the interviews were read and coded according to the thematic framework. Applying the index involved making numerous judgements as to

the meaning and significance of the data. Some passages often contained a number of different themes each of which needs to be referenced and the researcher was then able to record patterns of association within the data. This process of making judgements was subjective and open to different interpretations.

In order to aid the analytic process, Computer Assisted Qualitative Data Analysis Systems (CAQDAS) packages such as Atlas-ti are often used. In this study, Atlas-ti allowed the researcher to enter raw data directly into the package and hold the documents securely. The package allowed annotations and automatic indexing of material. Furthermore, it allowed the researcher to search through textual data for chosen words or phrases, check frequency of words for content analysis, and Boolean operators can be used. The process of coding and re-coding is made simple by using packages such as Atlas-ti as small sections of data can be highlighted and assigned to a pre-existing or new code quickly and efficiently (Wickham & Woods, 2005). Items that have been coded are stored and can be searched in the same way as documents. Codes can be given titles and descriptions chosen by the researcher, and can be combined with other codes, subdivided, or built into conceptual models to develop theory (Lacey & Luff, 2007). Importantly, Atlas-ti can retrieve data within the context of the sentence or paragraph from which it comes, which is critical when considering the context of the chosen word or statement. Finally, retrieval allows identification of the data, such as the participant number or name of field note (Lacey & Luff, 2007).

Charting

According to Ritchie and Spencer (1994), the researcher should build up a picture of the data as a whole by considering the range of attitudes and experience for each concept. Therefore, data were rearranged according by constructing charts with headings and sub-headings drawn from the thematic framework. Charts could either be thematic for each theme across all respondents (cases) or by case for each respondent across all themes (see Figure 3 for fictitious examples of thematic and case charts).

Thematic chart

	P 1	P 2	P 3	P 4 etc.
Theme e.g. Positive expectations of treatment	L13, L48, L132, L179, L246 (<i>'I thought they would be friendly'</i>)	L166, L277, L376 (<i>'I read on a leaflet that I could get CBT'</i>)	L489	

Case chart

	Theme 1 e.g. Negative expectation of treatment	Theme 2 e.g. Positive expectation of treatment	Theme 3	Theme 4 etc.
P 1	L23 (<i>'I thought it would be like something from a film where you were strapped down'</i>), L46, L155, L376	L137 (<i>' looking forward to getting better'</i>), L244, L339	L27	
P 2	L14, L189			

Figure 3. Thematic/case charts including examples of themes, reference numbers and quotations (Lacey & Luff, 2007)

Charts for this study were developed using a thematic approach rather than a case-by-case approach. Charts were drawn up for each key subject area, and entries made for respondents on each chart. Cases were always kept in the same order for each subject chart so that the whole data set for each case could be easily reviewed, and comparisons could be made between cases.

Some of the chart headings were identical to the indexing categories earlier in the analytical process, whereas others were eventually added or modified to reflect newly emergent themes identified whilst indexing the data. Therefore, the purpose of charting data was not

to extract large portions of the data, but to synthesise key concepts and themes. The original text was referenced so the source can be traced and the process of abstraction can be examined and replicated.

Mapping and Interpretation

After the data had been categorised and charted according to the core themes, the researcher connected key characteristics of the data, and mapped the data set as a whole. This included defining concepts, mapping the experiences of patients, creating typologies, noting associations and explanations, and finally developing strategies or recommendations. It was important to note that Ritchie and Spencer (1994) highlight that this process was not just a question of aggregating patterns, but weighing up the salience and dynamics of issues, and searching for a structure. Therefore, it was crucial to observe the factors that emerged as important throughout the patients' accounts of their treatment experience (salience), and how these factors interacted (dynamics). As the one of the objectives of the research was to inform policy and service delivery for eating disorders services in the Welsh NHS, the process of developing strategies which emerged directly from the data was important.

Considering Alternative Methods of Analysis

Although thematic framework analysis was chosen as the method of analysis for this study, it was important to acknowledge that there were other methods of analysing qualitative data that were available to use, such as Thematic Analysis (Braun & Clarke, 2006), Grounded Theory (Glaser & Strauss, 1967) and Interpretative Phenomenological Analysis (IPA).

Thematic analysis (Braun & Clarke, 2006) is a method for identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes the data set in detail. It can go further than this, and interpret various aspects of the research topic (Boyatzis, 1998). In order to make the process of thematic analysis more accessible, Braun and Clarke (2006) suggested a pragmatic approach which includes six stages of the analytic process: familiarisation with the data; Generating initial codes; searching for themes; reviewing themes; defining and naming themes; and producing the report. Boyatzis (1998) suggests that thematic analysis has a number of overlapping or alternative purposes. It can be used as a way of seeing, a way of making sense out of seemingly unrelated material, a way of analysing qualitative information. It can be a way of systematically observing a person, an interaction, an organisation, a situation or a culture. It can also be a way of to

convert qualitative data into quantitative data. Although thematic analysis would be appropriate for the present study, it has been criticised for lacking depth (Attride-Stirling, 2001). Thematic analysis can result in sections of data being fragmented from the original, which can result in data being misinterpreted. As a consequence, findings are subjective and lacking transparency in how themes are developed (Smith & Firth, 2011). Therefore, a method that has a clearer analytical process that could be documented was preferred.

Grounded Theory (Glaser and Strauss, 1967) was a method that was developed originally to allow theory to be generated systematically from the data, with theory as the final output of research (Strauss and Corbin, 1998). Psychologists can use grounded theory methods to study individual processes, interpersonal relations, and the reciprocal effects between individuals and larger social processes (Charmaz, 2003). Where other theories may stop at the levels of description or simple interpretation, grounded theory focuses on analytic induction (Lacey & Luff, 2007). Grounded theory consists of systematic inductive guidelines for gathering, synthesising, analysing, and conceptualising qualitative data to construct theory (Charmaz, 2001). It starts with a clear but broad research question and the research proceeds in stages, with the analysis performed after one stage of fieldwork determining what or who will be studied next and which methods will be used (Lacey & Luff, 2007).

Grounded Theory is an approach to research as a whole, yet researchers frequently use the analysis procedures outlined in grounded theory without taking on board the whole methodological approach to research design (Lacey & Luff, 2007; Bryman & Burgess, 1994). Charmaz (2003) further suggests that most researchers construct conceptual analyses of a particular experience instead of creating substantive or formal theory. This problem is compounded by the development of several approaches to grounded theory, where a number of aspects from the original approach are no longer upheld by any of the authors (Flick, 2009). For example, Glaser and Strauss, the original authors, eventually disagreed on the process of grounded theory, and new researchers have entered the field such as Charmaz and Corbin. Although the current study seeks to explore relationships between concepts that have not been clarified before, the requirement for a full research proposal to obtain ethical approval from the NHS will impede the true inductive process that Glaser and Strauss (1967) originally proposed.

Interpretative phenomenological analysis (IPA) is an approach that has its origins in fields of inquiry including phenomenology (the study of what an experience is like), hermeneutics (the theory of interpretation) and idiography (understanding lived experiences from the perspective of a small group of particular people, in a particular context) (Smith, Flowers, & Larkin, 2009). The aim of IPA is to explore, in detail, the processes through which participants make sense of their own experiences, by looking at the respondents' account of the processes they have been through and seeking to utilise an assumed existing universal inclination towards self-reflection (Chap & Smith, 2002; Smith et al. 1997). Thus, IPA research has tended to focus on the exploration of participants' experience, understandings, perceptions and views (Reid, Flowers & Larkin, 2005). The IPA approach recognizes that research is a dynamic process (Smith, 1996), and the complexity of the relationship between the researcher and the participant is acknowledged.

IPA is thought of as a methodology, specifying that critical realism and contextualism are the ontological and epistemological underpinnings of the research, with phenomenology as the framework (Larkin, Watts & Clifton, 2006). The approach specifies the types of research questions that should be asked, and the sampling strategy used (small, homogeneous). The data collection method is usually qualitative interviews; as other methods of data collection can mean that the idiographic focus is lost (e.g. focus groups). IPA is relatively limited in how the method can be applied, specifying that interview schedules should be short so that the participant is able to set the parameters of the topic. Furthermore, IPA recommends that the researcher should not impose their understanding of the phenomenon on the participant's narrative (Smith et al., 2009).

IPA has gained popularity in health psychology research as it satisfies a biopsychosocial approach to health and illness. There are differences between IPA and framework analysis, but the end result of either analysis can look similar. Firstly, whereas IPA specifies the overarching framework for research (phenomenology, hermeneutics and idiography), framework analysis allows freedom to choose the epistemological and ontological position that the researcher takes. Therefore, framework analysis is flexible and allows the researcher to address a wide range of research questions. Like IPA, this can include questions about a person's experiences and perspectives, as well as including other questions.

Contrary to IPA, there are no specific sampling requirements for sampling in framework analysis. This was important for the current study as it is often difficult to recruit participants for studies regarding AN. By imposing further specific inclusion criterion, the likelihood of achieving an appropriate number of participants may have been compromised. Nevertheless, it is important to acknowledge that the resulting sample were homogeneous and so IPA seems feasible.

What is important to reiterate at this point is that IPA is a methodology, that is, it should be applied from the point of conception of the study. The study was commissioned by AWEDSIG who asked for patients' feedback regarding how the Welsh Healthcare service could be improved. The aim was not just to focus on idiosyncratic accounts of treatment and the position of the researcher, but to provide patterns of meaning across participants regarding the service for AN in Wales. Therefore, a method of data collection and analysis that produced broad results suitable for service improvement was important. Use of IPA would have constrained the research aims, and the types of questions that could be asked within the interview schedule.

Furthermore, during analysis, IPA takes a case-by-case approach, producing coding and producing themes for each participant before moving onto the next. This allows the researcher to remain close to the data and focus on the unique characteristics of the individual. Each stage in framework analysis can take place across the entire data-set, therefore allowing the researcher to identify patterns across participants, as well as being able to capture difference and divergence in the data.

Therefore, although IPA would have been useful in providing the overarching framework suitable for a study within health psychology, the flexibility of framework analysis meant that the aim of the research was not restricted. Additionally, framework analysis can be applied so that the patient experience is indeed captured. Consequently, it can be argued that framework analysis produces results that are not dissimilar to IPA, and framework analysis is preferential given the context of the current study.

Results

Descriptive details of patients with anorexia nervosa

Demographic details were collected for those who participated in the study (sex, age, onset and duration of disorder, treatment start age and treatment duration). Table 3 shows the demographic data at the time of the interview for each patient who took part. Pseudonyms have been used to preserve the anonymity of the participants.

Table 3. Sex, age, onset and duration of illness of patients, and treatment start/duration

	Sex	Age of onset (yrs)	Duration of illness (yrs)	Start of treatment age (yrs)	Treatment duration (yrs)	Period between onset and treatment (yrs)	Age (yrs) at time of interview
P1 (Beth)	F	17	7	23	1	6	24
P2 (Ellie)	F	14	10	18	6	4	24
P3 (Katie)	F	14	6	15	5	1	20
P4 (Holly)	F	17	14	19	12	2	31
P5 (Joanne)	F	13	10	15	8	2	23
P6 (Emily)	F	15	25+*	Late30s*	5+*	20+*	40+*
P7 (Faye)	F	11	15	23	3	12	26

* Estimate was given as the demographic information was not shared with the interviewer

All patients were female and their ages ranged from 20 to 40+ years. The age of onset of anorexic symptoms ranged from 11 to 17 years, supporting previous research which states that onset most frequently occurs during adolescence (Hoek & van Hoeken, 2003). Two participants had first degree relatives who had also been diagnosed with an eating disorder, indicating a familial/genetic contribution to development of the disorder. One participant

described how she was raped, and another described childhood sexual abuse, and another described the upheaval and distress associated with moving schools, revealing experiential factors during development of AN.

Duration of illness ranged from 6 to 25+ years. Treatment start age ranged from 15 to 39** years (**late 30's was the estimate given by Emily) and duration of treatment ranged from 1 to 12 years. All patients received primary and secondary care for AN in Wales. Five of the seven patients also received part of their care for AN as an inpatient in England. The treatment patients received in England was from specialist inpatient ED services only, as Wales did not have a specialist inpatient ED at the time of data collection. This confirms a previous report which states that there were gaps in provision of services in parts of the UK (RCP, 2012). As patients were still receiving secondary care at the time of data collection, these figures were not definitive and for descriptive purposes only.

Following the familiarisation phase, the researcher developed a thorough thematic framework that included a hierarchy of concepts, themes and subthemes (See Table 4 below for overview of framework). Descriptions for each concept and its corresponding themes were included so the researcher could index the rest of the data and continue to modify to the framework as necessary. Detail was kept to a minimum in order to maintain a coherent overview of the data.

A thematic approach to indexing was adopted (rather than case-by-case). Charts were drawn up for each key subject area and entries were made for respondents on each chart. Cases were kept in the same order for each chart, so the data set as a whole could be easily reviewed. The original text was referenced with a quotation number so that the source could be traced, and the process of abstraction might be examined and replicated. Six concepts emerged from the data; each concept with its own set of themes and subthemes.

Table 4. Overview of framework including concepts, themes and subthemes

Concepts	Themes	Subthemes
Patient description of AN	AN is a positive disorder	
	AN is a negative disorder	
	AN is a separate inner voice	
	AN is consciously manipulative	
The journey through the healthcare service for anorexia	Initial presentation of anorexia	
	Accessing healthcare for the first time	Initial diagnosis
		Barriers to first treatment
	Inpatient treatment approach	General acute mental health ward
		Specialist eating disorder unit
	Aspects of treatment	Treatment as a privilege
		Psycho education as a valued treatment
		Range of HCPs available
		Breaks in treatment and/or waiting lists
		Services received outside of NHS
		Withdrawal of treatment from NHS
		Communication in the healthcare service
Engaging in treatment	Barriers to engaging in treatment	
	Reasons to engage in treatment	
Recovery as a gradual process		
Relapse or slow recovery as disappointing		
Expectations of treatment for anorexia	Positive expectations of treatment for anorexia	
	Negative expectations of treatment for anorexia	
	Expectations of treatment that were met	
	Expectations of treatment that were not met	
	Expectations after treatment	

Table 4. Overview of framework including concepts, themes and subthemes (continued)

Concepts	Themes	Subthemes
Satisfaction with the health service for anorexia	Aspects of treatment that leave patients satisfied	
	Being 'not satisfied' rather than dissatisfied	
	Difficulty in being either satisfied or not satisfied	
	Expressing lack of satisfaction through anorexic behaviours	
Therapeutic alliance during treatment for anorexia	Contributors to therapeutic alliance	Persona of HCP
		HCP knowledge about AN
		Trust between HCP and patient
		Respect and negotiation between HCP and patient
	Barriers to therapeutic alliance	Persona of HCP
		HCP lack of knowledge about AN
		Threats used during treatment by HCP
		Characteristics of AN
		Lack of professionalism by HCP
		Lack of trust between HCP and patient
		Lack of respect and negotiation between HCP and patient
		Loss of relationship with a HCP
	Therapeutic alliance as a confusing relationship	
Patient recommendations to improve the health service	Early intervention for AN	
	Better treatment options for AN	
	Better information for patients regarding AN	
	Address long waiting lists	
	Address funding difficulties	
	Treatment closer to home	
	Better HCP knowledge about AN and treatment	
	Better communication in the NHS	
	Control high turnover of staff	

Following completion of the framework, indexing and charting of all data, two models were developed. The first model was to explicate the relationship between expectations, motivation to engage, satisfaction and outcome during treatment for EDs. Use of the model was explained using an applied example, where the impact of HCP knowledge of AN is explored. The second model was devised to show the components of therapeutic alliance during treatment for anorexia.

The basic needs expectancies model of motivation during treatment for anorexia

A model was devised to explain the factors that may affect a patient's outcome during treatment for anorexia using the Social Determination Theory (Figure 4). Results from the present study reveal that patients with AN have both positive and negative expectations of treatment. The expectations relate to a person's basic psychological needs i.e. relatedness, competence and autonomy. For example, patients who have positive expectations which are met are more likely to feel as though their basic needs are met. This will make internal motivation more likely, increase their satisfaction with the ED service, increase engagement with treatment and result in better outcome. For example, a patient expects to be able to negotiate their treatment with a HCP. The HCP respects the patient's choice and they collaborate toward a treatment approach. The patient is more likely to feel autonomous during treatment, internalise the importance of change, engage in treatment and be satisfied with the service.

Patients who have positive expectations which are not met are likely to feel as though their basic needs have not been met. This will thwart their motivation, decrease their satisfaction with the ED service, decrease engagement with treatment and result in poor outcome. For example, a patient expects to see a knowledgeable HCP when they seek treatment. When they attend healthcare services, they are treated by someone who tells them to go away and eat a biscuit or cake. The patient is likely to experience needs frustration, and therefore will be more likely to experience amotivation or external motivation to change, less likely to engage in treatment, and less satisfied with the healthcare service.

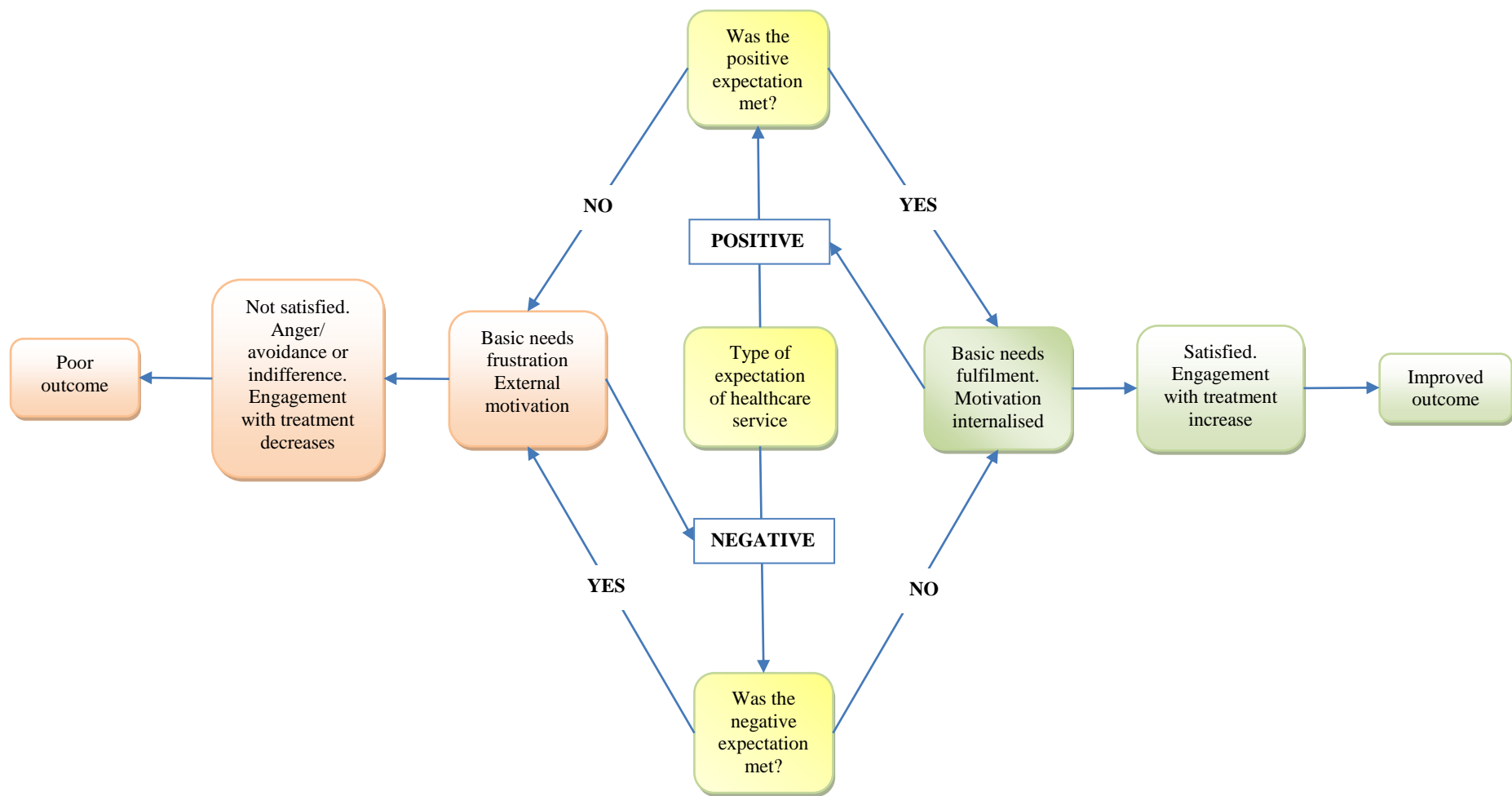


Figure 4. Basic needs expectancy model of patient motivation during treatment for anorexia nervosa

Patients who have negative expectations which are not met are likely to feel as though their basic needs have been met. This will make internal motivation more likely, increase their satisfaction with the ED service, increase engagement with treatment and have a better outcome. For example, a patient expects that they will be told they are not ill and be turned away from treatment. When they attend healthcare services, they are assessed and referred to the appropriate services. The patient is likely to feel as though they are cared for, internalise the importance of change, engage with treatment and be satisfied with the healthcare service.

Finally, patients who had a positive expectation that was not met are more likely to have negative expectations in the future. Patients who had a positive expectation met are more likely to have positive expectations of future treatment. Patients who have a negative expectation met are more likely to have negative expectations of future treatment. Patients who have a negative expectation that was not met are more likely to have positive expectations in future. The more patient's positive expectations are met, or negative expectations not met, then the more the motivation will be internalised, meaning higher likelihood that recovery will be maintained. Conversely, the more patient's positive expectations are not met, or negative expectations are met, motivation will remain external and result in lower likelihood that recovery will be achieved. The model lends itself to exploring the effect of expectations being met on motivation, satisfaction, engaging in treatment and outcome at one point in time, or across a longitudinal period.

Factors that affect therapeutic alliance

A model to show the components of the therapeutic alliance was developed from the data (Figure 5). The model shows that factors attributed to the HCP and patient are important to the therapeutic alliance. Importantly, mutual interactions and understanding must be achieved to develop and maintain the relationship.

The persona that the HCP adopts in the therapeutic setting is important to the development and maintenance of the alliance. The definition of persona is 'the aspect of someone's character that is presented to or perceived by others' (Oxford Dictionary Online, 2013). The persona and professionalism of the HCP, such as being friendly or professional, or cold and uncaring, were seen as contributors or barriers to therapeutic alliance respectively. Furthermore, awareness of the disorder and use of threats by HCPs were important factors. The patient's motivation to change as well as the characteristics of anorexia can either

contribute, or be a barrier, to the relationship (e.g. lying to HCP). In order for the best therapeutic alliance to be developed, there must be respect for one another and a mutual agreement and negotiation regarding treatment.

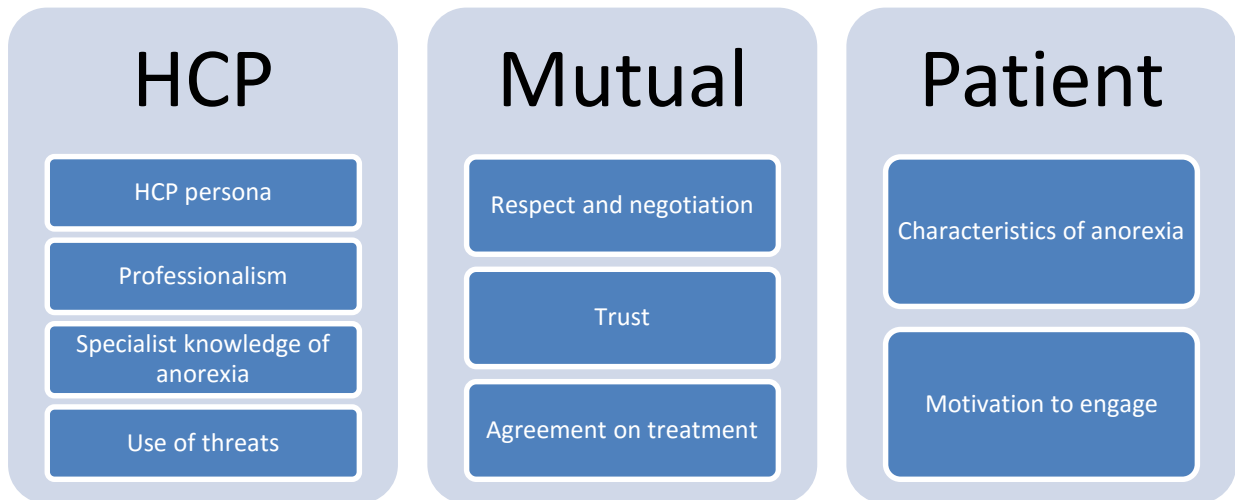


Figure 5. Factors affecting the therapeutic relationship in treatment for anorexia nervosa

The data framework

The research team comprised of the researcher (Laura Rees-Davies) and the supervisors of the project (Dr Bev John, Dr Susan Faulkner, and Dr Caroline Limbert). The team developed the framework to include descriptions of themes to enable the full data set to be indexed and charted (see Appendix 7 for charts and indexes of themes/subthemes for each of the concepts). Examples of data (quotations from participants) for each theme/subtheme are shown below, and the results are discussed together alongside evidence from previous literature.

Concept 1: Patient description of anorexia

Throughout the interviews, participants alluded to various descriptions and definitions of AN (Table 5). This included instances where patients attempted to explain or name their disorder with other labels. In addition to the DSM-5 (2013) diagnostic criteria, these descriptions will be useful in the identification of eating disorders in future by providing an insight to patient's unique definitions of anorexia.

Table 5. Thematic framework for patient description of anorexia

Theme	Description of theme
AN is a beneficial disorder	AN was described being seen as an aspect of the patient's life which makes the person feel positive. For example being a lower weight, feeling in control.
AN is a dysfunctional disorder	AN was described as a dysfunctional disorder by the patient. This can include the negative aspects of the disorder such as cognitive decline, isolation from others, exclusion from activities such as the gym, and breakdown of relationships.
AN is a separate inner voice	This included when AN was part of the person's identity. This may include the descriptions of the inner-voice, the impact of the inner voice and the battle to ignore the inner voice. The theme can also include the way the patient describes the battle between their ill-self and the well-self. <i>*This theme emerged without specific questioning and was unexpected by the researcher.</i>
AN is consciously manipulative	The patient described anorexia as a disorder that caused them to be manipulative. This included descriptions of occasions where patients have knowingly lied to others, and used or created situations that enable characteristics of AN.

Anorexia is a beneficial disorder

Participants admitted that some of the symptoms of anorexia were desirable by sufferers and they preferred to remain a low weight. For example, Ellie explained the positive aspect of anorexia for her:

“I can deal with being a bit heavier. I think that the problem is its still, it feels still more comforting being a little bit thinner” (Ellie)

Anorexia nervosa as a dysfunctional disorder

Whilst participants saw the benefit in having AN, they also acknowledged that it has negative consequences. This created a difficult dichotomy for sufferers when they were receiving treatment. Ellie explains that in order to remain healthy then you should not be underweight:

“If you want to function as a, as a woman then you need to have periods and if you want to not get osteoporosis then you need to put on weight. If you know if you don't want to lose your hair, then you need to put on weight” (Ellie)

This description reflected the DSM-5 (2013) diagnostic criteria of intense fear of weight gain. Joanne further explained about the negative effects of anorexia for her as she developed depression, a mental health problem which is often co-morbid with eating disorders (Herzog et al., 1992):

“I just went home and then hell began basically. I lost more weight. I became horrifically depressed...depressed in that I didn't eat. I wouldn't drink. I wouldn't wash my hair. I wouldn't clean my teeth. I wouldn't get out of bed. And if I did get out of bed, I would just sit on the chair and stare into space” (Joanne)

Therefore, although participants admitted that anorexia had some benefits, for them it also meant they experienced undesirable symptoms too.

Anorexia nervosa as a separate inner voice

As participants talked about their disorder and what they thought about treatment, they often described having a separate inner voice or two parts of their selves. This theme emerged without specific questioning and was unexpected by the researcher. Beth described how having the inner anorexic voice made her feel about a HCP she worked with:

“At times I'd say I haven't trusted her but possibly, like the sort of eating disorder voice in my head hasn't necessarily trusted her” (Beth)

Ellie gave an example when her anorexic voice argued with her inner voice:

“I felt like it’s almost like having, maybe like two or three people inside you where one would be, sort of driving you to lose weight. One of you ‘okay you’re being stupid’” (Ellie)

Katie described how the anorexic inner voice affected her ability to decide if she needed treatment:

“It was just very, very frustrating 'cause you ... get to the stage where you’re floating in and out of ‘I have got something wrong with me but I’m still fat so I can’t have something wrong with me’ ...your sort of in two minds yourself” (Katie)

Faye talked about how she wanted conflicting things:

“It’s like one part I wish that like there wasn’t a problem and I didn’t have any issues and to have a normal life. But then there was another part that I don’t want to get better because I just want to lose as much weight as I can” (Faye)

The participants’ descriptions echo Tierney and Fox (2010) who examined 21 patients’ written accounts of their inner voice. The authors found that the bond between individuals and their anorexic voice explained ambivalence to change throughout treatment. The examples of quotations for this theme highlights that although people with anorexia may want to recover, they are in a dichotomy between the want to be well, and the compulsion to maintain anorexia. This builds upon the explanation that SDT for AN offers, which suggests that a person’s motivation to recover may be extrinsic. The degree to which the person internalises the importance of change affects the likelihood of recovery. If the person still holds intrinsic motivation to maintain anorexia, then recovery is more difficult (Ryan & Deci, 2000; Vansteenkiste et al., 2005).

Anorexia nervosa as consciously manipulative

When describing how their disorder affected treatment, participants would describe anorexia as making them untruthful or manipulative. Beth explained how she lied to her GP about her symptoms in order to stop people thinking it was anorexia:

“I did lie to her about, about what I’d ate...my Dad was really really worried about me...She believed me the first time I just said ‘oh I’ve got- I think must have worms or something like that’” (Beth)

Ellie explained how the lies progressively increased:

“It was really weird like one lie popped out after, like I’d like to think that I’m generally quite a truthful person” (Ellie)

Emily suggested that the specialist eating disorder unit needed people who are adequately trained in eating disorder symptoms and characteristics because when a HCP lacked knowledge of anorexia it meant they were easily manipulated:

“When you’re in the depths of eating disorder you are manipulative. And you don’t think you are but you can manipulate situations and unless somebody knows exactly what you’re likely to do and how you’re likely to hide food or not eat or whatever, then it’s not going to work” (Emily)

Therefore, although participants may have usually described themselves as truthful, they attributed the lying or being manipulative to the eating disorder. According to the SDT, Emily may have felt more motivated to continue her anorexic behaviours, given that she felt competent in convincing others that you were adhering to treatment.

Concept 2: Expectations of treatment for anorexia

This concept related to participants’ expectations of the healthcare service (Table 6). According to Williams et al. (1995) *expectations* are defined in terms of patient’s needs, requests or desires prior to seeing the doctor. Yet those with AN may not just have requests and desires regarding treatment, they may also have fears (Colton & Pistrang, 2004; Treasure & Schmidt, 2001; Vitousek et al., 1998).

Table 6. Thematic framework for expectations of treatment for anorexia

Theme	Description of theme
Positive expectations of treatment for anorexia	This theme related to the positive expectations that the patients stated that they had prior to entering the Welsh healthcare service. Specifically in this study, positive expectations were those aspects of the Welsh healthcare service which patients believed would result in a positive outcome. E.g. Specialist staff.
Negative expectations of treatment for anorexia	Negative expectations are aspects of the Welsh healthcare service which patients believed would produce a negative result. An example was that the patient expected to go to the doctors for help and were then told that she did not require the service and/or did not have the disorder.
Expectations of treatment that were met	This included both positive and negative expectations that <i>were</i> met. For example when the person with AN expects to put on weight and when they receive treatment they do put on weight.
Expectations of treatment that were not met	This included both positive and negative expectations that <i>were not</i> met. For example when the patient with AN expected that the HCPs were going to be unpleasant and when they met them they were different to what they expected.
Expectations after treatment	Expectations the patient with AN had after receiving treatment. This included the expectations the patient had (prior to treatment) if they still applied after they had received treatment. This also included modified expectations as a result of having treatment.

Positive expectations of treatment for anorexia

Participants' descriptions of their expectations revealed the importance of exploring positive and negative expectations (Williams, 1999). Participants who had decided to seek medical help often had positive expectations:

“What I think I thought was going to happen, if I sought treatment, is that I would get treatment” “I expected to put on weight...I expected to have periods again. I think I kind of expected to feel more attached to my body...sometimes I do and sometimes I don't” (Ellie)

“I think I expected a lot quicker help...There was a stage where I expected them to just sort of treat me right there, right then. You know a pill or something just, help me right there right then...Some help from them. Mostly just counselling just talking help” (Katie)

Participants therefore expressed their expectations in terms of a particular service, supporting Williams et al. (1995) definition where expectations reflect requests or desires. Participants described what treatment they expected to receive:

“I was aware that there was certain services that I would have liked to been put into. I didn’t know about ((adolescent inpatient unit)) but I thought that there must be some sort of psychological or counselling” (Holly)

Participants expected to be seen by HCPs who were specialists in eating disorders (Pereira et al., 2006):

“I thought it would be helpful. I knew there would be trained people working there” (Katie)

Patients also expected to be treated close to home and for treatment to be successful:

“I think I maybe expected to be treated near to home. Or I think I would have at least I would have expected to have completed the course of treatment” (Ellie)

“I expected it to cure me I expected to be able to eat normally. To be able to just totally cure me of my anorexia” “I expected them to make me put on weight but I expected them to make me healthier I suppose and be ok about putting on weight” (Katie)

“I thought it would do what it said it was going to. Do what it said on the tin, type thing, yeah” (Holly)

“I don’t know I suppose I just expected some, I, at the time I thought I want to speak to somebody and in a few weeks it would all be better again” “ [I] Just expected I don’t know just to be able to go back to normal” (Emily)

When participants described their positive expectations of treatment for anorexia, they expected to be treated locally using effective therapies which were administered in a timely manner by specialists in eating disorders. This relates to the basic psychological needs proposed within OIT, as the women felt that they wanted to feel that the HCPs were competent at providing an effective treatment, which would allow patients to feel competent in recovery. Awareness of such expectations are important in shaping the way HCPs first meet with patients who have anorexia, i.e. being explicit with them about what realistic expectations they should have.

Negative expectations of treatment for anorexia

As well as positive expectations, patients reported various negative expectations prior to receiving treatment. As previous research and diagnostic criteria have suggested (Grilo,

2006; DSM-5, 2013), expectations of gaining weight and being made to eat were intensely negative:

“I thought that they were going to make me really fat ((short soft laugh))” (Beth)

“It’s also the thought of “oh hell what are they going to make me do are they going to fatten me up now” “I think I expected...I expected that they were just going to shove food at me and say “right, you’ve got to eat this”. Because that was my concept of how my siblings had been treated...I had wholly expected they would just going to say “right, you’ve got to stop doing this and start doing that and we’re going to weigh you and we’re going to make you fat so there”” (Katie)

“I just thought I’d be tube fed and let out and I would lose weight and I’d be admitted again. And I was just getting into this cycle that so many girls do” (Joanne)

Some of the women also thought that they would ask for help and be turned away:

“Well I think I thought that they wouldn’t really believe that I was ill and that they wouldn’t, wouldn’t help me...I think that’s quite a common fear for people...I thought that...I would go to see someone and they’d be like you know ‘you’re fine what’s, there’s nothing wrong with you’... ‘you’re alright you haven’t got a problem’” “I guess I was quite cynical about it...I was quite cynical about everything” (Beth)

“I think that’s more fears about treatment, perhaps. I was worried about trusting people because I was worried that they would not trust me, maybe, not believe me...not being taken seriously” (Holly)

Holly described her negative expectations of the HCPs:

“[I expected the people to be] quite authoritarian” “What they had set out on paper ‘this is what will happen’ I don’t know, “you will be given...whatever”, you know ‘this is the way the programme runs’. I just didn’t really believe that they would actually stick to what they’d said” (Holly)

Therefore, participants described a range of negative expectations, and whilst some are related to the consequences of weight gain during treatment, others were related to way in which treatment is delivered. Negative expectations should also therefore be considered

seriously when meeting with patients who are coming for treatment for the first time. HCPs may help them to consider what expectations they have by attempts to clarify unrealistic expectations, and helping them to manage realistic negative expectations (e.g. weight gain). Consequently, a consideration of the basic psychological needs of patients (SDT) is advised given the likelihood of ambivalence towards treatment.

Expectations of treatment that were met

Participants were asked if their expectations were met or not:

“I was quite scared about going to ((psychiatric hospital)) ‘cause it’s quite stigmatised...once when I was early for an appointment, and I went to the cafeteria and had someone strange, saying strange things to me...and that made me feel quite bad...it just made me feel a bit loopy actually because ((with laughter))...it was just like one weird person talking to another” (Beth)

Joanne described how her negative expectations were almost met during a crisis situation:

“When I was seventeen I thought I was going to have to put on a lot of weight and I thought I was going to be tube fed. And I was pretty much right because they did want to do that and it was just that ((HCP)) who stopped that happening basically” “I just thought any minute now they’re going to come and section me. Cart me away to hospital. Shove an NG tube down me” (Joanne)

Expectations of treatment that were not met

Participants talked about what it was like to have an expectation that was not met, such as the following negative expectations:

“I had an image of it kind of being kind of women in white coats shouting and screaming at you...it really wasn’t like that...They had carpets and it was like a house. I really like it there and [they’re] trying to make you feel comfortable” (Beth)

“The waiting lists were the only thing, I heard the waiting lists were pretty bad and I’ve been quite a lucky person. Touch wood so far with the waiting lists. But there are a lot of waiting lists aren’t there in the NHS? [The NHS are] always on the news so that’s the bad expectation that you’re...stuck without services” (Katie)

Participants also described positive expectations that were not met in terms of treatment success, being valued and HCP knowledge of AN:

“I expected to have an inpatient phase, a day patient phase, and then up to what I believe was five years of follow up. What actually happened is that I had an inpatient phase, which was just, I mean, it’s like going for open heart surgery and then saying ‘we can’t afford to sew you up, but we did your heart surgery and you’ll have to try and hold it together’ Utterly crazy. I came away thinking I really wish I hadn’t bothered in the first place” (Holly)

“I expected it was going to make me better and I was going to come out feeling better, but I actually. When I actually discharged myself I think I was actually lighter than I was when I went in” (Faye)

Faye also described her expectations of a different facility:

“I was hoping that going to ((place)) was going to fix me and I was going to come out okay, but I was wrong” (Faye)

Ellie and Emily expected their opinions to be valued but they were not:

“I think I expected to come out feeling like a normal person or like (long pause) yeah I definitely expected to feel supported and listened to. I think I was listened to by those immediately around me but I don’t think that like in terms of kind of the funding” “Overall I don’t think my expectations were met” (Ellie)

“[I expected to feel] valued. A taxpaying citizen and I just didn’t feel that at all. I just felt that it was like ‘oh just another nutcase’ and the things that I would say were treated like oh you know ‘she has a mental health disorder’ so I wasn’t respected for my opinions” (Emily)

Patients described the realisation that expectations of having treatment with specialist HCPs were not met:

“[I expected the people to be] slightly more caring and more knowledgeable actually. I was quite shocked at how little they knew...and they admit that they don’t know anything” “I expected them to know what they were talking about...it was all like ‘oh my God what do we do now?’” (Emily)

In summary, the patients expected treatment that was successful delivered by caring HCPS who were knowledgeable about AN, their experience, yet unfortunately this was not their experience. Overall, the expectations tended to relate to autonomy, competence and relatedness of the patients' basic psychological needs, yet these expectations were not met.

Expectations after treatment

Despite definitions of expectations describing the desires or requests of patients prior to treatment, the participants in this study talked about the effect of treatment on their *future expectations*. After having funding withdrawn for treatment, Ellie described her fears of gaining weight:

“When I had to leave that I had put on weight and just with no way to deal with it and that’s what put me off getting help again. I think was the fear of putting on weight but not knowing how to deal with the weight gain” (Ellie)

Katie described her negative expectations of the health care service as a result of being turned away from treatment, and how this shaped her trust and expectation of future intervention:

“Why bother going to the doctors to be told you should be eating three meals a day whereas logically you know, even as someone who's anorexic, you know you should be eating that...that’s not enough help so yeah I lost a lot of faith in it” (Katie)

As a result, Holly then expected funding to be withdrawn in the future, and was less likely to trust people. Lack of trust may have had a negative effect on the development and maintenance of therapeutic alliance (McQueen, 2000; Irwin, 1993).

“I suppose having had the huge let down of health funding does make me a lot less likely to trust that people will do what they say. Or for example my CMHT might not exist next week, in my head so I have to, I feel like I constantly walk around with that hanging over me. So yeah I’m a lot less likely to trust people” (Holly)

Emily talked about how the inadequate treatment approach made her expect nothing from the health service:

“I thought there would be more help out there and I think it just sort of knocks you and knocks you back and just makes you think ‘oh my god there’s nothing and you can’t trust

anyone because they're telling me they don't know what they're talking about. So how can you sit there and sort of take advice from somebody who doesn't know what they're talking about?" "I don't expect anything in all honesty because that's what I've come to expect is nothing and to expect nothing is much easier than to expect something" (Emily)

Faye suggested that she previously expected to be helped as an inpatient, but that her expectations then changed:

"I agreed to go in. I agreed to go there thinking it was the right thing to do. It was going to make me better. But it didn't it just made it worse. That's probably why I didn't want to go in there again this year. Because I was supposed to go into the ((inpatient facility)) and I didn't want to go in there and it got worse and it be even harder then, when I do go to the ((inpatient facility))" (Faye)

After a HCP left her position and no one replaced her, Holly explained her expectations of treatment afterwards:

"I try not to expect things anymore...I understand sometimes people leave and if she were to leave I'd have to deal with it. But I hope that the service would remain. I hope that would be able to continue...To be seen at ((place))...I hope they don't all just disappear. I half expected them to do so" (Holly)

Participants described their experiences of treatment and how this then affected future expectations. This suggests that the process of expectations being met may be dynamic and on-going. Therefore, it is important to consider the basic psychological needs of patients as they continue to receive treatment.

Concept 3: The journey through the health service for anorexia

This concept related to the journey that the patient with anorexia took through the healthcare service (Table 7). This included diagnosis, treatment, HCPs, waiting lists, services provided outside the NHS, and end of treatment. It also included personal elements such as the recovery process for the patient.

Table 7. Thematic framework for the journey through the health service for anorexia

Theme	Sub-theme	Description of theme
Initial presentation of anorexia		The circumstances that surrounded the onset of AN for the patient. This included age, location, and perceived reason for onset and included further progression of the disorder.
Accessing healthcare for the first time	Initial diagnosis	The process and circumstance of the initial diagnosis that the patient experienced. This included when a patient was taken to the GP by a family member, or accessed healthcare through their own volition. This was also associated with the presentation of symptoms that were attributed to AN but also included when the patient saw a HCP for something unrelated to the disorder but there was opportunity to diagnose.
	Barriers to first treatment	The opportunities to diagnose AN that were missed. This included times when the person with anorexia attended hospital, the GP clinic or saw a HCP but was not diagnosed or referred for investigation regarding suspected anorexia.
Inpatient treatment approach	General acute mental health ward	If and when patients were admitted to a general acute mental health wards.
	Specialist eating disorder unit	If and when patients were admitted to specialist eating disorder units.
Aspects of treatment	Treatment as a privilege	Participants perceived treatment as a privilege. This included when patients described how they felt happy, lucky etc. to receive treatment because it was scarce.
	Psycho education as a valued treatment	Treatment for AN was an education. This related to any aspect of treatment whereby the patient felt as though they were learning something new. This included knowledge about the disorder, knowledge about nutrition, learning about them. For example a patient described that they were learning about food and what the function of the food groups were.
	Range of HCPs available	The range of HCPs that was available to patients whilst they are within secondary care of the health service. For example, the patient may have seen psychologists, dieticians, and community nurses.
	Breaks in treatment and/or waiting lists	Breaks in the treatment for anorexia or the waiting lists that the patient experiences. This included transition from one HCP to another, holiday breaks, and waiting lists.

Table 7. Thematic framework for the journey through the health service for anorexia
(continued)

Theme	Subtheme	Description of theme
	Services received outside of NHS	The services that the person with AN received outside of the NHS. This included any treatment that was seen by the patient as being part of the journey of treatment that they received for anorexia. For example, private healthcare, voluntary support groups, self-help methods.
	Withdrawal of treatment from NHS	The withdrawal of treatment from the NHS for the patient with anorexia. This included the circumstances surrounding the withdrawal of treatment and the effect this withdrawal had.
	Communication in the healthcare service	Communication in the healthcare service. This included communication between HCP and patient, or between HCPs regarding the patient.
Engaging in treatment	Barriers to engaging in treatment	Barriers that the patient with anorexia had to being engaged in treatment. This included the disorder itself, life events causing delays, fear of physical changes etc.
	Reasons to engage in treatment	Reasons why patients with AN chose to engage in treatment. For example, a life event such as becoming pregnant, thinking of others such as family members, the realisation of the negative effects of the disorder etc.
Recovery as a gradual process		This related to any aspect of the patient description of recovery or treatment as being a gradual process. For example if the patient described the recovery as being in phases or the motivation increasing as time and treatment occurred.
Relapse or slow recovery as disappointing		Relapse or slow recovery experienced by the patient, and the effect this had upon them. This included when the patient felt as though they have not made progress in recovering. For example, when the patient was coming to the end of treatment and was fearful of having support withdrawn, and they might purposively lose weight. This then resulted in disappointment that they did not maintain their recovery.

Initial presentation of anorexia nervosa

Each participant described the start of the disorder. Holly described the onset of her symptoms:

“With me it started in the way of using food as a sort of comfort eating thing, and then becoming aware of the way my shape and size would vary according to what I ate. Or what

exercise I did. And then it all sort of started clicking into place, and realising that one influenced the other, and kind of snowballed into that” (Holly)

Joanne described the trigger of her AN as a change in circumstances (supporting Grilo, 2006):

“I was about thirteen, fourteen ... secondary school. That was one of the triggers I think. I moved secondary school and I moved to a private school. Everyone had made friends, you know they’d made their groups and especially in a private school, they’d all formed their little gangs. I didn’t fit. I couldn’t stand to eat in front of the other kids” (Joanne)

Emily talked about how her AN symptoms started early, but she did not realise until she was much older:

“I started having the symptoms when I was about 15 but not realising and then through my 20’s I sort of knew there were problems. It wasn’t normal but because it had always been that way it was normal behaviour for me. And then it was only when I sort of realised when I was in my late 30’s that it just had taken hold of me completely and I knew I had an eating disorder” (Emily)

This was also similar to the suggestion that people with AN may experience denial of the seriousness of their low body weight (ICD-10, 1992; DSM-5, 2013).

Accessing healthcare for the first time

The initial diagnosis

Early intervention is correlated with improved outcome of people with AN (Herzog et al., 1996; Zipfel, Lowe, Reas, Deter & Herzog, 2000). When participants described their journey, they included details about the process and circumstance for their diagnosis of AN. Holly was already having treatment from the health service for another problem and was diagnosed when her symptoms of anorexia were noticed:

“I was in touch with social services, because there’d been problems at home. I was living in a sort of, foster set up, and I was in touch with a child psychologist. That was because of all the behavioural stuff. Yeah, so then at that point, there were questions being asked and they became concerned about my eating and behaviour” (Holly)

Emily described her initial appointment being made by her husband:

“I went probably about a month after, two months after I told ((husband)) and he sort of monitored what was happening and read up on stuff as well and he made the appointment and I saw the ((HCP)) then” (Emily)

According to SDT, Emily and Holly were externally motivated to enter treatment for their eating disorder (Ryan & Deci, 2000), as they did not seek help because they wanted to recover, but because someone else had asked them.

Barriers to first treatment

Despite the importance of early intervention and treatment (Herzog et al., 1996) not all patients were diagnosed when they first presented with the disorder. Beth described being sent away by the GP when she first sought treatment for AN:

“She [GP] said ‘oh you know just eat a bit more and you’ll be okay’ ... and sent me away ... my Dad phoned her up ... ‘cause they were really worried ... and then she asked to go back then” (Beth)

Ellie backed away from services when she was told she was attention seeking:

“I mentioned it when I was about seventeen ‘cause I got, I went on antidepressants and I told a counsellor I think it was, that I’d like, I was jealous of anorexic people and she told me that I was attention seeking. So I didn’t, like, you know, I backed away from it for a while” (Ellie)

Katie tried to access treatment but after several appointments was told to eat and sent away, despite having the DSM IV TR* (2000) symptom “amenorrhea”:

“I stopped having periods for which obviously are symptoms and then I was getting quite worried because I wasn’t wanting to eat. I was wanting to exercise all the time. And then they basically sent me away and I had a couple more GP appointments over the next few months but still nothing really happened. And then they said that ‘you have got something wrong go away eat three meals a day and you’ll be fine’” (Katie)

*The DSM IV TR (2000) was the diagnostic criteria being used at the time Katie diagnosed. This symptom is no longer required for diagnosis of AN (DSM-5, 2013).

This was supported by Emily who described a HCP telling her that she needed to lose more weight in order to receive treatment. This reflected the stipulation of the DSM-5 (2013) symptom “refusal to maintain minimally normal body weight” to be met to receive a diagnosis and treatment for AN:

“Basically he told me I was wasting his time. I wasn’t underweight enough and to come back when my BMI was sort of, BMI was under 16” (Emily)

These findings were important when the delay in appropriate treatment had potentially adverse consequences for prognosis (Bryant-Waugh et al., 1992).

Patients expressed that they felt that they would not receive treatment if they asked for it. Holly talked about the feeling that she would not have treatment due to her low self-esteem:

“I was unable to articulate what I wanted, what I needed and that I’m sure, was made more difficult by the overriding feeling that even if I had of asked, it couldn’t have been provided anyway. So at that point, I chose not to ask because it seemed easier. Why be let down? Very depressing situation it seemed” “Having the lack of self-worth and feeling that other people, possibly, ask, if they want to see their HCP or whoever more regularly, ... I will just assume that either A. they won’t be able to or B. they won’t want to, or C. I don’t deserve it anyway, so I don’t ask, and therefore I don’t get, whereas in fact, maybe if I asked- I would actually get a lot more help” (Holly)

This was compounded by the feeling that in order to get help weight loss would need to continue:

“You just think nobody cares and you’re never going to get better, and the only way to get better is to become severely, severely ill” (Emily)

The accounts by Emily, Hollie, Katie, Beth and Ellie relate to the Self-Determination Theory (Ryan & Deci, 2000; Vansteenkiste & Vandereycken, 2009). The theory suggests that a person’s basic psychological needs should be fulfilled in order for the person to be motivated to engage in treatment. The accounts from the participants in the current study confirm that when a patient feels as though they are not cared for, do not feel able to ask for treatment or feel in control of their own recovery, then the impact upon their health would

be negative. Indeed, in the current examples, the eating disordered behaviour continued and poor health ensued.

Inpatient treatment approach

Participants described the inpatient treatment approach for AN, which included both general acute mental health wards and specialist eating disorder units.

General acute mental health ward

Three participants described had been on general acute mental health ward. One of them found being on an acute mental health ward frightening:

“I was very scared ‘cause it was a mixed ward... there’s people with things like..., postnatal depression and there was... this guy who was like, ...wandering around talking to himself and being sick ...Oh it was horrible..... I don’t know how anyone could get better... I only stayed for a week and then I withdrew....” (Ellie)

Having experienced an acute mental health ward, Faye was very reluctant to be admitted again (suggesting that prior experiences affected future expectations):

“I didn’t want to go in there because I knew that they didn’t help when I went in a year before.” “It didn’t do anything to help me, only make things a bit more confused” “I actually came out weighing less than when I went in”. (Faye)

After being sectioned onto an acute ward Holly described the atmosphere:

“They’re just prison wardens who need to stop people from hurting themselves too severely and trying to keep the peace” (Holly)

Holly came to a very negative conclusion regarding the role of the acute ward for her:

“It was blatantly obvious to all concerned that I didn’t need to be on an acute ward.” “The reality was that I needed to be on an eating disorder specialist unit, and there wasn’t one.” (Holly)

Similar to the barriers experienced in getting treatment, the participants reported feeling as though the acute ward was inappropriate and consequently the treatment did not meet the

basic psychological needs (Ryan & Deci, 2000). The result was poor outcome (losing weight during treatment) and dropout from treatment.

Specialist eating disorder unit

Five of the seven participants were admitted to a specialist eating disorder unit in England as there was no inpatient facility for AN in Wales. They described their general experience of the units. Positive reactions to the specialised units were expressed by two of them, for example:

“I still, even today, benefit hugely from the time spent down there” “Overwhelmingly, just how brilliant a place it was.” (Holly)

But others who had experienced specialist inpatient care were not so positive about it:

“I hate group therapy. I think it’s ... the worst thing in the world for girls with eating disorders because you just sit there and you compete with each other.” (Joanne)

“I was hoping that going to (EDU) was going to fix me and I was going to come out okay, but I was wrong.” “I didn’t have any therapy really, when I was in (EDU) because I was having memory problems, episodes where I didn’t know where I was or who I was and things like that, but it was just to do with some of the medication I was on.” (Faye)

Participants tended to report that being an inpatient was a difficult for them:

“It was so intense, there’s no let up. I suppose it’s like a form of brainwashing really.” (Holly)

“All my meals were very, very carefully controlled. And I had rules about when I had to eat and how I had to eat and things like that. ... I was on one-to-ones all the time I was in (EDU) since that first night.” “Three of the girls, out of four of us who’d been in multiple admissions had all been tube fed.” (Joanne)

“A lot of it was ‘if you don’t eat you get punished’ ‘if you don’t eat we can’t treat you’. And once you were at the right weight it was, ‘you don’t need treatment now because you’re at the right weight.’” “And for me it’s not all about the food, it was about the other issues which created problems ... And the food was how I dealt with it.” (Emily)

Previous research such as Escobar-Koch et al. (2010) and Reid, Williams and Hammersley (2009) argue that treatment needs to address wider psychological and emotional issues of patients. This typically includes therapeutic approaches that not only focus upon physiological processes of weight gain, but that also incorporates other factors that contribute ED aetiology. This includes an approach that is considerate of sociocultural factors such as media or peer influences on body dissatisfaction, familial problems or adverse life experiences that may maintain the ED behaviours. Emily explains that she needed support with issues other than food intake. Escobar-Koch et al. (2010) and Reid et al. (2009) suggest that this would avoid the encouragement of further control issues that present in those with EDs.

When considered within the overarching framework of SDT, inpatient treatment sometimes provides for a patient's basic psychological needs, and at other times does not. For example, Joanne and Emily talked negatively about the strict atmosphere on the EDU, revealing that they felt a loss of control and autonomy during treatment.

Components of treatment

Participants described different components of the treatment that they received throughout their treatment, including what they felt worked or did not work. It also included the way they felt about getting treatment.

Treatment as a privilege

Patients described feeling as though they should be grateful for the limited treatment they received because of the lack of availability:

“When I did get the treatment it was, it seemed like I was so privileged for having the treatment because it was so scarce you know. If they did advertise it then everyone would want it and you can't have that 'cause there's not that much treatment available” (Beth)

Holly elaborated on this by discussing the guilt that was associated with receiving treatment:

“I didn't feel like I was worthy of that help, and ... assuming also that help wasn't available anyway so what's the point of asking? ... Why should I deserve anything like that? And also they were so obviously unable to deal with the case load anyway so it was just never going to happen in my mind” *“I got very personally involved at that time because it feels like “I've*

got to prove myself to be worthy". And the last thing I think of myself as is worthy of anything quite frankly, so for somebody to sit there saying 'we need to apply for funding'... My instinct is 'I can't take that money, think what else could they be doing with that money?' So it then turns into a real thing of 'do I feel like I deserve to be asking for thousands and thousands of pounds for something that might actually not work either'... 'Somebody might die because you've taken their funding' ... That's a horrible guilt to be carrying around before you've even started treatment" (Holly)

Holly and Beth therefore both explain how being aware of the lack of treatment and funding was difficult for them. This may represent introjected regulation of motivation to change, where the person feels guilt, shame or anxiety as a motivator to engage in treatment. Nevertheless, in this case, internal conflict may arise between the guilt of receiving treatment and the desire to maintain the anorexic behaviours. The results also confirm Escobar-Kock et al. (2010) where patients reported concerns over the inequity of ED services by patients in the UK. Furthermore, the study by Koskina et al. (2012) found that clinicians saw a need for increased funding for ED services. Therefore, it is clear that lack of funding and specialised ED services are common concerns, and this affects the way that patients perceive the service (Reid et al. 2008).

Psycho-education as a valued treatment

Beth described treatment for AN as including education. Beth described the benefit of education:

"I think it's quite good to have just a little knowledge" "When I started the treatment I really had to be kind of re-educated about how to eat" "I think it's quite good to have just a little knowledge ... because with ((clinical psychologist)) it was psychological ... and you know she [dietitian] explained all the things about blood sugar and stuff" (Beth)

Holly felt that the education enabled her to change her cognitions:

"I think she was probably one of the most helpful people to start off with...showing me the way things worked, and actually learning about the false beliefs. For example food-diet things or the use of certain behaviours, the use of laxatives or, just actually putting me right on things" (Holly)

The results confirm that the treatment approach met Holly and Beth's basic psychological needs by making them feel more competent in being able to recover from their disorder. (Ryan & Deci, 2000)

Range of healthcare professionals available

A variety of experiences with different HCPs including Community Psychiatric Nurses (CPNs), nutritionists, dietitians, nurses and clinical psychologists were described by participants during the interviews, some directly after referral from the GP, some later on and some after a period of inpatient treatment.

Breaks in treatment and/or waiting lists

Breaks in the treatment for AN or time on waiting lists were discussed. A lack of resources and funding meant that the service provided by the Welsh NHS was limited:

"It definitely was more a case of how to get the help as opposed to getting the help and dealing with it" (Emily)

"Not only is it 'there's this really scary treatment that I'm not sure whether I want to do or not' but there's also the thing of 'well, we don't know whether you can have it anyway'"
"having had the huge let down of health funding does make me a lot less likely to trust that people will do what they say" (Holly)

"I went back to my GP and we'd written letters and then that's when we decided the only way to do it was to go private. To pay myself because I wasn't going to get any help for ages. So we do that by going into the (name) and paying for that funding. So I funded all that myself" (Emily)

Joanne described her wait for treatment for AN:

"There was a two year waiting list or something ridiculous. I had been put on the waiting list, but it had taken, like, literally two years and I had completely forgotten about it...Then one day, this woman rang me and said, "You're at the top of the list for psychology"...It is hard when you're deteriorating and you're on a waiting list and it's not...it's a first come, first served basis...it's not really done on a need basis. I guess it is to some extent but with regard to seeing a psychologist" (Joanne)

When talking about breaks in treatment due to HCP annual leave, Beth described the benefits and problems that arose:

“I’m quite nervous about it’...I mean actually the fact that she’s not going to be there for three weeks will give me time to go and see how I can cope with not having treatment”
(Beth)

Although participants experienced breaks in treatment:

“Mostly the support has been there” (Faye)

The result support studies such as Reid and colleagues (2008), Lose and colleagues (2014), de la Rie et al (2006), Escobar-Koch et al. (2010) that state that patients are unhappy about the waiting times that they have encountered when trying to access treatment for EDs. This is in direct contrast to clinical practice guidelines and reports that state that patients should be able to access early intervention with minimal waiting lists (NICE, 2004; RANZCP, 2014; RCP, 2012).

Services received outside of NHS Trust

Three participants (Emily, Joanne, and Beth) received help for anorexia from outside the NHS. The current study reflected a similar picture to that of a previous UK study which showed that 40% of eating disorder sufferers sought private care due to lack of UK services and waiting lists (Newton et al., 1993). This supports the RCP (2012) which states that some parts of the UK lack a specialised ED service. Rather than complimenting the services provided by the NHS, private services were considered to be the only option in some cases:

“I was told that there wouldn’t be anything when I came out...They didn’t have anyone available at the time to help me and so we borrowed money and we paid and self-funded”
(Emily)

“I had family medical insurance with (private company) so I was referred to a private psychiatrist...I’d had my dealings with the NHS and it hadn’t gone well so I thought I’d try (private company). And I went to see a psychiatrist...I was an inpatient there” (Joanne)

Additional options were considered in order to augment the NHS provision; Beth described a negative experience of attending a self-help group that was recommended whilst receiving outpatient treatment:

“I went to self-help group a few weeks ago and it was awful...But it also made me realise...how much I’ve recovered...In comparison to other people...But the reason it was awful wasn’t the people running it. It was just the other people in the group” (Beth)

Withdrawal of treatment from NHS

Ellie and Holly described similar experiences whereby their inpatient treatment was withdrawn prematurely because funding was no longer available:

‘I got sent up there and they funded me for eight months inpatient treatment that really, really, really, helped...well they did just pull it out from under my feet and that was a bit like...having your appendix taken out but not bothering to sew up the stitches...so I came back and had a relapse almost straight away’ (Ellie)

‘It was prearranged that I was going to be leaving on such and such a date because funding had been withdrawn. But it was getting closer and closer to that date and I was just losing all sense of why I was there and what I wanted, and I just thought “oh sod it.”’ (Holly)

The findings confirm that not only is the lack of inpatient treatment a problem for Wales, but a lack of funding may also mean that even when the treatment is provided away from home, it may be withdrawn. This echoes other UK studies which reveal that financial input towards ED services in the UK is insufficient and patients are aware of this problem (Reid et al. 2008; Koskina et al. 2012; Escobar-Koch, 2010). This contrasts practice guidelines and reports which state that ED treatment should be provided close to home (NICE, 2004; RCP, 2012).

Holly also described the withdrawal of treatment due to non-compliance of the agreement in place between patients and the ward, despite carrying out a behaviour (self-harm) that was known to be associated with AN (Favaro, Farrera & Santonastaso, 2004; Paul, Schroeter, Dahme & Nutzinger, 2002):

“They actually kept to their word when they said that this is unacceptable, if you self-harm...You know the rules. You know that it cannot be tolerated on this sort of ward and they damn well stuck to it. It was scary to see it in action sometimes, because it felt harsh and it felt like; “oh come on, you know, just give her one more chance!” But really, you can’t. If you start doing that once then where do you stop?” (Holly)

Joanne reported the inadvertent withdrawal of treatment due to the resignation of the HCP working with her:

“Basically she left to go on maternity leave, and everyone said she was coming back, but she never did. She left. And for some reason, I never got listed with the new person. I was kind of missed” (Joanne)

According to the SDT, this would make Joanne feel as though she was not cared for and therefore this treatment did not meet her basic psychological needs. This may have thwarted her motivation to engage in treatment (Ryan & Deci, 2000).

Communication in the healthcare service

Participants sometimes discussed how lack of communication in the health service caused problems for them:

“I remember my dad had to chase it up like he was on the phone quite a lot. Like things get lost...It was quite complicated and there seemed to be a lot of miscommunication between the NHS here and the NHS there” (Ellie)

Holly explained how a lack of communication from the health service had a negative effect:

“I think at that point it just came to an end naturally when I moved to ((names place)), and it was a case of “well you will tell your GP, won’t you?”, ‘yeah, yeah, yeah’. I’m sure I didn’t. I’m sure I wouldn’t have done. I mean, I probably saw no point. So, I didn’t, I just let thing different, until behaviours just got worse as time went on, and I felt more desperate...At that point, I was referred to CHMT” (Holly)

According to SDT, the lack of communication would have made Holly and Ellie feel as though they were not cared for. Holly specifically refers to feeling as though there was no point and feeling desperate, therefore confirming that failing to make the ED patient feel cared for will have an effect on their motivation to engage in treatment (Ryan & Deci, 2000; Vansteenkiste and Vandereycken, 2009).

Engaging in treatment

Barriers to engaging in treatment

Servicer users were able to discuss how sometimes they were unable to engage in treatment. Faye refused treatment she did not like:

“When they come up with like a plan when I was in the ward in ((names hospital)), I didn't want to be there, I was like "No" I completely refused to do it. I hated it. The more they tried, the more then I was against it” (Faye)

The lack of autonomy reported by Faye shows that taking away the control of a patient with AN will have an adverse effect on their motivation to recover (Ryan & Deci, 2000). Also confirming SDT, Holly described feeling as though she was just a number to some HCPs, demonstrating that she wanted to feel cared for:

“If you're seeing somebody like a really busy CPN they don't remember who they saw that morning, let alone what you said to them two weeks ago which can feel very unsafe and just adds to the feeling of 'why bother?'" (Holly)

Joanne talked about the type of therapy that she did not engage with and why:

“Group therapy I don't believe helps me. And memory plans I don't believe help me. And mindfulness groups I don't believe help me and looking at reasons endlessly” (Joanne)

Emily also discussed her feeling that the type of treatment was not right for her:

“I didn't get on with the regime because I'm not very good at keeping to rules. I suppose that's part of the illness as well” “I just didn't feel it was right for me in the end again probably the illness as well although I don't really rate their ((private health care)) care there to be honest” (Emily)

This supported previous research, and elaborated on the possible reasons why people with anorexia were reluctant to engage with therapy, including a fear of the loss of control which may result in basic need frustration, poor motivation and failure to engage in treatment (SDT, Ryan & Deci, 2000; Button et al., 1997; Vandereycken & Pierloot, 1983; Cockell et al., 2003; Tan, et al. 2003).

Reasons to engage in treatment

Participants described ambivalence towards recovery and confusion about whether they wanted to recover from all aspects of their disorder (Colton & Pistrang, 2004; Treasure & Schmidt, 2001; Vitousek et al., 1998). This confirms that people with AN see some parts of the disorder as beneficial and may only be motivated to change the less-desired aspects of the eating disorder (Nordbo et al., 2006, 2008; Serpell et al. 1999; Vitousek et al., 1998; Williams & Reid, 2009; Cockell et al., 2002; Geller & Drab, 1999; Rieger et al., 2000). This supports the SDT by emphasising the importance of distinguishing between different types of external motivation (Ryan & Deci, 2000). The participants discussed in what circumstances they were able to engage in treatment:

“I think a lot of professionals can see that as well that I've made an effort. I mean I have at least one appointment everyday with somebody sometimes two appointments sometimes three and I never miss them. I go to every single one I've never missed any at all. I do everything I'm told to do as well” (Faye)

“I did want to stop bingeing and vomiting. I wanted it to stop being so chaotic and stop-yeah. All the distressing sides of the eating disorder” “[I wanted to engage through] desperation, just how bad things had got. And how utterly hopeless everything felt...It felt like this was kind of the last chance really” (Holly)

The women describe their motivation to remove the negative consequences of anorexia nervosa. This reflects the concept of identified regulation within OIS (SDT), where patients may be extrinsically motivated to engage in treatment and recover in order to improve their health (Ryan & Deci, 1985, 2000).

Realisation that recovery as a gradual process

Participants described the process of recovery as being difficult and the level of recovery changed frequently:

“I'm still dealing with it and it's just this sort of realisation...every time I sort of climb another step and I realise. So I wouldn't say there was that turning point” “Every week there's been a whole like another step up and every time I make that step up before I make the step it's like I have a huge dip...And I feel awful and then in order to come out of that

and rise above it I have to dip right down so it's been there's been a lot of those...I think that's part of the treatment" (Beth)

"I started kind of realising it was, well I don't know, it was a slow process where I started kind of going from 'I really don't want to be treated' to like 'maybe I want to be treated on some days and then other days like definitely not'" (Ellie)

Emily described the realisation that the treatment would take longer than planned:

"I think I just didn't realise how long term and how deep rooted it is, and how deep rooted the illness becomes, and how long term the actual treatment needed to be" (Emily)

Relapse or slow recovery as disappointing to the patient

Relapse or slow recovery was often disappointing to participants, and they described the effect this had upon them. Ellie described the disappointment in herself that she was not in the right band (bandings of weight given by HCPs as goals for patients):

"It's definitely my own fault, I think at the moment I think like I know I'm under band, the band that you're supposed to be between...I am kind of disappointed in myself...I feel quite annoyed with myself because now after the treatment I know what the implications are. I do know what I am doing I also feel kind of a bit frightened about it...But in a way that's a good kind of frightened 'cause that means that I'm aware of it at least" (Ellie)

Therefore, the banding caused patients to feel as though they were not making progress in treatment based solely on their weight. The bandings made Ellie feel as though she was not competent at engaging in treatment and recovering from her disorder. The lack of confidence in being able to meet the goals being set by the HCPs made her feel disappointed and her basic psychological needs would not have been met. Katie talked about how having her negative expectations met was good for the anorexic part of her, but that she would still like treatment that worked:

"It's good for the anorexic part of me. It's bad that aspects haven't been met and I didn't rocket up to the size eighteen that I was. But no it's not a good expectation not good on the part of the good expectations 'cause I just did want to be healthy and I feel I need help to be healthy and I've gone through all the services they've offered me and come out the other end

of it no better off. Which I don't say blamelessly 'cause I know a lot comes from myself. But I just wish there was a service that could help me” (Katie).

Katie describes the inner conflict that would arise between the characteristics of her ED, and the desire to have her basic psychological needs met. This provides evidence that treatment for AN should comprise of a caring approach that is respectful of the characteristics of the disorder (Ryan & Deci, 2000; Colton & Pistrang, 2004; Treasure & Schmidt, 2001; Vitousek et al., 1998).

Concept 4: Therapeutic alliance during treatment for anorexia

Patients described various aspects to development or barriers to therapeutic alliance (Table 8). The information that emerged regarding this concept was detailed, resulting in four themes and eleven subthemes.

Table 8. Thematic framework for therapeutic alliance during treatment for anorexia

Theme	Sub-theme	Description of theme
Contributors to therapeutic alliance	Persona of HCP	Aspects of the persona that the HCP adopts that are perceived to affect the therapeutic alliance are categorised here such as caring, friendly, etc.
	HCP awareness of AN	Awareness of AN characteristics by the HCP, and experience of working with people who had anorexia. It also included HCP awareness preventing the patient to manipulate the situation or maintain the behaviours specific to the disorder. For example a nurse who knew, or did not know, about the characteristics of anorexia and the effect this had on therapeutic alliance. More general comments were included if relevant.
	Trust between HCP and patient	The trust that is established between HCP and patient with AN and the reasons surrounding the presence of trust.
	Respect and negotiation between HCP and patient	Examples of where respect and negotiation between HCP and the patient are described as important to development of the alliance. For example, when the patient and HCPs were able to come to a compromise over the treatment plan.
Barriers to therapeutic alliance	Persona of HCP	Personal characteristics of the HCP were seen as factors that affected the therapeutic alliance, such as unfriendly and patronising.
	HCP lack of awareness of AN	The negative effect of lack of awareness of anorexia by the HCP on the therapeutic alliance. For example, the lack of awareness that enabled the patient to manipulate the situation or maintain the behaviours specific to the disorder. For example a nurse not knowing about the characteristics of anorexia and the effect this had on the therapeutic alliance. More general comments were included if relevant.
	Threats used during treatment by HCP	For example, a GP warning the patient that if they do not put on weight then they will have to be referred to a psychologist.
	Characteristics of AN	When the patient was suspicious of people due to their disorder. For example, when a person with anorexia was reluctant to let someone help them as they thought that person was doing it for reasons other than to aid recovery.
	Lack of professionalism by HCP	Staff not abiding by rules of professionalism, such as confidentiality and appropriate behaviour around patients. For example, a nurse who told a patient about their own personal experience of eating problems.
	Lack of trust between HCP and patient	The circumstances surrounding the lack of trust. For example the patient did not trust the HCP, because the HCP previously did not tell the truth.
	Lack of respect and negotiation between HCP and patient	When the person with anorexia lacked respect for the HCP, or vice versa, or if the person with anorexia and the HCP were unable to negotiate and this resulted in a barrier to therapeutic alliance. For example, when a HCP was not willing to negotiate about treatment and this resulted with the patient feeling as though they cannot trust, like or engage with the HCP.

Table 8. Thematic framework for therapeutic alliance during treatment for anorexia
(continued)

Theme	Subtheme	Description of theme
Loss of relationship with a HCP		The loss of a relationship with a HCP. For example, the result of the HCP moving professions or the treatment period came to an end. This included end of treatment, staff leaving employment, withdrawal of funding etc.
Therapeutic alliance as a confusing relationship		This included when the patient with AN stated that they found it difficult to classify the relationship they had with a HCP. For example when the patient with AN felt as though the HCP was a friend but also knew they were not.
Barriers to therapeutic alliance	Persona of HCP	Personal characteristics of the HCP were seen as factors that affected the therapeutic alliance, such as unfriendly and patronising.
	HCP lack of awareness of AN	The negative effect of lack of awareness of anorexia by the HCP on the therapeutic alliance. For example, the lack of awareness that enabled the patient to manipulate the situation or maintain the behaviours specific to the disorder. For example a nurse not knowing about the characteristics of anorexia and the effect this had on the therapeutic alliance. More general comments were included if relevant.
	Threats used during treatment by HCP	For example, a GP warning the patient that if they do not put on weight then they will have to be referred to a psychologist.
	Characteristics of AN	When the patient was suspicious of people due to their disorder. For example, when a person with anorexia was reluctant to let someone help them as they thought that person was doing it for reasons other than to aid recovery.
	Lack of professionalism by HCP	Staff not abiding by rules of professionalism, such as confidentiality and appropriate behaviour around patients. For example, a nurse who told a patient about their own personal experience of eating problems.
	Lack of trust between HCP and patient	The circumstances surrounding the lack of trust. For example the patient did not trust the HCP, because the HCP previously did not tell the truth.
	Lack of respect and negotiation between HCP and patient	When the person with anorexia lacked respect for the HCP, or vice versa, or if the person with anorexia and the HCP were unable to negotiate and this resulted in a barrier to therapeutic alliance. For example, when a HCP was not willing to negotiate about treatment and this resulted with the patient feeling as though they cannot trust, like or engage with the HCP.
Loss of relationship with a HCP		The loss of a relationship with a HCP. For example, the result of the HCP moving professions or the treatment period came to an end. This included end of treatment, staff leaving employment, withdrawal of funding etc.
Therapeutic alliance as a confusing relationship		This included when the patient with AN stated that they found it difficult to classify the relationship they had with a HCP. For example when the patient with AN felt as though the HCP was a friend but also knew they were not.

Contributors to therapeutic alliance

Participants described contributors to the therapeutic relationship, such as personal characteristics of the HCP, awareness of anorexia, trust, and respect and negotiation.

Persona of the healthcare professional

Participants described how characteristics adopted by the HCP contributed to the therapeutic alliance. Participants described some professionals as understanding and friendly, which supported McQueen (2000), and Button and Warren (2001) who suggested that a successful therapeutic relationship requires high quality communication, interpersonal skills, development of rapport, awareness of the disorder and trust:

“I have been satisfied with the sort of, the psychology unit itself is nice. The people there are really nice and they always, you know, very friendly” (Beth)

Ellie talked about the persona of a HCP who was experienced in talking to patients who had eating disorders:

“He was very friendly and approachable. I think I just worry about shocking people with the things I say...I’m aware that they sound crazy and it makes it hard to tell people when, you know, that these things are kind of wrong...He wouldn’t be shocked or he might be a bit shocked but, you know, that he’s heard that sort of thing before” (Ellie)

Ellie appreciates the expertise and understanding towards the disorder that the HCP had, confirming previous studies that found patients prefer a HCP who is caring and knowledgeable and therefore meets their psychological needs (Ryan & Deci, 2000; Lose et al. 2014; Reid et al. 2008; Williams et al. 2008)

“My key-worker who was called ((name)) and he was the same guy all the way through. He was really good...you’d ask for time and then in the next sort of couple of hours they’d fit you in for quarter of an hour. Just for like a quiet like chat, you know, what was wrong” (Ellie)

“It...felt supportive. A supportive place where I could go and I could talk and I could say a bit of what was going on” (Holly)

Again, a supportive approach by HCPs was appreciated, and motivated the women to be engaged in treatment, which supported previous research which found that therapeutic relationships increased motivation to change (Ryan & Deci, 2000; Vansteenskiste & Vandereycken, 2009; Federici & Kaplan). Joanne talked about the benefits of speaking to an empathetic HCP:

“I saw my parents’ ((HCP)) who was lovely- such a nice doctor ((name)). He was so wonderful and I used to go into his office and just cry for 40 minutes and he’d just let me sit there and cry. And he said that as long as it helps then I have to keep coming and crying and that would be fine” (Joanne)

Joanne also described another HCP being willing to listen:

“((Name)) was different because he understood everything I said...he would come down and see me and it’s not that he was particularly caring towards me. He wasn’t affectionate or anything like that he just was there when I needed someone to talk to and I was really, really vulnerable” (Joanne)

Healthcare professional awareness of anorexia nervosa

Participants described HCP awareness of anorexia and how this facilitated development of the alliance. This supports Pereira et al. (2006) who suggested that knowledge of the disorder facilitates development of therapeutic alliance and therefore influences treatment outcome. Beth talked about the benefits of having a HCP who was knowledgeable about food:

“It was very professional...She came here and she kind of educated me about food and made me...dispelled some myths...You know like I thought eating carbohydrate made you fat and it didn’t obviously...She could tell me the science, and I, I think that it was quite good that I did that learning about the science of food before I started seeing ((clinical psychologist)) because it made it quite it made it easier for me” (Beth)

Holly elaborated by explaining how the HCP who was knowledgeable about psychology helped her:

“I think she was probably one of the most helpful people to start off with, because she was able to do the, sort of, I don’t know what they call it, the psycho-educational side of things.

But just showing me the way things worked, and actually learning about the false beliefs”
(Holly)

Emily supported Holly’s explanation and elaborated it by describing the respect gained for a knowledgeable HCP:

“I just think she’s obviously very, very good at her job Very knowledgeable and very clever and very understanding and she’s just got such a lovely manner...She was firm and she wouldn’t take nonsense which was fine but you respected her for that because she was also finding other ways round a problem instead of it being just being ‘well you’ve got to go down this route and if you don’t go down that route I’m cutting you off’...I just think she definitely had the right manner and the right way about it...She did for me anyway It worked really well” (Emily)

The women reported feeling as though the knowledge of the HCP made them feel as though treatment was working well for them. Furthermore, by providing information to the patients, knowledgeable HCPs made the women feel competent to recover, something which is important for developing an internally regulated motivation to change (Ryan & Deci, 2000).

Trust between healthcare professional and patient

Trust was described as an important component of the therapeutic alliance between the HCP and patient (Irwin, 1993; McQueen, 2000). Beth and Joanne described having a trusting relationship with the HCP:

“I trust her and the first session we had she made sure that I trusted her. Which I thought at the time was a bit weird ‘cause she you know I’ve never had anyone saying to me ‘do you trust me’ before but that’s, I can see why she did that. It’s quite strange...I’ve got respect for her” (Beth)

“[About HCP] She was a treat. Really good. I mean I wouldn’t say that I was...I wasn’t a great patient to be honest...She was always truly lovely and she was very, very sensitive about things that had happened. And I told her about, she was really nice. She was very, very sensitive and she made me feel like I could just say anything to her...I really trusted her” “It’s just nice to have someone who can give you advice and who you trust and you know is not going to tell anyone” (Joanne)

Beth talked about the importance of trust with a HCP on recovery:

“I think I have put quite a lot of trust into you know sort of handing myself over so ‘right okay I’ll do what you say’ ‘I’ll believe you. I’ll trust you’ and that’s enabled me to get better. And the times I haven’t trusted, or been confident in what she’s said...then that’s when I’ve lost weight” “It’s kind of a case of putting my trust in someone and just saying ‘okay I don’t know I, I fucked up and...you have to sort of help me sort it out’ ...And it was about relinquishing some control and being a bit less confident about the way that things were going to turn out and just trusting that they’d be okay” (Beth)

Katie talked about feeling cared for by her HCP, and how this affected her trust in him:

“It’s brilliant he always...It says on the wall one appointment one problem five minute maximum and he just ignores that. Basically gives you the time. Never feels like your rushing. I trust him completely...and he knows what he’s doing he’s so thorough. You go in for anything you come out having to have about twenty blood tests you know he’s thorough...Yeah a really good relationship” (Katie)

Respect and negotiation between healthcare professional and patient

Participants would sometimes describe respect and negotiation during treatment between the HCP and patient. Escobar-Koch et al. (2010) described the importance of client-centred care which involved the client in decisions during treatment. The current study had similar findings, for example, Ellie disliked the lack of negotiation:

“She (HCP) wanted me to do food diaries and I didn’t keep them...I thought that it was going to be triggering to keep food diaries. Like it would trigger them off. So I didn’t do it, and she said ‘Well, if you don’t keep food diaries we can’t work with you’ so me being a bit stubborn, said ‘fine, I won’t do it then.’” (Ellie)

Conversely Holly described the positive effect of negotiation between herself and the HCP:

“I think some of that time they were able to offer meeting me half way. It was fantastic, it was just essential really” “Working as an outpatient we were able to do it as more of a compromise. She was able to, in my mind, I don’t know how true it is actually. But to my mind it felt as though she was able to relax the rules and meet me mid-way” “It’s

compromise all the way and she only gets told what I will dare to share with her and luckily I do trust her so I can let her in on it” (Holly)

Joanne valued being listened to by her HCP:

“I explained to my ((HCP)) and thankfully she was wonderful and she understood my reasons and I said that if they did put me in hospital then obviously I’d come out of my [university] year. They’d tube feed me. I’d put on weight. They’d discharge me and I would (relapse) again because that’s what I would do. That was the cycle I was in and I explained that to her and she thankfully agreed with me” (Joanne)

Joanne talked about her relationship with another HCP and her ability to express the treatment she wanted:

“We got on...I got the impression he could read me and I could always tell when he was annoyed that I’d done something. I used to refuse to see the dietitian. I used to say that I’d done dietetics a million times in the last year. And he’d say that that was medical arrogance and we used to laugh about that...we used to talk about that, the fact that I couldn’t do group sessions” (Joanne)

Emily talked about the HCP adapting treatment for her:

“There are things I couldn’t do and so instead of saying ‘well if you don’t do it we are not going to see you any more’ then we’d find a way round it. To adapt it. Eventually things all fell into place” (Emily)

Faye also described being able to make her own decisions: how she realised that her decision was wrong and how she was able to change her mind:

“It was my decision...I didn't get told to go to ((place)). I was told that's where I need to go but I didn't get told...I said, ‘Can I see how I get on with ((HCP)) first and if I can't do that then yeah I'll go in’...two weeks had gone past and I could just see myself going downhill so then I said to ((HCP)) ‘it's not working I'll go in’” (Faye)

The SDT (Ryan & Deci, 2000) emphasise the importance of negotiation in order to meet the basic psychological needs for patients during treatment. In the current study, the ability of HCPs to work collaboratively with the women made them feel cared for. It also allowed

them to feel autonomous as they had a choice over what their treatment involved. This in turn would make them feel as though they were competent to recover. The present study confirms that fulfilling psychological needs enhances the motivation to engage in treatment for AN.

Barriers to therapeutic alliance

Barriers to the alliance that were described by participants included the persona of the HCP, lack of awareness about AN, threats by the HCP used during treatment, the characteristics of AN, lack of professionalism, a lack of trust, respect and negotiation.

Persona of healthcare professional

Participants described some of the characteristics of the HCP as a barrier to the therapeutic alliance, such as the HCP being unfriendly and patronising. Beth described how the persona of the HCP had a negative effect on their therapeutic relationship by being cold and clinical:

“She just weighed me very, kind of, you know, clinically and abruptly and sent me off ...Well she’s just, she’s just got an appalling bedside manner...The nurses in the practise...they’ve been really nice to me and they commented on the fact that [HCP]...isn’t very nice. So when that happened I knew that it wasn’t really me...I went in there and I said ‘oh I thought I was supposed to be seeing [HCP]’ she said ‘I am [HCP]’ and I went ‘oh [HCP] I was supposed to be seeing’ and she was a bit offended I think that I hadn’t wanted to see her but she’s horrible...So I just avoided her” (Beth)

Ellie also agreed that the HCP being unfriendly caused a problem in the therapeutic relationship:

“I just remember I didn’t like her. I think she’s kind of just intimidating or scary or busy or something and [the relationship was] non-existent because I don’t think I saw her that many times” (Ellie)

Again the persona of the HCP caused Holly to avoid being around her:

“I think she was just a nurse on the ward but she was my main contact person to start off with. I found that very difficult because she did seem to be very judgemental and very, almost having a go at me for things before she even found out whether or not I’d done it...I

think I just tried to avoid her really. I think I tried to be cooperative genuinely...I just tried to avoid her” (Holly)

Emily supported her peers’ statements when she suggested that the persona of the HCP resulted in her writing a complaint:

“I didn’t like him at all. I thought he was really rude and condescending and I actually wrote a letter of complaint...Because he was the one who told me that I wasn’t low enough weight and I was obviously okay and in control of what I was doing and it was you know more, more obvious for me. I was exercising three, four times a day and not eating. It wasn’t normal” (Emily)

Faye also had a negative experience with a HCP:

“The [HCP] that I’d never seen before she kind of made me feel that she was treating me as if I was stupid...She didn’t treat me very good I don’t think” (Faye)

Healthcare professional lack of awareness about anorexia nervosa

When HCPs showed a lack of awareness of anorexia, participants reported negative effects on the therapeutic alliance (Bryant-Waugh et al., 1992). Beth talked about how she would lie to a HCP who had little knowledge of anorexia:

“At the beginning she said ‘well can’t you know can’t you just eat a bit more. Can’t you just eat a biscuit and an extra, like, have a bit of cake every day?’ Which now I can understand, you know, why she said that. But at the time I, that was just like the worst thing, you know, I was just like ‘no I can’t’...I found she was quite ignorant about it...I did lie to her about, about what I’d ate” “I could fob her off as well ‘cause like I knew that at the beginning that like she didn’t, sort of, I’d established that she didn’t really know anything” (Beth)

General lack of awareness including information about the treatment routine was a barrier to the therapeutic alliance. Negative attitudes towards people with anorexia have been documented in previous literature (Mond et al., 2006; Crisp, 2005; Schiavo et al., 2008) and this was supported by participants in this study. For example, inappropriate comments were made by HCPs and this impacted on the alliance:

“They had to be observing some of the emergency patients and they would sit and just talk really loudly about ‘What’s your one doing?’ ‘Oh mine’s just sitting there’ ‘Oh mine keeps on walking around. I think she’s trying to exercise’...With the evening snack which would’ve been biscuits and a milky drink. If they were not experienced. Even just one of the nurses. They would sometimes say ‘how many biscuits do you want?’ You just don’t, you shouldn’t ask that question...If you are anorexic you’re going to say ‘Oh none thanks I’m not very hungry tonight’ or if you’re bulimic you’ll say ‘Oh I’ll just take the packet’...I mean that was a complete breakdown of the roles of ‘who’s in charge here?’ ” (Holly)

Emily described the need for a HCP who knew about the psychology behind her eating disorder:

“[I didn’t agree with] things like ‘well just try it anyway go out and eat it and not care’. I couldn’t just eat a plate of chips and go ‘Oh that was fine’ you know. I couldn’t do it...I needed the psychology behind it as well I think. Not just to see a dietitian because I know about dietetics. You become very clever and very up on how to do things. What’s good and what’s not. And calories” (Emily)

Similar to results relating to contributors to TA, the present study supports the SDT which suggests that the development of a therapeutic alliance therefore supporting a patient’s basic needs, will enhance a patient’s motivation to change (Grawe, 2007; Ryan & Deci, 2000; Vansteenkiste & Vandereycken, 2009). Lack of knowledge and negatives attitudes towards anorexia made the women feel as though they could lie to the HCPs, and ultimately they felt as though they wanted to avoid treatment and maintain their anorexia behaviours.

Threats used during treatment by healthcare professional

Participants explained that they felt that some HCPs used threats during treatment, and that this had a negative effect on the therapeutic alliance. Emily described things that were said to her, or the meaning she interpreted from her communication with some HCPs:

“It was a lot of it was ‘if you don’t eat you get punished’ ‘If you don’t eat we can’t treat you’ and once you were at the right weight it was, you know, ‘You don’t need treatment now because you’re at the right weight’...I do feel part of that was the fat-feeding farm and not really getting to the depths of the problems” (Emily)

SDT proposes that using threats will diminish intrinsic motivation because they conduce towards an external perceived locus of control, ultimately denying the patient autonomy (Deci & Ryan, 1985). This has important implications, as the patient is less likely to engage in treatment if their motivation is externally regulated, or even worse, the person feels amotivated towards change (Ryan & Deci, 2000).

Characteristics of anorexia nervosa

Sometimes participants reported that some aspects of their disorder prevented them from developing a therapeutic alliance with HCPs. They also acknowledged that having anorexia had an effect on the quality of the therapeutic relationship that developed:

“I took a dislike to her for some reason. I can’t remember what she did or why I might have, just it might have been more the anorexic in me taking a dislike rather than anything personal...Well because quite easily I’ll just take a dislike to someone because they’ve mentioned something about food or I’ll just, yeah I think perhaps I thought that she was asking too much of me” (Ellie)

Katie elaborated by explaining how her disorder prevented her from trusting people, and this therefore affected the alliance:

“I’m terrified of getting fat and I don’t trust anyone, that they’re not trying to make me fat. I’m getting better now at trusting them but still I’ve got this negative thing in my head all the time saying ‘Well they’re just trying to fatten you up’. Which was worse when I was an in-patient which is screwed logic” (Katie)

Katie describes feeling as though she couldn’t trust the healthcare professional because she was afraid that she was going to lose control. This emphasises the need to allow patients autonomy during treatment (Ryan & Deci, 2000). Emily described how the AN affected her relationship with HCPs:

“I mean there were times when I saw ((clinical psychologist)) I was very negative but then I think you have to go, I think that’s all part of how you feel anyway” “I just felt that all the talk basically was ‘put on weight’ you know, and ‘get your body mass index up to the right’ I mean ‘sort yourself out’. I just didn’t want that...I think that’s because of your illness and my state of mind at the time as well” (Emily)

Emily discusses feeling as though the focus of the treatment was increasing her weight, something which conflicts with the feelings that result from having anorexia. This inner conflict caused a barrier to developing the TA, and also emphasised that should the HCP be aware of the difficulty of putting on weight for people with AN (Kaplan & Garfinkel, 1999; Wright & Hacking, 2012). For example, this supports the results from Nordbo and colleagues (2012) who found that the distress that resulted from putting on weight would often cause patients to relapse back to previous anorexic behaviours.

Lack of professionalism by healthcare professional

Participants talked about occasions when HCPs lacked professionalism, and the impact of this on how they felt about them. Holly described a HCP who brought her personal problems into work and let this affect how she interacted with patients:

“There was one nurse who obviously had issues of her own and she was bringing them to work, basically. So, if she was a bad mood then she wouldn’t talk to patients. Which just seemed, well it was, it was ridiculous. She was doing, just walking out of the dining room, which you just don’t do. Because the set up was, that the staff were to remain at the table with the patients for obvious reasons” (Holly)

Professionalism has been highlighted as a key indicator of a high quality service for EDs. Patients who have received treatment for EDs have reported that they prefer HCPs who behave in a professional manner (Nishizono et al. 2010; Lose and colleagues, 2014). Some staff also made patients feel uncomfortable by the way they acted towards them:

“She was just vile. I was allowed scissors, just blunt scissors, to cut things out. I used to...I went into collage in a big way but I had to be watched And she used to come in and I’d literally just be cutting something out as quick as I could and she’d just be standing there complaining that I was taking forever and that I was wasting her time. She used to hate going on one-to-ones with me because that meant she had to sit there...and she’d just sit there complaining at me” (Joanne)

Emily described the effect of a HCP telling her she was not underweight enough:

“I didn’t like him. He obviously didn’t like me and basically he told me I was wasting his time I wasn’t underweight enough and to come back when my BMI was sort of, BMI was under 16...That’s what sent me down the route of ‘Right the only way I’m going to get help

is to lose weight'. So I just increased my starvation and increased my exercise and all the rest of it" (Emily)

Lack of professionalism towards patients with EDs appears to indicate a lack of knowledge regarding eating disorders. Worse still, lack of professionalism will make the patients feel as though the HCPs do not care about the effects of their behaviour, and therefore decrease their motivation to engage in the treatment that is being provided. The results from the present study confirm that this results in a return to anorexic behaviours and therefore has a negative effect on outcome.

Lack of trust between healthcare professional and patient

Although participants described being able to trust some HCPs, absence of trust with other HCPs impeded the therapeutic relationship:

"I didn't feel I could talk to her. Trust her. There just wasn't that sort of bond" (Katie)

After losing trust in a HCP, Joanne described the effect on future therapeutic relationships:

"I'm aware now and I will conduct myself very carefully. Because I was very honest with ((HCP)) I mean, I really was. I told him that I couldn't cope with being suspended and that I would self-harm significantly and I told him how awful I was feeling and everything. But he did say it would be okay. But I will be more careful now. Definitely" (Joanne)

Speaking about a different HCP, Joanne also described the effect of the persona of the HCP on being able to trust other HCPs:

"She was a nightmare. She was just nasty. I didn't trust her at all. Lots of the other girls said that as well. She was just like that" (Joanne)

Similar to Joanne, Emily also felt the persona of the HCP affected how she could trust them:

"I suppose I didn't trust the dietitians at that point and didn't agree with her methods either, and didn't get on with her as well" (Emily)

Faye described the effect of a lack of trust between HCP and patient after the HCP had been dishonest:

“I said, when I spoke to my social worker a couple of days later I said to her ‘I don't want her to come in my house again” and I said, “I never, ever want her to help me with any of my treatments ’” (Faye)

The quotations from the women in this study demonstrate that trust is crucial to the TA. When the TA fails to form or breaks down due to the behaviour of the HCP, this can make the patient feel resistant to treatment.

Lack of respect and negotiation between the healthcare professional and patient

If a lack of respect and negotiation was felt by participants, then this often resulted in failure to develop or maintain the therapeutic relationship.

“No we didn't get on...She wouldn't negotiate any aspects of the food diaries at all...I managed to keep them quite often but it is quite impract', like if you're out with your friends or whatever and you, I don't know eat a milky bar. It's hard to get out your food diary, write it down. How you feel about it...Give me a bit more leeway on that” (Ellie)

And this was echoed by Emily:

“I think their way is very rigid and that doesn't work for me. I needed somebody who would just sort of sway off. And some of the staff members would just do that and they did understand and I'd be very good and I could get on with them. But they weren't allowed to do that and they may get into trouble” (Emily)

The results confirm that autonomy during treatment for AN is very important. Emily and Ellie portray the sense that there is a power struggle between the HCP and patients during treatment for AN, and that this makes them feel that treatment is difficult. This supports previous research that has found that patients should take an active role in therapy (Vandereycken & Vansteenkiste, 2009).

Loss of relationship with a healthcare professional

When participants had developed a therapeutic alliance with a HCP, they described the loss of that relationship when it ended. For example, if the HCP changed profession or the treatment period came to an end. Beth described the effect of realising that the therapeutic relationship would finish:

“I had a sort of back lash...I’m putting all this trust in her...She’s going to make me better and then after forty sessions ‘Okay see you later’ and just leave me there and what if I, what if she’s sort of taken away this eating disorder. The one thing that was giving me control over my life and helping me to...It was something I could hold onto. So it’s taking that away and leaving me with what? A load of problems and no coping strategies...That’s what I’m nervous about” (Beth)

Ellie discussed feeling frightened about the end of the relationship:

“I’m supposed to be seeing him again soon actually with ((clinical psychologist)). Actually because, like this is wrapping itself up now and I’m a bit frightened about it” (Ellie)

With reference to a different HCP, Ellie said that she wished she could contact them to let them know how she was. She also reported how it felt when the relationship ended:

“I do actually kind of wonder what happened to him and stuff. I’d heard that he’s gone to work over in ((ward)) which is also another ward in ((hospital)). It would be nice one day to kind of write back and kind of say ‘Yay I finally finished my degree’ and what have you. But no. It was good. I was just sad at the way it ended. It was really painful” “It’s coming to an end. I’ve been quite upset about that...I’m still not finding it easy at all ...She’s been spacing the appointments further and further apart and I’ve got a meeting with her at some point... ‘Cause I don’t want to have appointments for the rest of my life but I just I get really scared that I know what can happen or what I’m capable of doing if left to my own devices” (Ellie)

Similarly, Emily explored her inner conflict about whether to contact a HCP she used to see:

“To be honest in the end I was ready to leave her...but I do miss her. I do miss that and I haven’t had any contact with her since...I suppose if I write to her I’m sort of scared that things are going to start flooding out and I don’t want her to think that I’ve got a problem. And I don’t want myself to think I’ve got a problem. So I’ve sort of avoided any contact with her although probably I should let her know that I’m okay considering I’ve been doing quite well” (Emily)

Ellie described how the end of the alliance caused her to relapse:

“I’ve kind of just retreated into a few, kind of, anorexic behaviours ‘cause it just dulls those sorts of feelings...You don’t feel them so much. [I feel] just, like, upset and just, like, losing someone, like, just a bit, it stops you from being so sad and just kind of makes you get on with things. It just occupies your mind” (Ellie)

Ellie’s account supports research by Reid et al. (2008) which found that despite their ambivalence or resistance, patients with EDs often rely upon treatment and become fearful that it will be withdrawn. This can sometimes result in the patient losing weight on purpose in order to remain in treatment. Joanne also reported a relapse when the therapeutic alliance came to an end:

“He was great. Actually I remember him very well because he was the first counsellor I ever saw and he was a guy... [HCP] was a guy as well. I got on well with male counsellors for some reason. And then he left and he got another job and he had to leave very abruptly and I got...I went downhill quite quickly after he left” (Joanne)

Faye described the effect of a loss of a therapeutic relationship on future relationships:

“I used to get upset when they left because I built up this, like a relationship and this trust in them, and then they decided they were going to leave and that was like, it's like when I said to my CPN a few weeks back ‘You're not going to be leaving are you?’ because I just needed to know. I don't like just starting all over again and explaining” (Faye)

The loss of a therapeutic relationship appears to be difficult for patients with AN. The present results confirm that having the relationship with the HCP can become something that the patient learns to depend upon. The findings support the SDT by confirming that treatment should meet the basic psychological needs of patients (Vansteenkiste & Ryan, 2013). Therefore, this emphasises the need for a supportive TA that is provided within clear boundaries, that emphasises autonomy and develops competence in patients. A treatment approach based upon control may make the patient feel as though they are not able to continue without the support of the HCP.

Therapeutic alliance as a confusing relationship

Beth expressed how difficult it was to comprehend what the therapeutic relationship was:

“It’s not like a relationship I’ve ever had before. ‘Cause like at the same time talking about very personal things”. “Someone says ‘Will you tell me something? Will you tell me things about how you’re feeling?’ and you and you do...But you, kind of, think ‘Well what I am going to get back. What are you going to give me back’...How, you know, ‘If I’m going to tell you this stuff you’d better make me feel better because you’re telling, I’m being told I’m ill so, so fix it’. And it’s a very, kind of, at the beginning it’s like that sort of, thought process is going through my head in a way, I think, quite childish” (Beth)

Ellie echoed this in her difficulty in being able to define the therapeutic relationship:

“Imagine if you have a really good friend and like, ‘cause I was only just starting to make friends again. If you had a really good friend and you told them all your problems and then you got through this rough patch but you still had your friend that would be kind of normal. And so it feels a bit like, I wouldn’t say we’re friends, but obviously she knows everything about me” (Ellie)

Joanne acknowledged the attachment that she formed to a HCP and the effect of the end of relationship:

“I remember speaking to my...therapist at the ((inpatient facility)) because she worked under him [HCP] and I remember we spoke about, a lot of times about how I had formed this kind of attachment with ((HCP)) in a way. Because I was so ill when he looked after me and that I felt really lost without him” (Joanne)

This result supports the SDT which suggests that patients prefer to develop TA during their treatment. The result also highlights that there may be difficulty for the patient to understand their feelings regarding that relationship. They understand that it is not a friendship, but nevertheless feel as though an attachment has been formed. Therefore, it is important to emphasise the need to carefully plan the end of the relationship by encouraging autonomy and competence in the patient to continue the recovery. Making the end of the relationship explicit but also emphasising that the HCP cares about the patient will increase the likelihood that the patient will be motivated to remain recovered.

Concept 5: Satisfaction with the health service

Participants were asked to describe what parts of service they were satisfied with, and what parts they were not (Table 9).

Table 9. Thematic framework for satisfaction with the health service

Theme	Description of theme
Aspects of treatment that leave patients satisfied	Aspects of the Welsh healthcare service that patients with AN were satisfied with. This had to be an explicit expression of satisfaction, or a response to the questions that related to questions asked regarding satisfaction. This was important because previous research indicated an assumption that expectations met means satisfaction and this may not always be the case.
Being ‘not satisfied’ rather than dissatisfied	The patient with anorexia expressed which parts of the healthcare service that they were not satisfied with. This was usually in response to the question “what have you been satisfied with”.
Difficulty in being either satisfied or not satisfied	Patients expressed problems in have in identifying parts of the service they were satisfied with. Reasons for this included the nature of the disorder meaning they were unable to say wholly that they were satisfied as part of them (i.e. the anorexic part) may not have been satisfied but another part may have been (the well-self).
Expressing lack of satisfaction through anorexic behaviours	Patients with AN explained that they expressed their lack of satisfaction with the healthcare service by engaging in behaviours attributed to the disorder. For example, a patient who had treatment withdrawn restricted their food intake and lost weight to express her lack of satisfaction with the service.

Aspects of treatment that leave patients satisfied

Participants were asked if they were satisfied with treatment. They would often describe what parts they were satisfied with. Beth described how she was satisfied with the service she received from her GP. Even though Beth was aware the GP was not an ED specialist, she believed the GP did everything she could and was aware of the risks of osteoporosis:

“She put me forward for a bone density scan which I thought was good, I had blood tests ... her knowledge is she is a general practitioner, she’s not a specialist so I kind of think she did what she could and she went a looked on the NICE information about how much I should eat to gain weight and ‘cause she did a little bit of research” (Beth)

Ellie also reported feeling the same about her GP and the local outpatient facility:

“[I have been satisfied with parts of the service] definitely ((psychologist)) she been really good my GP had done her best like she's like when I yeah she's like there's a limit to what

GPs can do but she's always been really helpful ... and ((clinical psychologist)) as well ... it's been people that have been good but the sort of system the way things had flowed it's maybe been a bit hap-hazard it's like individual people have worked really, really hard with me” (Ellie)

Similarly, Faye described being happy with individual people, which emphasised the role of a therapeutic alliance with certain HCPs:

“I'm satisfied to the extent of how much people go out of their way to support me and try to try different ways to support me, so I'm really satisfied with that and everyone's support” (Faye)

Beth spoke about her satisfaction with the local outpatient facility:

“I was quite impressed by it actually. I was quite impressed by the ((outpatient facility))” “I have been satisfied with the- sort of- the ((outpatient facility)) itself is nice. The people there are really nice and they always, you know, very friendly. And like I said nice flowers and nice pretty bathrooms and carpets and ((clinical psychologist)) is really nice and just feel like tried to put me at ease” (Beth)

Ellie explained her satisfaction with the contract she was asked to agree to with the inpatient facility:

“Well at ((hospital)) there was that contract so I had to get up to that band and stay there...I think the contract is actually quite a good idea 'cause I hate to say it but because there's not a contract now and there's only a couple of sessions left... having a kind of contract is a really good idea” (Ellie)

Holly explained how she was reluctant at first to have input about dietetics, but was satisfied with how the dietitian was willing to negotiate with her about her treatment (Bjork et al. 2009):

“A good thing about ((place)) the input that I have had recently from the dietitian has been outstanding...she was prepared to see that I'd had a long history of treatment and that it needed to be very slowly and very much at my say so” (Holly)

Holly talked about feeling satisfied with a specialist service (Bjork et al. 2009):

“The whole of the set up with ((inpatient facility)) was great, because that’s what it is. It’s a specialist service they know what they’re doing, they’ve got, in general, the facilities”
(Holly)

And Holly was satisfied with how the service had improved throughout her treatment by providing more services:

“In ((place)) I suppose the way that people, over the last few years, have started openly to recognise that there is a huge gap in eating disorders care. That something must have happened because I, for a long time, I was never aware that there were any specific dietitians. You know, specific eating disorder dietitians” (Holly)

Joanne talked about the aspects of the service she was satisfied with, but stated that it was still limited:

“I don’t accept that you can get over it. I don’t accept that but I just think I’m very lucky. And some key events have happened with my treatment that I’ve been very fortunate with the care I’ve received” “Yeah I think it’s definitely increased my satisfaction because I’ve seen proof of it. I did five...well four and a half years successfully, until February” “They always have good...once you get into the system, they’re always very good with numbers like 24-hour numbers, ‘you can always call me’...they always say ‘If you’ve got a problem you can come back earlier’. That’s really important. If you’re like deteriorating and you really need to be able to be seen earlier. This psychologist once I got to see him was great. The services are fantastic they’re just limited that’s all. Once you get them then you’re good”
(Joanne)

The women reported feeling as though the people that delivered the treatment were crucial in their satisfaction with services. Feeling supported by HCPs and the effort that the staff were willing to make increased satisfaction, as well as the feeling that they could access care again if they wanted to. Furthermore, treatment that allows the patient to be collaborative in their own care increased satisfaction. This provides further evidence that when treatment meets the needs of patients, they are more likely to be satisfied with the service.

Being 'not satisfied' rather than dissatisfied

Participants were asked what parts of the service they were not satisfied with. For example, participants described not being satisfied with the location and availability of specialist services:

"I haven't been satisfied with the fact that ((hospital)) is so far away" (Beth)

Ellie elaborated on the lack of specialist services. But she noted that because she did not want treatment, she was not dissatisfied as her anorexic side was pleased there was a lack of services:

"In a weird way not [dissatisfied] as it is. But I mean that's because my expectations are not, I don't want to be an inpatient somewhere. I don't want to be a day patient somewhere I don't want, or do I? There's a question...actually yes be quite nice so I don't know. I guess I could sit here and say 'well no it's really crap because there is absolutely nothing. Well it's not absolutely there is nowhere near enough facilities or services full stop. And certainly not in the area of eating disorders' but that's kind of stating the obvious" (Holly)

When asked about what parts of the service she was satisfied with, Joanne talked what she was not satisfied with e.g. the lack of communication:

"I'm not satisfied with what happened with ((HCP)) because I think I was misled about what was going to be written about me. There were obvious problems with communication when ((HCP)) left and I wasn't listed with anyone else. And had I not been getting ill I would have chased it up but, I guess it should have been chased up. But it's just unfortunate just one of those things. If you don't get [referred on] you get lost" (Joanne)

Emily described being unsatisfied, but explained that the characteristics of the eating disorder may have been a contributing factor to the way she saw the health service. Furthermore, she empathised with staff about the limitations of the service:

"No, no, I just think the service itself was completely diabolical sorry ... I really do and so unsatisfactory" *"I am a perfectionist and I suppose there's always that that I might expect people to put in 100% as I do for everything that I do. So because the service lacks in so many different aspects I suppose that frustrates me. Because I think there should be more help and there should be more funding for people to have the help and there should be more*

funding to give support to people like ((clinical psychologist)) and ((clinical psychologist))...and hundreds and hundreds or maybe thousands of people who are severely ill that could do with the help. And it must be very frustrating for them not to have the extra help as well” (Emily)

Difficulties in being either satisfied or not satisfied

Participants explained that it was difficult to decide whether they were either satisfied or not satisfied overall. Holly described feeling satisfied with some parts of the service but not others:

“I think both at the same time, if I can say that. I think it was better. The ((inpatient facility)) treatment was better than I ever expected it could be. And equally the funding cock up and the lack of services around here was worse than I thought it could be” (Holly)

Similarly, Faye talked in the same way about her treatment:

“I am satisfied but I'm not- I'm satisfied to the extent of how much people go out of their way to support me and try to, try different ways to support me. So I'm really satisfied with that and everyone's support but then if I, I'm not really satisfied with I suppose I mentioned about the waiting lists and maybe if there was a specialised unit in Wales. I could have gone there sooner rather than having to go to ((place)). Therefore, then I wouldn't have gone to the ((inpatient facility)) and be away from my [child]. Just that really I suppose nothing really- other than that I reckon everyone's been brilliant” “Not anything in particular [I have been dissatisfied with]” (Faye)

Joanne discussed the difficulty with treating AN and how she found it difficult to be satisfied:

“I think it is difficult isn't it? When you're talking about something like anorexia and you call it a service. Because if you're having a knee replacement or a hip replacement you come out feeling so much better don't you? I don't feel like I felt before I had an eating disorder. Before I had an eating disorder I wasn't depressed and I didn't even know what a calorie was...I will never be like that for the rest of my life. So I think with mental illness you tend to...I guess you consider it less of a service. I mean, I know it is a service and I do recognize I have been lucky” “I think anorexic patients are very hard to please. If that's kind of answering it because they're naturally very judgmental people and also just because

it's a chronic, chronic condition that just remits, and relapses, and remits, and relapses" "I had a purely physical illness and I'm completely satisfied with my treatment on the NHS. I don't want to give the impression that I'm like...because I'm anorexic I'm dissatisfied with all NHS treatment...It's just...I'll never be really cured. But that's just because of the condition not the treatment. I'm not saying...It's not to blame anyone it's just the nature of the condition" (Joanne)

Holly described the problem with being treated by other people:

"I had this strange surprise when I realised human beings are fallible sometimes. Which kind of lets me down on occasions because I do build people up to being far more capable and far more perfect than they actually ever could be" (Holly)

The results suggest that patients who receive treatment for AN have difficulty in choosing whether they are satisfied with the service or not. Rather than a dichotomous answer, the patients chose to report the aspects that they were satisfied with, and others which they felt could be improved. This has important implications when considering how to measure satisfaction with services for EDs. Although quantitative research suggests that increased satisfaction is crucial to outcome (Bell, 2003; de la Rie, Noordenbos, Donker, & van Furth, 2006; Button, Marshall, Shinkwin, Black, & Palmer, 1997; Kahn & Pike, 2001; Rentrop, Bohm & Kissling, 1999), researcher should remain cautious about the use of quantitative measures of satisfaction during service improvement. Rather than reducing satisfaction to a numerical value, it might be beneficial to ask patients what areas worked well, and what could be improved.

Expressing lack of satisfaction through anorexic behaviours

Participants suggested that a lack of satisfaction with the service manifest itself in the form of relapse or delay to recovery. After funding was withdrawn for treatment, Ellie engaged in anorexic behaviours:

"I think that...when I came out of ((hospital)) I think that because I haven't felt that I'd completed the end of it or kind of gotten as better as I could I felt, that I could have gotten more better if that makes sense. I felt I'd got partially on my way so that when I came back then I felt like I expressed my dissatisfaction by kind of making myself worse" (Ellie)

Similarly, Holly reacted to funding being withdrawn by giving up on treatment:

“Funding had been withdrawn but it was getting closer and closer to that date and I was just losing all sense of why I was there and what I wanted and I just thought ‘oh sod it’. For some reason I thought, it felt like I was going to lose face or feel like I was letting everybody down if I just said ‘look, I’m going to discharge myself now’” (Holly)

Emily explained how she reacted to the lack of service by purposefully carrying out anorexic behaviours to lose weight:

“Nobody will do anything. He sort of vaguely offered me some services but nothing major...that’s what sent me down the route of ‘right the only way I’m going to get help is to lose weight’. So I just increased my starvation and increased my exercise and all the rest of it to go with it all” (Emily)

The results confirm that lack of access to services and problems with funding can contribute to the likelihood of relapse and dropout from treatment for AN. The problems that the women faced during treatment caused them to retaliate by returning to their eating disordered behaviour. This supports the results by Reid et al. (2008) who found that patients lose weight purposely when treatment is ending. Furthermore, it highlights the effect of failure to provide care that meets the basic psychological needs of patients described in SDT. The patients’ accounts reflect a feeling of not being cared for, and the result is motivation to return to their anorexia behaviours rather than to recover.

Concept 6: Patient recommendations to improve the health service

Participants described a variety of areas that could be improved in the health service. For example, better information, treatment close to home, and adequate funding (Table 10).

Table 10. Thematic framework for patient recommendations to improve the health service

Theme	Description of theme
Early intervention for AN	Early intervention in both primary and secondary care, as patients may have entered treatment through their GP, or through secondary care for treatment of another medical or psychiatric problem.
Better treatment options for AN	Any treatment options that were available or not to patients, and how patients would have liked their treatment options improved.
Better information for patients regarding AN	The amount and quality of information provided about anorexia and treatment available from the healthcare service.
Address long waiting lists	The waiting list that patients had to go on in order to receive treatment with the service.
Address funding difficulties	Difficulties participants experienced in receiving and maintaining funding for treatment for anorexia. For example, a patient had funding withdrawn for their treatment, or they have to fund private treatment as there was no funding available for treatment on the NHS.
Treatment closer to home	The locations that patients had to travel to in order to receive treatment for anorexia. For example, a patient had to travel a long distance to receive treatment.
Better HCP awareness about AN and treatment	HCP awareness of anorexia. This includes the lack of knowledge some staff may have had, or the training (or lack of training) regarding anorexia. This also included inaccurate knowledge or misconceptions by HCPs regarding anorexia.
Better communication in the NHS	Issues that reflected the need for better communication within the NHS. This included oral communication, communication via email, patient notes, letters, and telephone calls. This also included recommendations made by patients to improve communication within the NHS in general.
Control high turnover of staff	The effects of the high turnover of staff in the treatment of anorexia and how reducing turnover of staff would improve the service.

Early Intervention in the NHS for anorexia nervosa

Participants discussed the time they were diagnosed with anorexia, and suggested that early intervention should be improved in the NHS. Ellie described the problem with relying on BMI for diagnosis:

“I suppose don't assume people are fine...if people come to the doctors and they're having problems with eating and, but they don't fall, like, under, I don't know. I think it's seventeen point five (BMI) I think they start to consider you poorly and then fifteen consider you sectionable. I think if people ask for help, if the sooner you can get people some help. Consistent help. The better...it could be and just, it's not about weight” (Ellie)

Emily also reported feeling frustrated that the HCP's would focus on weight in order to determine whether they could provide treatment:

“I could have started off at 20 stone and been anorexic at 18 stone and that’s when it needs help and guidance. When you are on that rollercoaster on the way down...you can’t think straight and you just, not able to cope or communicate with people properly. So it’s much more difficult to help people” (Emily)

Katie noted that HCPs should be more able and willing to notice anorexic symptoms in their patients, and when they do notice, they should act upon them:

“I think they could have intervened. Best intervention would be when I first went, because I didn’t have periods and I was finding it difficult to eat. They could have intervened a lot earlier. It was obvious that I had an eating disorder from what I was eating. From what effects I’d had and what I was feeling. And I was perfectly honest when I went into the doctors, you know, I wasn’t secretive about it” (Katie)

Emily said she felt that help was only given to those who were in mortal danger:

“I just felt there was no hope unless I was at death’s door. Which is what I then tried to do to get the help. Whereas realistically I think if there was support at that point, not necessarily saying that I needed to go to a unit at that point. But I certainly needed something more positive. The last thing you need is a negative input. And yeah because you take any positive input negatively so to have negative input is just horrendous” “That’s why I’m reluctant to leave the system again because if it does start going downhill I would have to become very ill to get any help again” (Emily)

This theme highlights the need to improve timely access to services. It appears that although current practice guidelines state that early intervention to appropriate care is needed for patients with EDs (NICE, 2004), the provisions that were in place for these women were not adequate. The women reported the negative effects of focusing on BMI for treatment. Thankfully the new DSM-5 no longer includes a particular weight for diagnosis and recommended treatment for AN. Nevertheless, the need for clear guidance for HCPs regarding assessment, diagnosis and referral of patients with the disorder is necessary.

Better treatment options for anorexia nervosa

Participants talked about the treatment options that were available or not to patients, and how they would like their treatment options improved. For example, Ellie talked about the

frequency and availability of meetings with HCPs after the standard number of sessions had been administered:

“I would have been grateful if it could have gone on just a little bit longer, or like I say I could have had appointments every three months or even every six months for like the next two years or something. I think that's what I'd change if I could” (Ellie)

Ellie talked about people who did not want to engage in a full programme but who still required some form of help:

“I think just making sure that the service is, is easy to, to access and say someone wasn't necessarily ready to engage with like the full programme...then maybe if there was something to, could just kind of stable-wise and just keep them going along” (Ellie)

Holly described the service and how HCPs struggled with their caseloads:

“It always had an overriding feeling of ‘This could be helpful if the system were working’ but it was so obviously not working for anybody. In that it was as if everybody was making more appointments than they could possibly ever keep...Who was at the least risk on any one day so they could dare to cancel in order to fit the case load in. It just felt like a complete farce really. That somehow the patients were mixed up with as well, which just seemed ridiculous” (Holly)

Holly also described how the acute wards were inappropriate for people with AN:

“But apart from that you're on an acute ward with everybody else and it's just a case of trying to keep the peace all the time. They're just prison wardens who need to stop people from hurting themselves too severely and trying to keep the peace...I'm hoping you could say it kept me alive, but I think that was more luck than judgment. Completely actually. A complete and utter disaster. I'm afraid I've not got much good to say about the special acute units” (Holly)

Faye described feeling that a local specialist facility would be beneficial:

“It probably would be easier if there was a unit...Say in ((place)) or somewhere. Even if it's not to, not to like the ((inpatient facility)) standards or anything like that...but just some unit

who could help a bit more. I mean that's what I thought that it was going to be like. I didn't kind of realise until I was there how, how kind of little” (Faye)

Joanne talked about how she felt recovery from anorexia required individual care, and that at present this was only achieved in private care where resources were available:

“I think what needs to be done is that everyone needs to be considered as individuals. And that’s really hard to do in something like the NHS. That’s where the private system works in that they have the resources to be able to do that...the NHS doesn’t have the resources...I think just maybe what needs to be accepted more in the NHS is that it’s not one rule for all and that every pen doesn’t fit the slot...Everyone talks about NICE guidelines and they come down from on high as if God has delivered them himself” (Joanne)

Emily echoed the opinion that treatment should be individualised but acknowledged that in the NHS this is difficult:

“I was quite horrified, and my mind just thought ‘Well that’s just the way the system is. Just so vast and they have so many patients and they can’t individualise anyone. We’re just a big number’ and that’s how I feel. That you’re just a number and they do just whatever they can to keep you safe” (Emily)

Faye suggested that some kind of intermediary between her and the crisis team would be beneficial, so she could contact someone without the team needing to intervene:

“The thing really is if there was something where, sometimes if I want to speak to my CPN, I really need to speak to her, I’ll ring her up but...sometimes crisis team is a bit over the top. You don’t need the crisis team but you need something in between...Like somewhere where you can just drop in and speak to someone or, that is kind of connected to your mental health team” (Faye)

The accounts reveal that patients do not appear to prefer or request a particular type of treatment, such as CBT or FBT. The women portray the sense that the important factors during care include HCPs who are knowledgeable regarding the disorder, specialist facilities and the freedom to make choices during treatment. This indicates that factors other than the treatment type might be important during service development, echoing previous research who stress the need for research that explores the psychological mechanisms that may

explain why some people respond to treatment, and others no not (Wollburg, et al. 2013). Therefore, the current study supports the use of SDT in development of services for people with EDs.

Better information for patients regarding AN and treatment

Participants discussed the amount and quality of information provided about anorexia, and the treatment that was available. Katie said that advice regarding AN from the NHS was lacking:

“I didn’t find that there was a lot of information...The GP didn’t give me a lot of information. We went on the internet and there wasn’t a lot to do with eating disorders. I still don’t think there is much now to be honest. There’s not much clear cut advice on it...The eating disorders association (B-EAT) is but there’s still not overflowing advice which you sometimes need” (Katie)

Beth compounded this by describing the lack of health campaign posters prompting people to consider AN:

“Looking now I don’t think there’s much information...Considering how bad the problem is and the amount of people that are suffering with eating disorders, there’s very little. You know, you go to the GP there’s nothing, you know, no posters up or anything like that...and that’s the sort of, you know there’s posters for flu and, you know, prompting people to think ‘Have I got a problem that actually needs attention?’ and there’s not anything like that really” (Beth)

Address long waiting lists

Some participants spoke about being on a waiting list for treatment, and that this should be improved. Katie talked about her expectations of waiting lists:

“I knew there were long waiting lists but I did think it would be a bit more productive than it was, I must say” (Katie)

Emily described how being on a waiting list was difficult:

“I suppose, yeah I did have quite a few breaks every now and again and then I’d have to fight my way back to get treatment sorted...I was on waiting lists. Although there’s been

nothing anyone could do or something like that...It's not great...Especially when you're very poorly" (Emily)

Ellie not only highlighted the importance of reducing waiting lists, but suggested that money would be saved as a result by avoiding unnecessary, costly treatment:

"I'm on another waiting list to be on a waiting list so it's just retarded really that, like, a whole lot of money could be saved if the whole thing was made a bit more streamline...The amount of money they get spent on kind of, looking after people in the meantime before they go in for treatment...they could organise the treatment sooner and wouldn't be so much money" (Ellie)

Joanne explained that people who were waiting list received treatment in order of referral, and this could be improved by implementing a triage service:

"So I guess it's hard if there are people on the list who are really struggling and then there are people who get to the top of the list and they don't need the service anymore...I guess that would be very, very time-consuming to sort out and I understand there's a huge lack of resources and money, especially for mental health" (Joanne)

And Emily described the negative effect of waiting too long for treatment:

"There are so many huge waiting lists and by the time you actually reach, I mean there was a point I got ((HCP)) and it was just, I couldn't see her because I was in a state and it wouldn't benefit me so there was no point starting treatment with her" (Emily)

Confirming the previous results regarding the need to decrease waiting lists, the women make it explicit that this is something that should be improved in future services. The accounts also give the sense that the women had to fight for treatment or felt let down, something which would contribute to lack of basic needs fulfilment (SDT: Ryan & Deci, 2000) and a sense that there was no point trying. This would make treatment difficult in a groups of individuals that already experience ambivalence and resistance to treatment.

Address funding difficulties

Funding difficulties have been acknowledged in previous literature. Participants suggested improving funding difficulties in the health service. Ellie described how she expected her treatment to be completed:

“I think I would have at least, I would have expected to have completed the course of treatment. I definitely would have expected to ‘cause, you know, how like, you’re supposed to get antibiotics for a certain amount of time and if you stop they don’t work” (Ellie)

In a rather similar explanation, Holly talked about her funding being withdrawn:

“It was five months of the inpatient phase of the programme. So I was discharged in ((month)). On paper, it was because I used self-harm. In reality it was because funding went out. It was withdrawn. It was argued over. Was denied. Whatever you want to say” (Holly)

Ellie elaborated by suggesting that it cost more money to withdraw funding as she then required further treatment:

“It would have saved money in the long run if I’d have just completed the treatment...I think at certain points I think it has been down to me to try and sort it out myself” (Ellie)

Holly described the negative expectations of the service she then had after funding for treatment was withdrawn:

“I suppose having had the huge let down of health funding does make me a lot less likely to trust that people will do what they say, or, for example my CMHT might not exist next week, in my head, so I have to, I feel like I constantly walk around with that hanging over me. So yeah I’m a lot less likely to trust people” (Holly)

Emily decided to fund treatment herself after experiencing difficulty in securing funding for treatment through the NHS:

“I went back to my GP and we’d written letters and then that’s when we decided the only way to do it was to go private to pay myself” “It definitely was more a case of how to get the help, as opposed to getting the help and dealing with it” (Emily)

Ellie also described the lack of financial support whilst receiving treatment for anorexia:

“No one would help me with benefits or anything so I used all of my savings to pay the rent while I was in hospital...I wasn’t able to leave the ward to go and speak to anyone who deals with benefits and finance...If you’re in hospital, at home the council would sort it so that they pay your rent or what have you. But I came back absolutely broke” (Ellie)

Treatment closer to home

Criticisms have been cast regarding the lack of specialist inpatient services for eating disorders in Wales. The RCP (2012) report states that treatment should be closer to home. Unfortunately, this appears to be a particular difficulty for patients from Wales who require specialist inpatient care. Ellie explained what she expected from the service, and what she found when she went into treatment:

“I think I maybe expected to be treated near to home” “Even if, if it had been staying in the ((local hospital)) until a place opened up it...I didn’t look after myself at all and it had a really bad impact on all the people around me. Just in general as well there was no, like, apart from here [outpatient service] where you have the treatment there was, like, going to the ((CMHT)) and stuff, there was nothing kind of specifically eating disorder it was all kind of general mental health” (Ellie)

Holly relived the experience of travelling for treatment, and highlighted how difficult this was when she was ill:

“Somehow they were able to find somebody who would shove me in a car and take me down there. Which I hated just because of the journey itself...because I don’t like travelling...exhausting. And sometimes, in my physical state, not fit to be doing that sort of travelling” “Just an overwhelming feeling of how good it was or how good it could be if it weren’t on the other side of the country” (Holly)

Emily explained how she could not access treatment because it was too far away, and how she felt she could not drive because of her impaired cognitive ability:

“They wouldn’t fund me as an inpatient because they felt I could drive backward and forward. But I couldn’t drive back and forward because I wasn’t allowed to drive because my weight was too low to be driving on the motorway because I wasn’t eating and stuff. And lack of concentration” (Emily)

Faye drew attention to the problem for parents receiving treatment outside their area:

“Maybe if there was a specialised unit in Wales I could have gone there sooner rather than having to go to ((place)). Therefore, then I wouldn’t have gone to the ((inpatient facility)) and be away from my [child]” (Faye)

The lack of specialist inpatient care for patients in Wales appears to have negative effects on their treatment. They are often required, at what would be considered the most severe point in their treatment, to travel to or relocate to another country to receive care. This not only makes them feel as though they are a disadvantage to those who live closer to the facility, but it puts distance between the patients and their family. According to the SDT, the patients require relationships in order to meet their basic needs. If relatedness is not met, then ill-health will ensue. Therefore, the necessity of travelling to the specialist ED inpatient facility in England is not conducive to the recovery of patients in Wales.

Better healthcare professional awareness about anorexia nervosa and treatment

Participants often alluded to the HCPs' lack of awareness about the symptoms and behaviour of people with AN. Participants described the need for fully trained, knowledgeable HCPs involved in their care. For example, Beth described her GPs lack of knowledge of the symptoms of anorexia:

“Yeah I do think that she could have been better trained and I think she realised that as well” (Beth)

Similarly, Emily described her GP's lack of awareness of anorexia, but empathised with the difficult situation the GP was in by having many disorders to understand and diagnose, as well as relatively small numbers of patients presenting with eating disorders:

“The GP didn't really know what to do. She had to then go and research it herself to see what services were available. She vaguely knew but it was hard because there's not enough information really. She didn't have enough information and I suppose certain GP's were in a position where they don't often come across eating disorders on a regular basis. So it's not something she'd come across so it, yeah, I think on their part it was quite difficult to know what to do. So we had to research into what was available” (Emily)

Holly talked about the HCPs that were not aware of the characteristics of AN:

“You'd always get...somebody who wasn't quite as experienced or quite as good as the other nurses, who would say the unfortunate comments or, maybe they were using the bank staff who hadn't worked on an eating disorder unit. Mistakes would happen, at the time it feels like a huge big deal and everyone gets really angry about it” (Holly)

Ellie talked of the problem with using agency staff in the care of people with AN:

“I think they were of the view that well...they’re agency staff and they won’t know as much as the regular staff. But I think to be honest that you really should know, if you’re going to be on an eating disorders ward that you’re going to have to be in charge” (Ellie)

Joanne suggested that people who have had personal experience of eating disorders should be involved in the treatment and care of people with anorexia:

“The therapist, also what I found difficult is that she’d never had an eating disorder. I don’t know why...lots of my therapists had never had eating disorders. But in there it really struck me as being really odd because this woman was really, really bossy about the rules of being on the EDU. And the rules of how many calories I had to have and when I had to eat. At what times and the rules of eating. Things about what utensils that had to be used and she was just...I remember she was preaching a lot but she’d never been through it herself. And I thought that was a bit weird” (Joanne)

Emily explained why it was so important to have knowledgeable staff working with people who have AN:

“It’s knowledge and understanding and training. I think Wales lacks a unit desperately, which it needs. It also needs a unit that is going to be with people who are trained to know what they’re doing because yes, when you’re in the depths of eating disorder you are manipulative” “[I expected them to be] slightly more caring and more knowledgeable actually...they admit that they don’t know anything...They’re very honest about that. But if that were the only way of treatment then there has got to be somebody who is knowledgeable and knows about it” (Emily)

Lack of knowledge about AN appears to have a detrimental effect on the way the patients feel regarding treatment. The women revealed that a lack of knowledge by HCPs would allow them to continue their anorexic behaviour, but at the same time it made them feel angry about not receiving appropriate care. Lack of awareness regarding the importance of a collaborate approach to care also caused problems, and the women noted that HCPs should be taught about the characteristics of the disorder. Therefore, increasing HCPs knowledge regarding anorexia nervosa is an important facet of improving care in Wales.

Better communication in the NHS

Participants expressed that they would like communication between people, departments and service areas to be improved. Ellie illustrated the need for communication between HCPs in the healthcare service overall:

“If everyone got together and had a discussion it might generate a, kind of, better path especially 'cause everybody with an eating disorder is, is, is really different and you know so in gathering all that information together you might be able to work out a clearer path to treat someone” (Ellie)

Joanne experienced a lack of communication between different NHS services:

“Like it would be if he made a suggestion, he has to make a suggestions to his own team, not to a team in another...and not only that but I was moved to ((place)) because the ((inpatient facility)) in ((place)) and my parents were just over the border in ((place)). And so it crossed the boundary and it got really complicated” (Joanne)

Holly explained how one person was crucial in the communication between different departments for her treatment:

“I think there were definite funding problems and arguments to get the funding reinstated. That was a lot of work done by a support worker from ((charity)). I think without her, it actually wouldn't have happened. She kept all the different agencies talking to each other because that was a huge problem, communication between ((place)) and ((place)), letters just weren't happening or people were changing their jobs and they hadn't got in touch with the new people or things were getting lost. I don't know. It was just communication” (Holly)

Information regarding patients was not passed on when staff left their positions:

“Basically she left to go on maternity leave, and everyone said she was coming back, but she never did. She left. And for some reason, I never got listed with the new person. I was kind of missed” (Joanne)

Joanne described the difficulty communicating with HCPs whose first language was not English:

“I guess, pretty much all the psychiatrists I’d seen, certainly in Wales, have all been foreign...And so ((HCP)) was the first English, British psychiatrist I ever met...I just felt like that made a difference because I...I find it hard to communicate with...I remember trying to communicate with ((HCP)) and ((HCP)) in particular and you’re trying to talk about feelings. You often can’t be very articulate or your articulation’s difficult. And when their English is perhaps not great or a little...you have to spell things out more clearly and often your meaning gets lost in the translation. I used to find it difficult...I remember coming out of sessions with ((HCP)) and ((HCP)) and I’m sure they’re great clinicians I just remember I would have not said some stuff because I wasn’t sure how I’d get it across and that they’d quite understand what I was trying to say” (Joanne)

Control high turnover of staff

High turnover of staff was difficult for participants. Joanne discussed the problem with having to re-tell her story to different HCPs:

“It’s been very bitty unfortunately. They seem to have a really high turnover of psychiatrists” “That’s what’s really hard for patients is the turnover of staff. I’ve been here five years and seen so many psychiatrists and I’m just about to start seeing another one. And they’re going to have to go through the story all over again. And that’s really hard. So better continuity would help. But I know its people moving jobs and the NHS” (Joanne)

Summary of Results and Discussion of Study 1

AN onset, diagnosis, course and treatment characteristics of the current sample

The women in the study all described the age of onset of their disorder was between 11-17 years of age, confirming previous research which found that onset usually occurs in adolescence (Hoek & van Hoeken, 2003). This finding is contrary to that of Stice and colleagues (2013) who state that peak onset age is 19-20 years. All participants were female, confirming that anorexia is primarily a female disorder (Hoek and van Hoeken, 2003). The respondents in the current study reported a number of different factors that may have contributed to their risk of developing the disorder. Firstly, two of the women had close family members who also had a previous ED diagnosis. This provides support for research which has found having first degree relatives with either AN and BN increases an individual’s risk of developing an ED (Strober, et al. 2000). One of the women described becoming aware of food, eating and the effect on her body, supporting research that found

dieting and body dissatisfaction is associated with onset of EDs (Joiner, Heatherton, Rudd & Schmidt, 1997; Steiger, Stotland, Trottier & Ghadirian, 1996; Stice, Shaw & Nemeroff, 1998; Polivy & Herman, 1987; Stice, 2001).

Three of the women reported experiential factors associated with onset, including rape, childhood sexual abuse and upheaval of moving schools. This is similar to research which has found that individuals with EDs report life stresses and difficulties (Raffi, Rondini, Grandr & Fava, 2000), and adverse life events (Horesh, et al., 1996). Childhood sexual abuse in particular has been noted as being a significant risk factor for developing EDs (Johnson, Cohen, Kasen, Smailes & Brook, 2002; Steiger, Leonard, Kin et al., 2000; Garfinkel, Lin, Goering, Spegg, et al., 1995; Welch & Fairburn, 1994; Brown, Russell, Thornton & Dunn, 1997).

The duration of the women's illness had become chronic, with the shortest duration of illness being six years and the longest over 25 years. This is in line with prospective longitudinal studies which have demonstrated high rates of symptom persistence (Herzog et al., 1999; Strober, Freeman, & Morrell, 1997). The treatment duration for the women's disorder varied, with the shortest duration being 1 year, and the longest being twelve years. Delay between onset of the disorder and treatment ranged between 1 and twenty-five years.

Although the exact circumstances surrounding delay of diagnosis and implementation of treatment was not ascertained, the present findings indicate that delay between onset of AN and treatment was common. Failure to diagnose AN occurred because the HCP sent them away with minimal advice (such as eat more, their BMI was not low enough, or they were attention seeking). The care pathway for Wales (2009) states that HCPs should be able to assess general psychiatric and psychological dimensions of EDs, knowledge that is particularly important given that early diagnosis and intervention are significantly correlated with improved outcomes in patients who have EDs (Herzog, Nussbaum, & Marmor, 1996).

The women in the current study received both primary and secondary care for AN in Wales. Five of the seven patients also received part of their care for AN as an inpatient in England. The range of HCPs involved in their care were multidisciplinary, including CPNs, nutritionists, dietitians, GPs, nurses, and clinical psychologists. According to the recent RCP report (CR170), 2012), the lack of inpatient facility in Wales means that all Welsh services would not be currently classified as a specialist service for EDs.

For some treatment, the women described feeling as though the focus was on the food and not the psychological issues surrounding the disorder. In AN, this includes factors such as the fear of gaining weight or becoming fat, control, body dissatisfaction, negative affect and perfectionist and obsessive/compulsive tendencies. As such, when women received psychoeducation, they valued the approach because it dealt with the issues surrounding the disorder. For example, education enabled the women to modify their negative cognitions regarding eating. The results of the current study support research which explored patient perception of treatment for EDs. The studies found that interventions which addressed psychological issues, and developed a psychological understanding of EDs, were preferred over more medicalized treatments focused on food, weight and eating (Lose et al., 2014; Bell, 2003; Cockell et al., 2004; Le Grange & Gelman, 1998). Indeed, the RCP (2012) advise that a multidisciplinary approach to care is one of the key features of a specialist ED service.

Breaks in treatment were experienced and the lack of resources by the Welsh NHS was noticeable. The women were aware that treatment was scarce and funding was a problem. Therefore, when they received treatment, it felt like a privilege, and that there was guilt associated with receiving treatment when others might need it more. Pursuit of treatment often became a case of *how* to get help rather than the patient feeling able to focus upon recovery. As a consequence, three participants felt they had to seek private treatment in order to recover due to lack of provision of services or because treatment from the NHS was not working. This supports criticisms that the provision of healthcare services for EDs in Wales, particularly the funding allocated for such services, did not meet practice guidelines (Keel et al., 2003; Which, 1998; Plaid Cymru, 2004; National commissioning advisory board, 2004; NICE, 2004).

Service user description of anorexia

Participants described their disorder in four ways: as a functional disorder, as a dysfunctional disorder, as a disorder that makes the sufferer manipulative, and as a part of themselves that is separate to their well self. Participants described wanting to keep the functional parts of the disorder, whilst removing the dysfunctional elements (e.g. remaining thin but not having long term negative effects). The results of the current study confirm previous literature noting that people with AN appreciate some of their symptoms and feel that the disorder has benefits (Nordbo et al., 2012; Nordbo et al., 2006, 2008; Serpell et al.

1999; Vitousek et al., 1998; Williams & Reid, 2009; Cockell et al., 2002; Geller & Drab, 1999; Rieger et al., 2000).

The women also acknowledged that the disorder had negative consequences, and this gave the women a feeling of internal conflict regarding recovery. For example, they understood that the disorder had negative long term consequences, such as osteoporosis. This confirms research which has found that patients with AN expect to be helped with the negative consequences of the disorder and become healthy whilst continuing to control their weight (Colton & Pistrang, 2004; Treasure & Schmidt, 2001; Vitousek et al., 1998). This results in ambivalence towards engaging in treatment, as the core symptoms of their disorder are perceived as both negative and positive (Clinton, 1994). This finding corresponds with the SDT (Ryan & Deci, 2000), in particular OIS (Deci & Ryan, 1985) and the distinction between different types of external motivation. In the current example, the women may experience identified external regulation, where she believes that recovery is important for her health. Nevertheless, the motivation is external and conflicts arises when the women feel as though the symptoms are consistent with the women's self-image (Tan et al., 2007). The women may therefore experience internal motivation to continue anorexic behaviours, and so efforts should be made to enhance the personal significance of change (Vansteenkiste et al., 2005; Ryan & Deci, 2000).

The women described their disorder in terms of their well-self, and their anorexic-self, and they elaborated by describing that their anorexic-self caused them to do things they would not normally do. For example, the women described the disorder as something that makes the sufferer manipulate situations or other people, by lying so that they can continue their anorexic behaviours. This demonstrates that there was a conflict between their anorexic-self and the well-self. The participants' descriptions echo Tierney and Fox (2010) who examined 21 patients' written accounts of their inner voice. The authors found that the bond between individuals and their anorexic voice explained ambivalence to change throughout treatment. Similarly, this supports the application of SDT to AN, as the women have internal motivation to continue anorexic behaviours, which contributes to amotivation or external motivation to recover (Ryan & Deci, 2000; Mansour et al., 2012; Carter & Kelly, 2015; Casanovas et al., 2007; Bewell & Carter, 2008). The examples of quotations for this theme highlight that although people with anorexia may want to recover, they are in a dichotomy between the want to be well, and the compulsion to maintain the disorder. This

may provide some explanation for findings in previous studies where patients with AN experience poor motivation to engage in treatment and recover (Vitousek, et al., 1998).

Factors affecting motivation and engagement in treatment

Relating the Self-Determination Theory to the current findings

The results from the current study support the use of the Self-Determination Theory (SDT) in explaining motivation to change in people with AN. The current study supports Organismic Integration Theory (OIT) which distinguishes between different types of motivation for recovery of AN. In particular, the women in the present study often appeared to have externally regulated motivation whereby they were seeking help to meet external expectations. Extrinsic or insufficiently internal motivation for change is known to be a common problem in AN treatment (Mansour et al. 2012; Carter & Kelly, 2015; Casanovas et al., 2007; Bewell & Carter, 2008). Authentic motivation to recover from AN would mean that the patients were more enthusiastic and confident about change, therefore enhancing performance and persistence during treatment (Deci & Ryan, 1991; Sheldon, et al., 1997; Geller, et al, 2004; Bewell & Carter, 2008; Vandereycken & Vansteenkiste, 2009). Therefore, the current study provides support for Vansteenkiste and colleagues (2005) who note that AN treatment should shift patients towards increasing the perceived personal importance of change (Vansteenkiste et al., 2005).

Patients revealed that initial diagnosis of AN was made during treatment for other health problems or due to family concerns, indicating external motivation on presentation to healthcare services (Ryan & Deci, 2000; Vansteenkiste et al, 2005). The women also reported then engaging in treatment in order to relieve the negative symptoms of the disorder, or to please a HCP (externally motivated) or to placate family members. This supports previous research which states that patients are often motivated to enter treatment by the desire to please others, yield to their pressure, or avoid even more severe health consequences (Colton & Pistrang, 2004; Treasure & Schmidt, 2001; Toman, 2002; Nordbo et al., 2008; Vandereycken & Vansteenkiste, 2009; Vitousek et al., 1998; Ryan & Deci, 2000; Vansteenkiste et al. 2005). According to the SDT, this would mean that the women's motivation was external and therefore motivation to recover would be poor. Indeed, the patients reported their intention to return to anorexic behaviours when the treatment was complete.

For example, Holly was sectioned and treated for AN. According to the SDT applied to EDs, (Ryan & Deci, 2000; Vansteenkiste et al. 2005), Holly experienced amotivation, i.e. she lacked control over the decision to enter treatment. As Holly did not have control over whether she entered inpatient care, she would not feel competent to engage in treatment or recover, she would not value the treatment and would not expect it to result in a positive outcome. Indeed, Holly reported feeling negatively towards her treatment as an inpatient on the acute ward. Similarly, Joanne reported being tube-fed. After treatment, she described being 'let out', revealing her sense of loss of control. In order to gain control again, Joanne reported losing weight, and consequently was admitted back into treatment. Beth described her parents requesting that she get help for her ED, and so entered treatment in order to plicate them. She reported feeling as though she did not want to recover, and that she was more motivated to maintain her eating disordered behaviour. Therefore, Beth's motivation to recover was externally motivated by her parents, and at first, she did not engage in treatment.

When the women engaged in treatment, they cited a variety of reasons which included a desire to recover, not experience anorexic symptoms anymore, and to be able to function normally. Although the women no longer cited externally regulated, extrinsic motivation to engage (family or HCPs), they still did not appear to have internal motivation. They wanted to reduce their symptoms, which indicates that they may have had introjected regulation and therefore still somewhat extrinsic motivation. That is, that the participants weren't necessarily pursuing change willingly but were engaging in order to reduce negative consequences.

Basic Psychological Needs

The SDT (Ryan & Deci, 2000) proposes that people have basic psychological needs (relatedness, competence, and autonomy). When a patient receives treatment for EDs, the context can stimulate or hinder the gradual acceptance of change by, respectively, supporting or thwarting the patients' innate and basic psychological needs (Vansteenkiste & Ryan, 2013). Fulfilment of these needs promotes positive outcomes including persistence, performance, and well-being (Ryan & Deci, 2000). In the context of ED treatment, if the patients' psychological needs are met, then they will develop increasingly positive attitudes towards treatment, including increased psychological flexibility or openness towards engagement in treatment and recovery (Wollburg, et al. 2013).

Vansteenkiste and colleagues (2005) suggest that patients who feel that HCPs genuinely care about them (i.e. meeting their need for attachment), who feel capable rather than incompetent in the treatment process (meeting their need for competence), and who feel that they can make important choices concerning their treatment (meeting their need for autonomy) tend to achieve better outcomes than patients whose respective needs are not supported as strongly.

Relatedness

The women in the current study reported the importance of developing a TA. When the patients trusted the HCP, they had mutual respect for them, felt they could be open, honest, and importantly relinquish control. Furthermore, it made the women feel they could do what the HCP advised them to do. This echoes Wollburg and colleagues (2013) who states that meeting the person's basic psychological needs will result in positive attitudes towards the treatment. The women talked positively about HCPs who were friendly, approachable, warm, sensitive and supportive. Furthermore, the women appreciated HCPs who were knowledgeable, professional, respectful and firm when needed. During treatment, the women favoured HCPs who were willing to listen and be flexible, and let the women return to treatment if they ever needed it again in future. They appreciated the ability of a knowledgeable HCP to provide education regarding the nutritional and psychological issues of their disorder. Wollburg and colleagues (2013) suggest that meeting the person's basic psychological needs will result in positive attitudes towards the treatment. Therefore, the results from the current study confirm that if the TA contributes to the fulfilment of patients' basic psychological needs, then this will improve motivation.

This confirms that the patients require relatedness from the HCP during treatment (Vansteenkiste et al., 2005; Grawe, 2007; Wollburg, et al., 2013). This is explicated by research which has found that perceived quality of the alliance plays a significant role with regard to recovery, treatment satisfaction and the patients' motivation to change (Federici & Kaplan, 2008; Escobar-Koch et al., 2010; Constantino, Castonguay, & Schut, 2002; Horvath & Bedi, 2002; Loeb et al., 2005; Comerci & Gerydanus, 1997; Kaplan & Garfinkel, 1999; Garrett, 1997; Noordenbos, Jacobs, & Hertzberger, 1998; Rosenvinge & Kluismeier, 2000; Tozzi, Sullivan, Fear, McKenzie & Bulik 2003; Federici & Kaplan, 2008).

Although the women expected to feel supported and listened to, they found that some HCPs were cold and dismissive of the seriousness of the disorder. HCPs were sometimes made passive remarks regarding eating or the need to lose more weight. This resonates the findings of Nordbo and colleagues (2012) who recently found that patients with AN feel extremely sensitive when exposed to other people's expressed opinions about them. HCPs did not remember important details about the patients. When HCPs behaved in this way, it made the patients feel as though they were attention-seeking and time-wasting, made them withdraw from services and not engage. According to the SDT for EDs, failure to meet the patients' basic psychological needs results in needs frustration and impedes the recovery process (Vansteenkiste et al. 2005). This provides evidence to literature that has found patients often resist or withdraw from treatment because they did not feel cared for by the HCPs (Ryan & Deci, 2000; Vansteenkiste et al., 2005).

Another effect the lack of knowledge also had was that the absence of concern by HCPs which made the women feel like they had to lose more weight to receive help. This supports previous research which has found that patients lose weight as a means to elicit treatment (Norbo et al., 2012; Reid et al. 2008). This made the women feel like they don't deserve help and that no one cares. The patients would often withdraw from treatment and felt there was no point in continuing. This also supports worrying evidence that people with serious EDs are likely to have attended health services on a number of occasions without their disorder being reported by the patients or detected by the HCPs (Ogg et al., 1997; NICE, 2004).

According to the SDT, by failing to care appropriately for the disorder, the HCPs failed to meet the basic needs of the patient, and the result was withdrawal or reluctance to engage with services. This is confirmed by the women in the current study who reported negative characteristics of the HCP to be a barrier to the TA, ultimately causing poor motivation to change and poor engagement in treatment. The patients recommended that the future service should ensure that HCPs be willing and able to notice symptoms of AN. They preferred consistency in the service so that they can be aware of what to expect, including knowledgeable staff in specialist units.

In the current study, the use of threats by HCPs during treatment made the women feel worried that their care would be withdrawn, but also made them feel that they wanted to return to their anorexic behaviours. This supports the SDT literature which advises that threats and imposed goals diminish intrinsic motivation, because they conduce toward an

external perceived locus of causality (Deci & Ryan, 1985). For the current study, this would mean that the use of threats during treatment would not encourage the patients, rather it would reduce the quality of their motivation to engage and recover.

Importantly, the women acknowledged that the characteristics of AN were sometimes a barrier to the TA. For example, when HCPs asked the women to engage in treatment activities, the nature of the disorder meant they resisted. This would then cause the patient to dislike the HCP. The disorder would often make them suspicious of the HCPs, creating a feeling of mistrust that they were going to make them fat. As the diagnostic criteria of the disorder includes fear of gaining weight or becoming fat, and this is a negative expectation of treatment, it is no surprise that there can be difficulty in developing the TA.

The women in the current study described the negative effect on them when they experienced the loss of a relationship with a HCP, such as feelings of sadness, fear and importantly the return of anorexic behaviours. The results support Reid and colleagues (2008) who found that patients lost weight as a coping mechanism when treatment was going to end. As Reid and colleagues (2008) recognised, this contradicts the Interactional Model of Control (Eivors, et al., 2003) which suggests that patients drop out of treatment to exert control. In the case of the patients for the current study, they often lost weight in order to *receive* treatment rather than avoid it. The participants described the intimate nature of the relationship with HCPs as confusing. One that is based on trust and feels like friendship but is not, and where the relationship ends with no further contact.

Competence

The women in the current study reported a number of different factors that affected their confidence that they would be able to recover from AN. Participants stated there were a number of barriers to engaging in treatment, which led to poor motivation to engage and recover. For example, they reported stating that there were barriers to accessing timely treatment, such as lack of knowledge by the HCPs. Reliance on BMI as the only indicator of AN, or conversely not taking notice of a low BMI, meant that patients were not diagnosed. Patients would not engage because they felt the types of treatment offered would not work for them. Patients also described a lack of communication between different parts of the NHS which meant that patients had to remind the service to provide care. Patients found that being on waiting lists was difficult. According to the SDT (Deci & Ryan, 2000; Vansteenkiste et al.,

2005), a patient will not be motivated to engage in treatment and recover if they do not feel competent to do so. Therefore, lack of provision of appropriate treatment resulted in the patients not feeling able to recover.

Recommendations to improve service included early intervention which did not rely solely on BMI and access to services for those with less severe versions of illness. When treatment started, patients would prefer to receive individualised care plans with more treatment options, including partial programmes for those who do not want intense treatment. Patients recommended that funding difficulties be addressed so that treatment could be provided by specialist ED facilities, rather than general acute psychiatric wards or inpatient care so far from home. Patients also recommended that there be continuity of care after ED treatment, including the option to receive treatment again should they relapse.

Autonomy

According to the SDT (Ryan & Deci, 2000), patients need to feel as though they have autonomy during treatment and recovery. The participants in the current study particularly emphasised the importance of control and negotiation regarding their care. They feared that treatment would be withdrawn early if they broke the rules, or often reported the power struggle between themselves and the HCPs when rules were imposed upon them, and the reluctance to engage in treatment that followed. Similarly, the results mirror findings from Ramjan (2004) who found that nurses reported feeling in a power struggle with patients, and consequently experienced difficulty in developing and maintaining a TA. In the current study, if the women didn't comply with the rules of treatment then they were punished, such as having treatment withdrawn. This often led to the return to anorexic behaviours and weight loss. The women described the acute mental health wards as frightening and HCPs were like prison wardens. Therefore, being an inpatient on an acute ward made them withdraw from treatment and be reluctant to access care again, and the women recommended that acute wards are not suitable for people with AN.

Conversely, when the HCPs were willing to compromise over treatment by relaxing the rules, this made the patients feel valued and more willing to trust the HCP. The patients reported that adapting treatment worked for them because they had a choice, and enabled them to admit when they were wrong. The patients made some recommendations for the future service that related to feeling autonomous during their treatment. For example, flexibility

was preferred, such as changes to length and frequency of treatment, and treatment plans for those who do not want to undertake a full programme.

The women's concern that treatment would then be withdrawn if they broke rules set by HCPs was sometimes realised. The women explained that the fear of losing treatment by breaking the rules conflicted with the fear of losing control of their disorder by engaging in treatment. Previous literature has noted that is a particular problem when treating a disorder where the need for control is a key characteristic (Troop, 1998). Therefore, it is important to consider that taking away the control of the patient is likely to cause problems with motivation and engagement.

Expectations of treatment for anorexia

Patients reported that prior to treatment, they had both positive and negative expectations of the Welsh healthcare service. The results confirm that the expectations often related to the women's basic psychological needs. Positive expectations included being given timely treatment close to home by knowledgeable staff that were familiar with the characteristics of AN. The women expected someone to listen to them, and to receive support from HCPs. Ultimately the women expected to be cured: to return to normal physiological and psychological function, with overall recovery from AN. This also supports Paulson Karlsson (2012), Clinton (2001) and Bowling and colleagues (2012) who found that patients want to receive appropriate therapy, to be treated by HCPs that are respectful and knowledgeable, to be involved in treatment and given the opportunity to discuss problems.

As predicted, the women also had negative expectations of treatment, some of which they described as being met. The main negative expectation was that treatment would make them fat, reflecting the diagnostic criteria of the disorder (APA, 2013). It is well known that extreme fear of eating and weight gain are core symptoms in AN, and therefore treatment aimed at helping the patient to overcome the illness will usually raise ambivalence, fear related to loss of control and decreased desire to recover (Nordbo et al. 2012; Cockell et al., 2003; Tan, et al., 2003). The SDT emphasises the importance of distinguishing between different types of external motivation to engage in treatment (Ryan & Deci, 2000). The finding also endorses literature that criticises the use of simple definition of satisfaction (Noble, et al., 1999; Treasure & Schmidt, 2001; Eivors, et al, 2003; Robinson, 2000), and that even though the expectation is met, satisfaction may not follow.

Some of the women were concerned that they would ask for help but not be taken seriously and consequently turned away. Interestingly, the women had identified that they were ill, but were concerned that it was not severe enough to receive help or that their concerns were not valid. This may indicate an atmosphere where the biological markers are key to a diagnosis of a mental health problem. Indeed, the Welsh care pathway (WAG, 2009) now states that weight is not the only indicator for a person to be diagnosed with an ED. This reveals a significant barrier to help-seeking behaviour in people with AN. If they do not believe that they are thin enough to meet a diagnosis of AN, and emphasis is upon low weight as a key diagnostic marker, then they may not seek help. Indeed, the women referred to occasions where the HCP directly told them that they needed to lose more weight in order to get treatment.

When asked whether their positive expectations had been met during their experience of treatment, the women described that often they were not. They expected to be valued as people but felt they were seen only as mentally ill patients with no opinion. The women expected staff to be knowledgeable but they were often not aware of the characteristics of AN, and focused only on the women's weight and diet. The women expected to get appropriate, specialist treatment in a timely manner that was close to home. Unfortunately, they reported either receiving treatment from HCPs who were not specialists, or when they received specialist treatment, it was withdrawn early due to lack of funding.

The participants also expected to be treated successfully but found that sometimes treatment made their anorexic behaviours worse. This finding is concerning given that the degree to which patients feel safe, supported and accepted by the HCP can help or hinder recovery (Robinson, 2000; Federici & Kaplan, 2008). Patients in other studies have reported the importance of good generic psychotherapeutic skills and knowledge of the disorder in facilitating the development of the TA (Roots et al., Pereira, et al., 2006). Furthermore, the women describe care that does not meet the standards set by the NICE guidelines (2004), the RCP report (2012) and the care pathway for Wales (2009) which state that patients should be able to access swift, appropriate treatment near their home.

Patients in the current study described having some of their negative expectations met, such as being tube-fed and putting on weight. This resonates with previous research which found that approaches that use tube-feeding as a means of weight restoration were not appreciated by patients with AN (Rosenvinge & Klusmeier, 2000; Noordenbos et al., 1998). Although it

is necessary to produce weight gain in those who are severely underweight, and tube feeding represents safe method for enhancing outcomes for AN (Zuercher et al., 2003), it is important to remember the fear that this negative expectation invokes.

Importantly, the women explained that negative treatment experiences resulted in them having negative expectations of future encounters with the NHS. Their negative expectations of future treatment included having to put on weight without appropriate psychological treatment; failure to diagnose and/or refer to other services; lack of support; lack of trust; lack of individual treatment; and that treatment would make the anorexic behaviours worse. The findings echo literature that describe patients' descriptions of negative treatment experiences (Roots et al., 2009) and that treatment sometimes made the situation worse rather than being helpful (Newton, Robinson, & Hartley, 1993). Therefore, it is reasonable to expect that negative treatment experiences will result in poor motivation and reluctance to engage in future treatment.

Satisfaction with the health service

The patients were satisfied with some HCPs knowledge of AN but not others. They were more satisfied when they received care from a specialist facility compared to generic services. They were satisfied when HCPs tried to find out more about AN, as this made the women content that the HCPs were doing all they could. Participants were also satisfied when there was a contract and negotiation regarding treatment plans between the practitioner and patient. The women appreciated the support that they received from the service and felt satisfied when the place of treatment was made to feel welcoming.

Patients were not satisfied with the lack of local specialist services, long waiting lists, short treatment plans, and lack of communication across NHS departments and sites. The women expressed difficulty in being able to say whether they were satisfied or dissatisfied overall, preferring to list the pros and cons. Although they were not satisfied with some parts, they were also satisfied with others and recognise the effort that some HCPs put into their care. Patients stated that they expressed lack of satisfaction directly through anorexic behaviours, such as purposely losing weight in retaliation or withdrawing from treatment. Therefore, establishing which aspects of care that patients are satisfied with is not only useful to evaluation of services, but it is critical in improving outcome of the disorder. Crucially, the women acknowledged that it was difficult to be satisfied because of the nature of the

disorder, and that treatment for this illness was not as straightforward as that of a physical condition.

Improving the Welsh healthcare service

The findings of the current study are in stark contrast with practice guidelines, care pathways and reports regarding the key service characteristics required for high quality ED care (NICE, 2004; RCP, 2012; WAG, 2009). Current practice guidelines suggest that treatment should: be near the patient's home; use appropriate, evidence-based psychological therapies delivered by specialists with experience in ED; involve patients' families; include medical monitoring of patients; involve multidisciplinary services; and include treatment by staff with an appropriate range of skills and competencies (NICE, 2004). Key aspects of high quality care have been identified by patients, carers and HCPs in previous studies exploring stakeholders' perceptions of treatment for EDs. The aspects include: rapid access to care; good therapeutic relationship; professional skills and qualities of staff; holistic approach; client-centred care and support; access to high quality, specialised treatment; psychological interventions; good accessibility and availability; and continuity of care (Nishizono et al., 2010; Escobar-Koch et al., 2010; Koskina et al., 2012; Fairburn and Harrison, 2003; Reid et al., 2008). The current study provides support for extant literature which states that access to evidence-based treatments and high quality specialist care is inconsistent or non-existent in many areas of the UK (Royal College of Psychiatrists, 2001), and attempts to deal with low quality care in ED services is urgently needed (Nishizono-Maher et al., 2011).

Limitations of Study 1

Participants

The homogenous nature of the group of participants who took part in this study poses a problem for the generalisability of the results. There were only seven participants, all white females who all from the same NHS Trust area. Therefore, some, if not all of the results may apply only to participants whose demographics match the sample. Although data was collected from only one NHS area, results could be used to inform NHS approaches to treatment for AN in general across the country as participants had received care from other NHS areas and furthermore private treatment. The results, in part, are also supported by previous research, therefore demonstrating that they may be applied outside the sample recruitment area. Importantly, calls for the patient voice to be heard have been met by this

study, relationships between expectations and satisfaction have been suggested, and a holistic approach used to explore the treatment journey that was experienced.

Method of data collection and analysis

Qualitative studies often recruit small numbers of participants, and this was true in this study as recruitment of people with AN was especially difficult. As data were collected using qualitative methods, the results were rich in detail and saturation was achieved. This is important to note, as this demonstrated that participants reported similar concepts, themes and subthemes, despite having had a variety of different experiences. Researcher bias could have affected the analysis of data and results. Therefore, this was mediated by having two further, independent researchers coding the data to check for similarities and differences. Any differences were clarified and a compromise agreed.

All patient had been diagnosed with AN (between 6 and >25 years) and receiving treatment (between 1 and 12 years) for some time. The participants may have chosen to take part in the sample because treatment was not working for them and they wanted to tell about their negative experiences. Nevertheless, such patient views are important to future development of services, as 20% people with AN never recover (Steinhausen, 2002).

HCP awareness of AN should be improved

A key finding in the current study is that the women experienced significant problems when they encountered HCPs who had little or no awareness of EDs. Firstly, lack of awareness prevented the patients from receiving timely diagnoses and treatment. The women reported visiting HCPs on a number of different occasions before the disorder was detected. AN is a complex mental health problem characterised by denial of the seriousness of the condition by its sufferers. Therefore, it is crucial that HCPs are aware of the diagnostic criteria, screening procedures and referral protocols to ensure that patients receive early intervention. Indeed, the care pathway for Wales highlights that HCPs should have the knowledge to be able to manage initial care of people with EDs.

A further problem associated with little or no knowledge of AN by HCPs is the impact it has upon the TA and motivation to recover. The women in this study reported that they were often faced with HCPs who were dismissive of the seriousness of the illness. The women reported negative expectations such as expecting to be turned away from treatment because they were not thin enough. This was realised when HCPs told them to go away and eat, to

lose more weight in order to receive treatment or that they were attention-seeking. Therefore, the lack of knowledge by HCPs resulted in lack of professionalism and competence to perform their roles. Unfortunately, without prior knowledge of the disorder and its characteristics, the HCP might think that they are behaving in the correct way. The lack of knowledge formed a barrier to developing the TA with the HCP, and made patients less likely to trust HCPs and develop TAs with them in future. This is a significant concern given that TA has been noted to be a key factor in the treatment outcome of patients with AN.

The interpersonal skills of HCPs were reported to be important to development of the TA. If HCPs were informed about the sensitive nature of the disorder such as fear of gaining weight, the importance of interpersonal skills could be emphasised. Furthermore, HCPs may also benefit from receiving training that develops the HCPs interpersonal skills specifically with patients who have AN, although it may not be realistic or achievable to expect every HCP to receive such training.

Finally, little or no knowledge by the HCP meant that the women in the current study felt amotivated to change, felt there was no point in engaging in treatment if they were going to be treated in a negative way by HCPs who didn't understand their disorder. This meant that the patients withdrew from treatment, and sometimes purposely lost weight in retaliation. Little or no knowledge of the disorder enabled the patients to easily manipulate their treatment so that they could continue their anorexic behaviours. Therefore, lack of knowledge of the disorder by the HCP meant that the outcome of the patients was negatively affected.

Overall, the impact of little or no knowledge of AN by HCPs has severe effects in terms of the outcome of AN treatment. The findings of the present study support research which highlights that knowledge of the disorder by HCPs is preferable. It is important to note that the disorder is complex and difficult to understand. Furthermore, at present only FBT treatment for adolescents with AN has received adequate support regarding efficacy. Nevertheless, awareness of the characteristics of the disorder, simple screening tools and referral procedures would enable HCPs to feel confident to approach patients with the disorder, and would have potentially positive benefits in terms of timely diagnosis and treatment as well as developing the TA and motivation to change.

Study 2

Development and Evaluation of an Anorexia Nervosa Awareness Campaign for Healthcare Professionals

Literature Review Study 2

The Importance of HCP Knowledge of AN

Given the high mortality rate (Keel et al., 2003) and physical and mental effects of AN (Crisp & McClelland, 1996; Schoken, Holloway & Powers, 1989; Sharp & Freeman, 1993) it is vitally important that HCPs have raised awareness and knowledge of the disorder. Despite the availability of guidelines regarding AN symptoms and treatment, patients confirm that some HCPs have limited or incorrect knowledge about AN (NICE, 2004; Rees-Davies, John & Limbert., 2011). Early diagnosis with intervention and earlier age at diagnosis are significantly correlated with improved outcomes in patients who have EDs (Herzog, Nussbaum, & Marmor, 1996). Increased knowledge of AN also facilitates development of therapeutic alliance between the HCP and patient (Zipfel, Lowe, Reas, Deter & Herzog, 2000; Rees-Davies et al., 2011; Pereira, Lock & Oggins, 2006).

The high mortality rate and severe physical and mental effects of AN warrant HCPs to have raised awareness and knowledge of the disorder (Keel et al., 2003; Crisp & McClelland, 1996; Schoken, Holloway and Powers, 1989; Sharp and Freeman, 1993). Knowledge, or literacy, of AN has been described as knowledge and beliefs about AN which will aid recognition, management or prevention of the disorder (Jorm, Korten, Jacomb, Christensen, Rodgers & Pollitt, 1997). Unfortunately, the results from Study 1 suggest that HCP awareness of AN is often insufficient.

Individuals with an ED are usually seen by a HCP several times before AN is detected. This indicates the need for medical providers to be knowledgeable and prepared to effectively treat ED sufferers (Clarke & Polimeni-Walker, 2004). Despite guidelines regarding AN for HCPs being freely accessible (e.g. NICE, 2004), the participants in Study 1 reported that HCPs had limited or incorrect knowledge about the disorder (Rees-Davies et al., 2011). Diagnosis of EDs can be elusive, and more than one half of all cases go undetected (Rees-Davies, Limbert & John, 2011; Becker, Grinspoon, Klibanski & Herzog, 1999). Recent research confirms that HCPs have gaps in knowledge regarding the assessment and treatment of EDs (Currin,

Waller & Schmidt, 2009; Linville, Benton, O'Neil & Sturm, 2010; Striegel-Moore, Leslie, Petrill, Garvin & Rosenbeck, 2000). A recent study found that only one third of individuals with an ED were not asked about problems with eating by the HCP even though more than 80% of them had sought treatment for other mental health problems (Mond, Myers, Crosby, Hay, & Mitchell, 2010). Bauchner, Simpson and Chessare (2001) suggest that when physicians make diagnostic and therapeutic decisions, they go through a complex decision making process in which three domains influence medical decision making: physician experience and knowledge (i.e. knowledge of EDs); patient characteristics and values (i.e. characteristics of the person with anorexia); and external clinical evidence. In an acute and urgent situation, the physician knowledge and experience may be the larger, most active domain. The HCP could fail to diagnose or refer if their knowledge of the disorder is limited and they attribute characteristics of the disorder to the person rather than being empathetic (e.g. when a patient is not truthful about their diet). Therefore, knowledge and awareness of AN is critical in situations where the physician is expected to make decisions regarding diagnosis, treatment or referral.

Delays in appropriate treatment have had potentially adverse consequences for prognosis (Bryant-Waugh et al., 1992) and furthermore a lack of knowledge and consequent delays to early intervention have negative effects on therapeutic alliance partly due to reduced trust in the HCP (Rees-Davies et al., 2011). A national survey of 3066 physicians, nurses, social workers, nutritionists, and psychologists in the United States explored perceptions of training and competency; and both physicians and nurses reported major deficits in the area of EDs (Blum & Bearinger, 1990). In recent survey, nearly 78% of medical providers were unsure how to treat patients that had an ED (Linville, Benton, O'Neil & Storm, 2010). Linville et al. (2012) also surveyed 260 HCPs regarding screening and diagnosis of anorexia. They found that a large proportion of the professionals felt unable to treat (60%) or screen (42%) for EDs because they didn't have the skills, and nearly 36% felt that the resources to help adequately treat patients with EDs were not in place. Alarming a high proportion (68%) felt that the ED symptoms were not the presenting concern and so they did not screen further. Not surprisingly, almost a third of HCPs reported that they had missed the diagnosis of an ED. The findings of Linville et al. (2012) support previous researchers who have suggested that education interventions should be aimed at GPs in order to raise awareness of the disorder.

General public attitudes towards AN have been moderately negative and research suggests that a negative social stereotype of persons suffering with AN exists (Crisp, 2005; Crisp, Gelder, Rix, Meltzer & Rowlands, 2000; Stewart, Schiavo, Herzog & Franko, 2008; Stewart, Keel, Schiavo, 2006). The egosyntonicity of people who have the disorder, and the related fear of and resistance to interventions, can fuel negative public perceptions (Crisp, 2005). In addition to the negative stereotype, there is ambivalence concerning the severity of the disorder (Mond, Robertson-Smith & Vetere, 2006; Crisp, 2005). Research reports a tendency for HCPs to also hold negative attitudes towards patients with anorexia, and that such attitudes present difficulties when providing treatment (Crisafulli, Von Holle & Bulik, 2008; George, 2008). For example, a study in Australia revealed that people with EDs were less liked than those with schizophrenia, and those with AN were seen as responsible for their illness almost to the same degree as recurrent overdose takers (Mond, Robertson-Smith & Vetere, 2006). Such negative attitudes by HCPs about people with EDs can affect treatment alliances and outcome (Loeb et al., 2005; Pereira et al., 2006; Crisafulli et al., 2008). Decreasing the stigmatising beliefs of providers and behaviours by providing education regarding the disorder would likely result in better access to care and more successful referrals and outcomes for patients with EDs (Thompson-Brenner, Satir, Franko, & Herzog 2012).

The Organismic Integration Theory within the Self-determination Theory (Ryan & Deci, 1985, 2000) suggests that there are different types of extrinsic motivation. The results from Study 1 confirm that patients describe their motivation to engage in treatment and recover is variable, and is affected by different factors. High HCP knowledge of AN is expected by patients. Often patients do not present to healthcare services to achieve diagnosis or treatment of AN. If patients have presented to the healthcare service, often it is because other people have taken them e.g. family or friends. The disorder means that patients have negative expectations of treatment when they present to the healthcare services for the first time. For example, one of the characteristics of the disorder is an intense fear of gaining weight or becoming fat. Therefore, the patient will likely have negative expectation of treatment is that the HCP will make them fat. The patients also report concern that the HCPs will be authoritarian. This can be cause for concern for the patient, as one aspect of the disorder is that patients prefer to be in control of their anorexic behaviours. Therefore, if and when patients present to healthcare services, they will often be reluctant to engage in treatment, and are ambivalent about recovery. It is important that when patients do present to

healthcare services, that the HCP appreciates how difficult the experience may be for the patient. When the HCP is warm, understanding, and knowledgeable then this develops the TA. This is important as the patient is more likely to engage in treatment and have a better outcome. Furthermore, according to the SDT, when the patient's basic needs are met, i.e. autonomy, relatedness, and competence, then the patient is more likely to accept treatment and encourages development of internally regulated motivation to recover.

When a patient presents to healthcare services and the HCP is not knowledgeable about the disorder, this can decrease their motivation to recover and increases their anorexic behaviours. Patients reported examples of HCPs lack of knowledge and the impact it had upon their treatment and recovery. For example, a patient presented to healthcare services and was told by the HCP to go away and eat three meals a day. In another example, the patient was told that they were not underweight enough to receive treatment, and to come back when they had a lower BMI. The patients would have been reluctant to engage with services prior to this, but report that they either went away and didn't seek help for a long time afterwards, or went away and purposely lost weight in order to be taken seriously. According to the SDT (Ryan & Deci, 2000), these experiences would thwart the basic psychological needs of patients, therefore reducing their motivation to engage in treatment and recover.

This has a negative effect on the way that patients interact with healthcare services. Their motivation to engage in treatment and recover would be poor after their positive expectation was not met (i.e. that they thought that the HCP would be knowledgeable and support them). Therefore, they are less likely to be satisfied with the service, and less likely to have a positive outcome (i.e. recover). This confirms that the SDT (Ryan & Deci, 2000) should be considered when determining the factors that affect treatment outcome for AN. Lack of knowledge by the HCP would mean that the patient's basic psychological needs were not met, as they are less likely to form a therapeutic alliance with the HCP (relatedness), less likely to feel able to recover (competence), and less in control of their recovery (autonomy). This all contributes to barriers of engaging in treatment for AN.

HCPs also report negative feelings towards patients with AN, and report low levels of confidence in ability to detect, assess and refer patients with AN. The Welsh care pathway (WAG, 2009) suggests that HCPs at all levels have a responsibility to provide basic care for people with AN. Unfortunately, the evidence from Study 1 suggests that this is not

happening at present. Therefore, it is justified to suggest that there is a need to begin by raising HCP awareness of AN, so that HCPs may think about patients with AN differently in future.

The Self-Determination Theory (SDT: Ryan & Deci, 2000) that was applied in Study 1 is also useful for Study 2 when considering the behaviour of HCPs towards patients with AN. The theory proposes that people are more likely to be motivated to carry out behaviours if they fulfil basic psychological needs. For example, the HCP will be more motivated to behave towards patients in a particular way if they feel that they will be more competent at their roles as a result (the need for competence). The HCP may be more likely to engage in a behaviour if they believe that it will encourage a positive therapeutic alliance (the need for relatedness). Finally, if the HCP is provided with the opportunity to learn more about AN, this encourages autonomy in their professional development as HCPs. The fulfilment of the HCP's basic psychological needs will conduce towards a more internally regulated type of extrinsic motivation, and the HCP will be more likely to engage in behaviours that are encouraged by practice guidelines (e.g. NICE, 2004; RCP, 2013; WAG, 2009) and favoured by stakeholders.

Development of Behaviour Change Interventions for HCPs using the Social Marketing

Approach

Social cognition models have been developed to describe and predict behaviours, and more recently, the models have been used to develop behaviour change interventions (Ogden, 2004). Although behaviour change models and theories (e.g. Theory of Planned Behaviour (TPB) and Health Belief Model (HBM)) have been used to *predict* and *explain* behaviours, the way they are applied to behaviour change interventions is often elusive. Therefore, it is important to consider not only the theory that should be used to inform the intervention, but the *process* of *development* that should be utilised in order to provide a framework for intervention development that includes behaviour change theory at the core.

Unfortunately, there are difficulties in achieving change in practice, with only some evidence of successful strategies (NHS, 1999; Walter, Nutley, & Davies, 2003; Grimshaw, et al., 2001; Davis & Taylor-Vaisey, 1997; Bero, et al., 1998; Lavis, et al., 2005; NICE, 2007; Robertson & Jochelson, 2006). Grimshaw et al. (2001) note that their systematic review highlights the fact that despite 30 years of research in this area, we still lack a robust, generalizable

evidence base to inform decisions about strategies to promote the use of guidelines or other evidence based measures in practice.

When designing campaigns to enhance people's well-being, health officials draw from numerous fields, theories, frameworks and techniques (NICE, 2007). In the 1970s, Kotler and Zaltman suggested that marketing principles could be used to sell ideas, attitudes and behaviours. Just as a brand of toothpaste can be effectively marketed by making it available to consumers in convenient locations, pricing it relative to competitors endowing it with attractive perceived benefits, and advertising it in persuasive ways with sufficient frequency, behaviours such as handwashing can be marketed to HCPs (Evans & Hastings, 2008). Therefore, Social Marketing (McGuire, 1968, 1972) is now a widely accepted approach in the field of health promotion and is commonly used by governmental health departments, such as the UK Department of Health, to design large-scale campaigns promoting healthy lifestyles to millions (Department of Health, 2008; NICE, 2007). NICE (2007) also selected the marketing approach for intervention design because of the potential learning which could be transferred from marketing to public health. The UK National Consumer Council's 2006 report 'It's our health!' confirmed the potential of social marketing to improve behavioural intentions, and one of the report's main recommendations was to establish a 'National Social Marketing Centre' (NSMC) to build national and local capacity and skills in social marketing. The NSMC was launched in 2006 by the UK government, and is now the centre of excellence for social marketing and behaviour change in the UK.

Social marketing is a multifaceted approach to behaviour change that is advocated in the literature (Pittet et al., 2000; Naikoba & Hayward, 2001). Central to marketing is the exchange of value between the marketer and consumer. If the marketer can promote a product or service to make the consumer perceive sufficient value, the consumer is more likely to purchase it. The marketers' objective is to create value for consumers and thereby financial benefit for the marketer or the clients. Social marketers use the same powerful idea in a different way – not to sell products and services for the benefit of the marketer but to promote socially beneficial causes and behaviours for the benefits of the audience (Hastings, 2007). Therefore, the approach seeks to influence voluntary behaviour, often through incentives in the form of marketing offers targeted to key population segments (Rothschild, 1999).

It is an attractive approach in which promoters identify the activity to be promoted and the barriers to this activity, and then design a strategy to overcome these barriers using psychological knowledge regarding behaviour change (McKenzie-Mohr, 2000). With 40 years of academic and practical development, it is an established approach to designing interventions that aim to achieve behavioural change (Andreasen, 2002) that has received growing support (Edwards, et al., 2012). The approach used marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behaviour for the benefit of individuals, groups or society as a whole (Kotler, Roberto & Lee, 2002; Marks, Murray, Evans and Estacio, 2011).

The social marketing approach has been used to develop campaigns for a number of different health topics, including physical activity (Wilson et al., 2013; Wong et al., 2004; Huhman et al., 2007; Berkowitz et al., 2008; Berkowitz, Huhman & Nolin, 2008; Price et al., 2008; Heitzler et al., 2008), improved nutrition (McDermott et al., 2005; Shive & Neyman Morris, 2006; Wechsler et al., 1998; Johnson et al., 2007; Peterson, Abraham & Waterfield, 2005), management of diabetes (Gallivan et al., 2007; Almendarez, Boysun, & Clark, 2004; Richert et al., 2007), heart disease (Long et al., 2008), STDs and family planning (Wackett, 1998; Cho et al., 2004; Montoya et al., 2006; Ahrens et al., 2006), HIV/AIDS (Futterman et al., 2001; Lombardo & Leger, 2007), smoking cessation and prevention (Schmidt, Kiss, & Lokanc-Diluzio, 2009), student drinking (Dejong et al., 2006), and alcohol-impaired driving (Elder, Shults, Sleet, Nichols, Thompson & Rajab, 2004). Therefore, the approach has been effective with a range of target groups, in different settings, and can influence policy and professional practice as well as individuals (Stead, Gordon, Angus & McDermott, 2007).

Morris & Clarkson (2009) argue that the social marketing approaches being adopted in public health also provide a potent strategy for achieving change from practitioners. The application of marketing to social goals has enabled the health provider to be effective in persuading the audience of HCPs to adopt the desired behaviour that benefits the organisation (e.g. healthcare setting) and its stakeholders (e.g. patients). Marketing approaches are also increasingly being used in health care to improve dissemination of information to HCWs and to promote behaviour change (Mah, Deshpande & Rothschild, 2006; Edwards et al., 2012). A social marketing approach has been applied theoretically to the implementation of best practice in mental health (Andreasen, 2004), handwashing (Mah, Deshpande & Rothschild, 2006), physician prescribing practices (Majumdar & Soumerai, 2003), and infection

prevention and hand hygiene (Edwards et al., 2012). The unique contribution of the marketing mind-set is a systematic commitment to reduce barriers to behaviour, to offer additional immediate rewards for adherence, and to fit desired behaviours into daily work routines without creating new hassles (Social Marketing Institute, 2013; Majumdar & Soumerai, 2003).

Structure of the Social Marketing Approach

The social marketing approach to designing a campaign is a systematic process. Social marketing is a systematic and planned process. The NSMC (2010) identifies six steps: Getting started, Scope, Develop, Implement, Evaluate and Follow-up. Furthermore, Wright, Sparks and O'Haire (2008) suggest conducting the research over three phases: formative, process evaluation, and process outcome (Wright, Sparks & O'Hair, 2008).

Formative Research

Getting started: establish the issue of challenge that needs to be addressed and who is affected.

Scope: includes consideration of which interventions to select, based on what is likely to achieve and sustain the desired outcome. This includes bringing people together who might be important for the intervention.

Development: is where the interventions selected as a result of scoping are taken forward. At this point, an understanding of the target audience behaviours and goals would be ascertained. Here, pre-testing with the audience would also be carried out and the intervention adjusted accordingly.

Process evaluation

Implement: is the point where the intervention goes live. At this point, monitoring and evaluation of the process should take place, as well as gathering feedback from the stakeholders. The wider environment should also be considered regarding changes that might affect the intervention.

Outcome Evaluation

Evaluate: at this point, the impact of the intervention should be evaluated to determine if it is making a difference, including its strengths and weaknesses.

Follow-up: is where the results of the evaluation are considered by the intervention designer and stakeholders. Implications are noted and forward plans are made.

Criteria for successful intervention development

The NSMC (2011) has reviewed behaviour change programmes to discover the criteria for success: Behaviour; Consumer Orientation; Theory; Insight; Exchange; Competition; Segmentation; and Methods mix.

Behaviour: the researcher should establish the behaviour that needs to be changed. For example, if hygiene on wards has been noted to be a factor in the spread of infections, then handwashing may be identified as the behaviour that the intervention should change.

Segmentation: the NSMC suggests that intervention developers should avoid a ‘one size fits all’ approach. Audience segmentation is general based on sociodemographic, cultural and behavioural characteristics that may be associated with intended behaviour change. In targeted communications, messages are prepared using information about population groups, for example, a healthcare professional working in a hospital (Evans & McCormack, 2008). Marketing approaches emphasise developing and marketing a message (a guideline or change proposal) which meets the needs of the target group and helps them to achieve their goals. The strength lies in emphasising the need to adapt proposals for change to the target group of HCPs, with their particular needs and perceived barriers to change (Grol, 1997). Audience segmentation includes classifying the audience so that the intervention can be tailored according to the specific needs of each subdivision. It is a research-derived practice of dividing on the basis of current behaviour, readiness to change, desired benefits, barriers to performance, lifestyle, or values (Mah et al., 2006).

Consumer orientation: After audience segmentation has been established, consumer orientation is achieved by carrying out research to gain insight into the knowledge, attitudes, beliefs, and social context in which the audience live and work. This is then used to inform the design and implementation of the intervention (NSMC, 2010; Rogers, 2007). Consumer

orientation therefore involves HCPs in the development and testing of interventions, selection of the messages and the launch of the campaign (Pittet et al., 2000). This process results in tailored health messages designed to influence specific subgroups of a target audience based on individual member characteristics (Rimal & Adkins, 2003). The benefit of such messages is that they tend to be more effective than generic messages in influencing cognitive and behavioural changes in the target audience(s) (Davis, Cummings, Rimer, Sciandra, & Stone, 1992; Kreuter, Oswald, Bull & Clark, 2000; Rimal & Adkins, 2003; Rosen, 2000).

The focus is upon the audience. Therefore, the researcher should attempt to understand the audience in terms of their lives, attitudes and current behaviour. A range of research analyses and combination of qualitative and quantitative data should be used. The intervention should be pre-tested with the audience, and the audience should be involved in design rather than just treating them as research subjects. Social marketers are audience driven, as all activities intended to influence behaviour are designed to address the perceptions, needs, and wants of the people who must perform the behaviour. Distinct groups require different strategies to elicit behaviour change (Rimer & Kreuter, 2006; Slater, Kelly, & Thackeray, 2006).

Marketers seek to understand from the audience's perspective the benefit of performing a behaviour such as considering patients who may have AN (e.g. feeling competent at their role, feeling trusted by the patient), the barriers to performance (e.g. lack of knowledge, lack of skills, unsure where to gather information), the sources of social pressure to perform (e.g. from patients, peers or management), and the availability of competing choices (e.g. not performing the behaviour) and the reasons these choices are preferred over the desired behaviour. Consideration should be given to people's feelings, motivations and current behaviour. It helps the researcher gain an understanding of what moves and motivates the target audience and influences the behaviour. It allows emotional and physical barriers to be identified. Therefore, insight can be used to develop an attractive exchange and suitable methods mix.

Exchange: considers the benefits and costs of adopting and maintaining a new behaviour. Identify the incentives and benefits that the target audience would gain. One of the fundamental theories required in social marketing initiatives is the economic exchange theory. It postulates that human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives. It is considered a core component in social marketing, is included in both published versions of the social marketing benchmark

criteria (Andreasen, 2002; French & Blair-Stevens, 2006) and has considerable importance in developing the price and product mix components (Hastings, 2007; Kotler & Lee, 2008). Exchange theory suggests that social marketers provide strong incentives emphasizing that the benefits outweigh the costs (Kotler & Lee, 2008). Although it is a fundamental in social marketing, a cost-benefit analysis alone does not create behaviour change. Thus, social marketing also relies on the use of health behaviour theory.

Competition: Understand what competes for an audience's time, attention, and inclination to behave in a particular way.

Theory: The social marketing approach involves the application of commercial marketing strategies to promote behaviour change (Andreasen, 1995) and draws on psychological theory (e.g. TPB, HBM), and persuasion psychology (e.g. Cialdini, 1984, 1993). The approach offers a greater understanding of the target audience and the factors that influence them and their actions. Theories should be identified after conducting consumer orientation research, should be used to inform and guide the methods mix and test theoretical assumptions as part of the intervention pre-testing. The use of behaviour change theory when developing interventions using the social marketing approach should help social marketers identify whether a particular behaviour is determined primarily by attitudinal, normative, self-efficacy, environmental or other social considerations, or a combination of these (Fishbein & Yzer, 2003), and then to design the marketing mix to address these determinants.

Insight: Consumer orientation allows identification of actionable insights that tell the researcher the 'truth' about the consumer based on their behaviour, experiences, beliefs, needs or desires, that is relevant to the task or issue and 'rings bells' with target people (NSMC, 2013).

Methods mix: As in traditional marketing, social marketing campaigns are developed and implemented on the four p's strategy: Product, price, place, and promotion. In social marketing, the product presented most often is a behaviour being encouraged, which often entails a change in lifestyle (e.g. exercise) or a change in healthcare use (e.g. screening). The price to pay is not just monetary, it involves giving something up that is satisfying (e.g. smoking). Place refers to where and when to deploy the marketing message. People will not go out of their way, so the message must reach them where they can pay attention, and most importantly, in situations when they might be ready to make a decision or to change health

habits (e.g. physician office). Finally, promotion stands for the techniques and media used to disseminate the social marketing message.

Theoretical basis of the intervention

Based on the social marketing approach, theory-driven information should be used to design the campaign. Indeed, there have been calls for theory based research to inform the design of interventions to change HCP behaviour (Grimshaw, Eccles, Walker & Thomas, 2002; Grimshaw et al., 2001). Unfortunately applying theories into programme design remains a challenge (Kok, Schaalma, Ruiter & Van Empeten, 2004). Nevertheless, including psychological theory to inform campaign development is essential, and so the current campaign was developed using two groups of theory that relate specifically to the role of information in changing behaviour. The first are psychological models that try to explain how and why people change their health behaviour. The second stem from persuasion and communication theory and explain how a message is transmitted to a receiver and help us to understand how that message can be tailored to best effect (Robertson, 2008).

The SDT (Ryan & Deci, 2000) and the findings from Study 1 were used as a basis to design the content of the intervention in Study 2. More specifically, the intervention should be designed with due consideration of the basic psychological needs of patients, namely autonomy, relatedness and competence. A more detailed explanation of SDT, including its relevance to patients with AN, is provided in the literature review and discussion sections of Study 1. Importantly, the SDT is also applicable to employee behaviour in the workplace. A lack of knowledge regarding AN may make the HCP feel that their own basic psychological needs are not met. For example, the HCP may not feel competent to engage in behaviours related to the care of patients with AN. The HCP may not feel relatedness with the patient as the patient is ambivalent towards treatment and denies behaviours associated with the disorder. The HCP may not feel autonomous in caring for patients with the disorder, as they may feel that they do not have the necessary skills or knowledge to communicate with such patients and may make the situation worse. Therefore, in order for HCPs to be motivated and engage with activities that are commensurate with care of people with anorexia, their basic psychological needs must also be met.

Social cognitive models and theories of behaviour

Models of social cognition and behaviour change have been devised and evaluated, and combinations of the models have been utilised in order to convey messages designed to evoke behavioural change. Numerous theoretical perspectives have been applied in the health sphere. For example, interventions have been developed using the Health Belief Model (HBM: Becker, 1974), Social Cognitive Theory (SCT: Bandura, 1977), the Theory of Planned Behaviour (TPB: Ajzen, 1991), Protection Motivation Theory (PMT; Rogers, 1975) and Terror Management Theory (TMT: Greenberg, Pyszczynski, & Solomon, 1986). Such theories focus on cognitive variables as part of behaviour change, and share the assumption that attitudes and beliefs as well as expectations of future events and outcomes are determinants of health related behaviour (Stroebe, 2000; Gebhardt & Maes, 2001). The results from Study 1 confirm that expectations of future events and outcomes indeed determine how patients with AN engage with treatment and are motivated to recover. Furthermore, the knowledge of HCPs regarding the disorder can have an impact upon the expectations of those patients in future. This emphasises the need to increase HCPs awareness about the disorder. Importantly for social marketing, there is an overlap in the variables of the different models (Conner & Norman, 1996). Therefore, components of the models can be used for development of campaigns to raise awareness and information seeking behaviour of HCPs regarding AN.

The Health Belief Model (HBM: Becker, 1974) was developed to predict and explain health behaviour and includes the following core constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, self-efficacy and cues to action. ‘Perceived susceptibility’ refers to the individual’s perceived risk of continuing with the current course of action, and ‘perceived severity’ refers to the person’s perception of the seriousness of the consequences. The effect of the action is evaluated by the individual. For example, ‘perceived barriers’ refers to the individual’s perceived disadvantages of carrying out the recommended behaviour, while ‘perceived benefits’ relates to the advantages of the alternative course of action. ‘Self-efficacy’, or the person’s confidence in their ability to carry out the behaviour, affects the likelihood of the recommended behaviour. Finally, ‘cues to action’, or events that trigger behaviour, have been identified as a factor influencing behaviour. For example, advice from others, information from media sources, or reminders from healthcare services.

Murray-Johnson and Witte (2003) argue that campaign messages should contain cues to action, or message features that prompt individuals to pay attention to the content of messages. Cues to action are needed to trigger motivation, and they can be developed from sources internal to audience members, such as guilt or fear, or external sources, such as using credible spokespersons to motivate change. Furthermore, variables such as perceived severity of the threat, perceived susceptibility, and attitudes, beliefs, values, and perceived resources surrounding a health issue all influence the salience of messages.

The SCT (Bandura, 1986) suggests that there are three factors that affect human behaviour, namely cognitive, environmental and behavioural. Cognitive factors include knowledge, expectations and attitudes regarding the recommended behaviour. Environmental factors include the social norms and the ability to change one's own environment. Behavioural factors include a person's skills, practice and self-efficacy (confidence) regarding the proposed behaviour.

The Theory of Reasoned Action and Planned Behaviour (TRA: Ajzen & Fishbein, 1980; TPB: Ajzen, 1991) suggests that an individual's attitude about behaviour (i.e., evaluation of the behaviour as a positive, negative or neutral) is influenced by his or her beliefs about the behaviour. More specifically, the person's attitude is formed from the person's salient beliefs regarding the outcome of the behaviour i.e. if they believe that performing the behaviour will result in a positive outcome, they are more likely to hold a favourable attitude towards it. Similarly, the person's subjective norms refer to the person's belief that specific individuals or groups think he/she should, or should not, perform the behaviour, as well as the motivation to comply. The TPB was developed to include behaviours that are not under volitional control, known as perceived behavioural control. This is the perceived ease or difficulty of performing behaviour and refers to past experiences as well as future obstacles.

Similar to the HBM and social cognitive theory, the TRA also takes into account an individual's resources, skills, self-efficacy, opportunities, and ability to engage in the proposed behaviour. Some of these factors may be internal (e.g., skills) or external to the person (e.g., opportunities to change behaviour), and they can either inhibit or facilitate the person's perceived control over the proposed behaviour (Ajzen & Fishbein, 1980). Although behavioural intentions are often predictive of actual behaviours, there is no guarantee that behavioural intentions will ultimately lead to behavioural changes.

Recently, a systematic review by Godin, Belanger-Gravel, Eccles and Grimshaw (2008), showed that the TPB was found to be the best predictor of HCP behaviour. Work by Jenner, Jones, Fletcher, Miller and Scott (2007) used an extended model of the TPB and found that the construct of personal responsibility as well as attitudes were significant predictors of the intention to practice appropriate hand hygiene behaviour, whilst perceived behavioural control, control and intention were significant predictors of behaviour (i.e. hand hygiene practice).

Similar to the subjective norm in the TPB, receivers may sometimes try to understand and remember only what interests or motivates them in a message (Rogers, 2007). Perceived personal relevance may be critical to the emotional and cognitive impact of threat information (Ruiter, Abraham & Kok, 2001). Receivers intentionally call on their own relevant attitudes and beliefs in order to accept or reject the persuasion of the message. Alternatively, the sender message may be dynamic enough to intentionally or unintentionally arouse particular attitudes and salient beliefs within the receivers (Rogers, 2007).

Protection motivation theory (PMT; Rogers, 1975; Rogers, 1983) argues that any information about a threat initiates two cognitive processes: threat appraisal and coping appraisal, and factors that increase the likelihood of performing the response are response-efficacy and self-efficacy (Self & Rogers, 1990). Murray-Johnson and Witte (2003) advocate using high-fear interventions only in cases where target audience members possess response efficacy, and perceived ability to easily perform the recommended response behaviours promoted in the campaign. Cautioned use of fear arousal techniques seems advisable (Ruiter et al., 2001), and the use of moderate fear-arousing interventions maybe more appropriate (Hale & Dillard, 1995; Stephenson & Witte, 2001).

Terror Management Theory (TMT) was proposed by Greenberg, Pyszczynski, & Solomon (1986), and was based on the writings of Ernest Becker. In Becker's book, *The Denial of Death*, he described an important paradox that he believed to be at the core of human existence. Humans have an awareness of mortality and that death is inevitable. Death can occur at any time, in a variety of different ways. Becker proposed that this knowledge is juxtaposed with the survival instinct, that this creates a paradox, and that the ultimate goal of human life is to deal with this paradox. Humans continuously strive to manage their existential anxiety (Becker, 1973). Greenberg and colleagues followed on from Becker's work, proposing that humans manage this anxiety, or "deny death", in a number of ways.

According to TMT, once death is made salient to us (i.e. once our mortality is brought into our conscious awareness), we employ a number of defensive mechanisms, including investing in a cultural worldview, and bolstering our self-esteem.

To deal with the “terror,” of death, each person’s worldview serves as a cultural anxiety buffer. The worldview is a collection of beliefs about such things as personal meaning, morality, and self. As such, the person attempts to gain either symbolic immortality (e.g., feeling as though you will live on after death by means of your life’s work) or actual immortality (e.g., belief in an afterlife, reincarnation, etc.). People maintain faith, preserve self-esteem, and obtain a sense of symbolic immortality, by living up to the standards of their cultural world view. It is used as an overall interpretive framework from which one can understand events. While this cultural anxiety buffer is built from things that people glean from their social environments, each individual carries a set of personalized coping mechanisms that serve as a barricade against his or her fears. For example, people create social networks, normative rules, religious organisations, and other institutions for procuring life-meaning and self-worth. By incorporating these into their cultural worldviews, people are able to fill their lives with a sense of value and existential meaning.

When thoughts of death are activated in a person, but are no longer in conscious awareness, self-esteem contingencies offer ways to manage mortality concerns and thus become especially influential in one’s behaviour and decisions (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). In other words, after being exposed to a death-related message, people are more likely to engage in a behaviour that is perceived to be beneficial for their self-esteem, as a distal, defensive response to mortality salience. Recent literature supports the concept that mortality salience may make a person engage in a life-threatening behaviour if it will increase their self-esteem. For example, when exposed to mortality salient messages, intentions to engage in binge drinking (Jessop & Wade, 2008), tanning (Routledge, Arndt, & Goldenberg, 2004) and smoking (Hansen, Winzeler, & Topolinski, 2010) have all been found to increase in individuals who perceive these behaviours to boost self-esteem.

A recent meta-analysis of the TMT literature (Burke, *et al.*, 2010) found the TMT mortality salience hypothesis to be robust. Specifically, moderate to large effect sizes were found across a range of manipulation types (i.e. death-related essay questions, subconscious death-related priming, death-related survey-based questionnaire, and death-related stories or videos), and across a variety of outcomes (i.e. attitude-based, behavioural, and cognitive).

According to TMT, appeals which account for self-esteem and world-view are more likely to be successful. It is important to note that the design of the current study did not include priming for mortality salience. As the viewers of the intervention would be HCPs, it was inappropriate to include references to their own mortality salience. The intervention was designed to raise awareness of AN in HCPs, so did not directly relate to HCP mortality. It was also inappropriate to expose HCPs to mortality salient reminders prior to viewing the poster, as this was not the aim of the study. Nevertheless, it was noteworthy to consider that if the suggested behaviour within the intervention was perceived by HCPs to raise their self-esteem, and was related to their worldview, then the message may have been more likely to be accepted.

Persuasion and communication theory

Cialdini (1993) suggests that there are six important factors that affect whether a person will say 'yes' to the requests of others: Reciprocity, scarcity, authority, commitment/consistency, liking and social proof. *Reciprocity* refers to the idea that people feel obliged to give back to others and feel a social obligation to those they owe. *Authority* suggests that people follow the lead of credible, knowledgeable experts. People feel a sense of duty or obligation to people in positions of authority. *Commitment (and consistency)* notes the deep desire that people have to be consistent. When an individual commits to something, they are more inclined to go through with it later. *Social proof* relies on people's sense of 'safety in numbers'. People are more susceptible to persuasion when they feel uncertain, and more likely to be influenced if the people they see carrying out a behaviour seem to be similar to them. *Liking* suggests that people are more likely to be influenced by people they like. Likeability comes in many forms, and again, people are more likely to be persuaded by people that are similar to them. Finally, *Scarcity* indicates that people are more likely to be influenced to want something if it is more difficult to get hold of, or the resources are scarce.

When viewing a health education campaign, a person may retrieve from memory a particular decision rule that can be used to evaluate the message, such as evaluating the sender credibility. This heuristic processing (Chaiken, 1987) can be an on-going process subject to change over a period of time. Receivers assess the credibility/merits of the person from which the message is coming from. According to Salmon and Atken (2003), the campaign messenger, or the person who provides information and testimonials or demonstrates appropriate behaviours during a health campaign, is crucial in enhancing the message

credibility. People increasingly depend on personal sources of information that they trust (Gladwell, 2000). Jenner, Jones, Fletcher, Miller and Scott (2005) suggest that persuasive messages which invoke a sense of personal responsibility should be utilised. This resonates with the models of social cognition that state that a personal must feel that they are susceptible and that the message applies to them.

The elaboration likelihood model (ELM) (Petty & Cacioppo, 1986) is a frequently cited theory of persuasion. The authors suggest that persuasion depends of the level of scrutiny given to a message. The level of scrutiny falls along a continuum from close scrutiny, or central processing, which involves examining and argument closely, to peripheral processing whereby short-cut cues are used to understand the message. The level of scrutiny depends on motivation; those who are less motivated use peripheral cues that lead to attitude changes that are not stable and less likely to lead to behaviour change; as opposed to those who are well motivated, undertake central processing and are more likely to lead to sustained changes in behaviour (Crano & Prislin, 2006). Messages can lead to both central and peripheral processing operating concurrently. The theory implies that information campaigns should seek to provoke central processing of their message, i.e. to provoke deep thought to bring about long lasting change.

The communication-behaviour change model was proposed by McGuire (1989). The module outlines the inputs and outputs in the process of persuasion in the communication behaviour change model, which is a useful framework when thinking about the design of an information intervention and the issues to consider. The five inputs in the persuasion process are: source (who delivers the message); message (what information included and how); channel (type of media); receiver (audience segmentation and consumer orientation); destination (the desired outcome of the intervention).

Mcguire (1989) suggests that for a message to travel successfully from source to receiver and reach its desired destination, there are 12 'output' stages that need to occur in response to these inputs. Each of these responses must occur before an individual can move on to the next stage: exposure to the message; attending to (notice the message); liking and becoming interested in it; comprehending it; skill acquisition (learning how to respond to it); yield to the message (attitude change); memory storage of content and/or agreement; information search and retrieval (be able to recollect the message); deciding on the basis of retrieval; behaving in accord with decision; reinforcement of the desired acts. The framework shows

the complexity of the process of persuasion and also highlights the fact that someone developing an information campaign needs to consider the journey of a message from source to destination. Each input is important. A well-designed message will have no impact, for example, if transmitted via the wrong channel.

Summary and Aims of Study 2

Existing literature, including the results from Study 1, suggest that HCPs' knowledge and awareness regarding AN is limited. This has had a negative impact on therapeutic alliance, motivation to engage in treatment, and treatment success. There are no existing campaigns to raise HCP awareness of AN. Therefore, the purpose of Study 2 was to develop and evaluate a pilot AN awareness campaign (ANAC) for HCPs. More specifically, the purpose of the campaign was to raise awareness of AN, prompt HCPs to seek further information regarding AN, and to raise HCP intention to consider AN when diagnosing patients in the future. The intervention was developed in reference to the SDT (Ryan & Deci, 2000) which emphasises the need for the patient to feel relatedness, autonomy and competence during treatment for AN.

The ANAC was developed using a social marketing approach: Formative research included interviews and focus groups with clinical psychologists, Nursing Students (NSs) and health psychologists-in-training; such data was then used in conjunction with a theoretical underpinning of social cognition, persuasion and models of behaviour change. Process evaluation was conducted with the initial versions of the ANAC, including evaluations by adult nursing and chiropractic practitioners-in-training. Questions were asked regarding current levels of knowledge and awareness of the nursing and chiropractic participants. Furthermore, the media used for the intervention was assessed regarding exposure of the target audience to the message. Outcome evaluation was carried out using evaluation questionnaires with GPs and Nurses.

Method

The social marketing approach was used as an intervention development framework across four phases. Figure 6 provides an overview of the approach used for the current study. Phase one was the formative research stage where the intervention was developed by considering the media type, audience segmentation, consumer orientation, exchange, competition, theory, insight and methods mix. Data was gathered using a qualitative approach. Phases two and

three included the process evaluation where the intervention was pre-tested and modified using a mixed methods approach. Phase four included the final phase of quantitative data collection, and included evaluation of the intervention in terms of effectiveness.

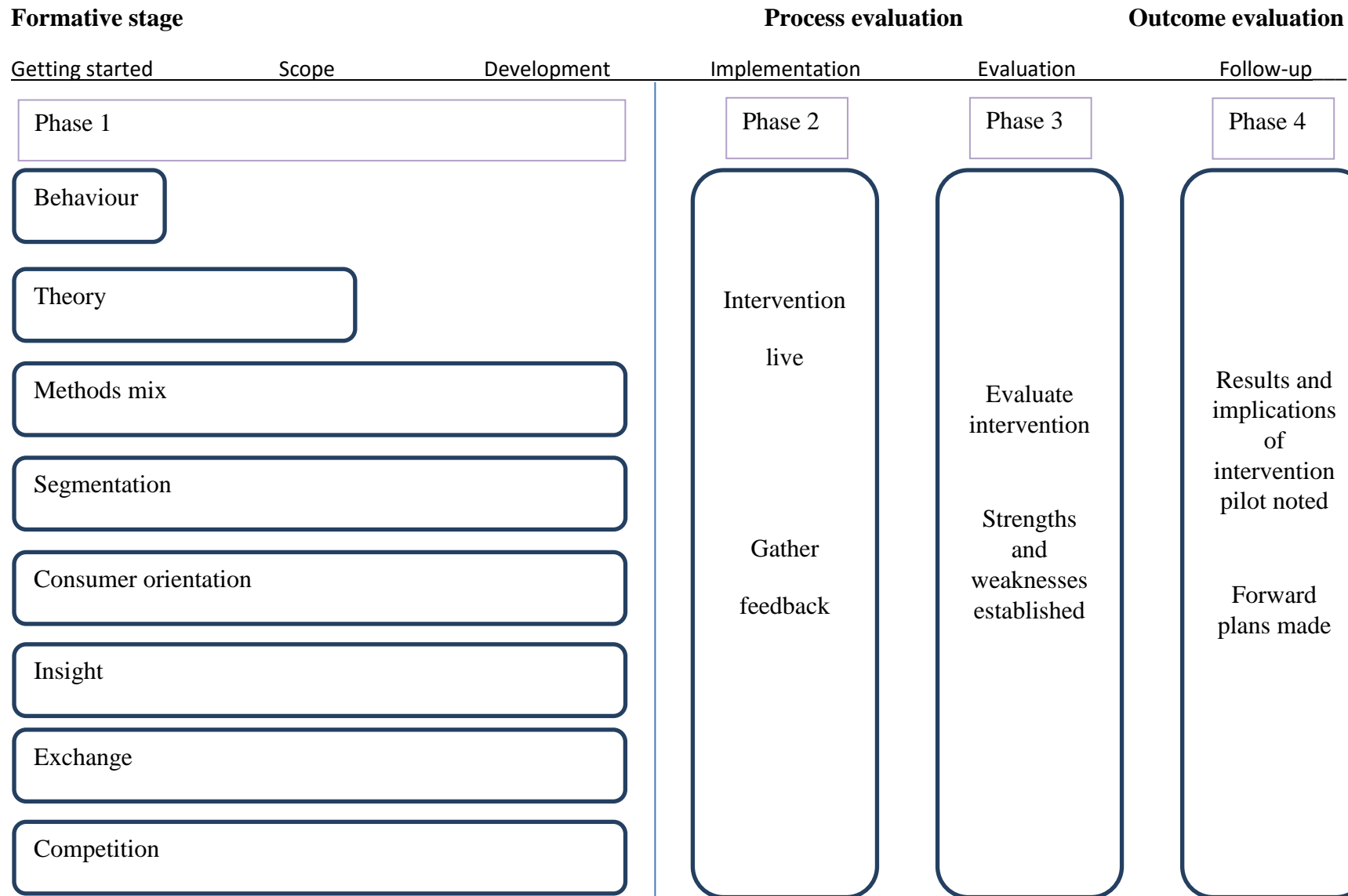


Figure 6. Social marketing Intervention Design Overview for the the Anorexia Nervosa Awareness Campaign

Phase 1: Formative Research exploring Type, Audience, Media and Content of the ANAC

Formative research was conducted across the first phase of Study 2. The purpose was to collect qualitative data regarding the target audience in relation to behaviour (existing behaviours), orientation (knowledge, attitudes, beliefs and social context), insight (what motivates the target audience and identification of physical and emotional barriers), exchange (what people must do to achieve behaviour change), competition (all other factors that compete for HCPs attention and willingness for behaviour to be adopted), audience segmentation (e.g. intervention is tailored towards HCPs only), and methods mix (the medium of presentation should be selected). Consideration of these points enabled development of the first draft of the ANAC.

Method

Design

Qualitative data collection was carried out in order to generate data that would contribute to the formative research phase, and contribute to the design, formatting, content and application of the first version of the ANAC. Data were collected using interviews, focus groups and a focussed task. The interviews and focus groups were carried out in stages. The Social Marketing approach suggests that the intervention details are refined and checked through a series of stages. At first, the initial strategy, target audience and parameters of the project were decided through data collection with clinical psychologists. Following this data collection, the preliminary results were analysed and used to develop the next focus group schedule. The purpose of the next set of focus groups (with health psychologists-in-training) was to discuss any issues related to the intervention that could be important, but to be more specific regarding the intervention content, such as the language used. The data was then used to develop a more specific focus group schedule for mental health NSs which focussed upon message development. This was an opportunity to assess audience reactions to the concept of the intervention at that stage. Drafts of suggested materials for the intervention were also presented to participants during this last phase of focus groups.

Method of Analysis

Thematic Analysis is a flexible, easy and quick method of qualitative analysis that can be useful to summarise key features of a dataset (Braun & Clarke, 2006). The researcher chose to carry out Thematic Analysis rather than the Framework Analysis approach used in Study 1. The benefit of Framework Analysis is that it provides a systematic approach that can be applied to data, to include a combination of inductive and deductive analyses, which allows the categorisation and organisation of large datasets (Gale et al., 2013). Although the approach is useful, it is time-consuming and resource intensive (Gale et al., 2013). The dataset from Study 2 was not anticipated to be large nor complex, and therefore Thematic Analysis would be a time- and cost-effective method of analysis suitable for the type (interview/focus group transcripts from focus groups and written responses to open-ended questions) and amount (small units from different sources) of data in Study 2.

Participants

The researcher recruited 32 HCPs (31 females and 1 male), including clinical psychologists (band 8c-d), final year mental health NSs, Stage 1 health psychologists-in-training, and final year undergraduate psychology students. Inclusion criteria were that potential participants had to be HCPs over the age of 18 years, and were either fully qualified (e.g. Clinical Psychologist) or still in-training (e.g. mental health NSs). Participants were recruited by purposive sampling. The level of knowledge was variable depending on whether they were qualified or still in training.

The clinical Psychologists were recruited particularly for their specialist knowledge and/or experience of AN. NSs, Stage 1 health psychologists-in-training and final undergraduate students were also recruited for this phase as they could contribute information regarding what they would like to see in a campaign aimed at healthcare professionals in general. It would Involving HCPs from different areas of healthcare, at different stages in their career, may allow development of a campaign that would be suitable for all HCPs.

The HCPs in this phase worked within the Welsh healthcare service. A contribution by HCPs from the Welsh healthcare service regarding the design and content of the ANAC would be beneficial considering the participants in Study1 reported a lack of knowledge and awareness by HCPs in Wales. Asking the HCPs about the purpose, design and content of the ANAC may reveal where they perceive the gaps to be in their current knowledge of AN.

By involving the HCPs in development of the ANAC, consumer orientation was established (by asking the target audience about the proposed intervention) and would therefore contribute to the intervention being more effective (Pittet et al., 2000). More specifically, participants could provide insight into the way HCPs perceive health education interventions.

Materials

The materials for this phase comprised of an information sheet, consent form, versions of the focus group schedule (for each type of HCP), a focussed task outline (for psychology undergraduates), a list of possible headlines for the ANAC (used only during the session with mental health NSs) and a device to record the interviews/focus groups.

The participant information sheet (Appendix 8) contained the information that participants required regarding the study for them to understand the purpose of the study. The consent form (Appendix 9) contained all relevant statements that participants would need to confirm they understand in order to give informed consent to participate. The interview/focus group schedule for the clinical psychologists was designed to be unstructured and open-ended. It contained general questions such as what an awareness campaign would comprise of, how the campaign would be delivered and who the target audience could be (Appendix 10). The schedule for health psychologists-in-training was unstructured. It comprised of a number of broad questions which asked about the possible content and type of campaign (Appendix 11). The schedule for the mental health nursing students' focus group was more focused than that of previous focus groups. It included specific questions on areas such as the target audience, design and formatting (e.g. images, text, layout) and positioning of the campaign (i.e. the area in which the campaign would be displayed) (Appendix 12).

The focused task outline (Appendix 13) asked participants to work in groups and consider questions such as "What do you think should be included in the Anorexia Nervosa Awareness Campaign poster?" (e.g. text, pictures, contacts details). Participants were also asked to sketch out their ideas for the posters.

A list of possible headlines was used during the focus group with mental health NSs. This included all suggested headlines made by previous participants. Some of the headlines were created from concepts or themes that emerged from focus groups that had already been

conducted in Phase 1 (Appendix 14). The recording device, model Olympus DS-2300 was used to record focus groups and interviews so that data could be transcribed for analysis.

Procedure

Interviews with clinical psychologists

The first interview was conducted with a clinical psychologist from the Welsh NHS who was a specialist in eating disorders. The purpose of the study was discussed with the participant, the participant gave informed consent and the researcher emphasised their right to withdraw at any time. The purpose of this interview was to discuss what the ANAC could comprise. The interview schedule (Appendix 10) was unstructured: questions were kept open and informal, and included general inquiries such as what the purpose of the campaign should be. The schedule was designed to be open in order to allow exploration of how to develop the ANAC. The discussion was centred around the topics on the unstructured schedule, but the unstructured approach allowed the clinical psychologists to bring other topics to the interview.

The clinical psychologist was asked: “would you start by telling me what your thoughts are on the idea of a health education campaign?”; “what do you see a health education campaign being?”; “what do you think a health education campaign for anorexia nervosa should consist of?”; “who would you aim the health education campaign towards?”; “do you think there will be a difference in the way healthcare professionals receive the health education campaign?”; “what would you include in the health education campaign for anorexia nervosa?”; “do you think they will take notice of the health education campaign?”; and “what difference do you think this health education campaign would make to the Welsh healthcare service?”.

Following the focus group, the researcher thanked the participants and reiterated confidentiality and the right to withdraw at any time. The researcher gave the participant the opportunity to say anything more about the study which they felt was important.

Focus group with clinical psychologists

Firstly, one focus group was conducted with two clinical psychologists. In preparation, the researcher enhanced existing skills for the focus group session by observing focus groups and reading guidance (Kitzinger, 1995; Wilkinson, 2004; Millward, 2012). At the time of the focus group the researcher offered thanks and welcomed the participants. The researcher outlined the procedure and purpose of the study, and assured participants of their anonymity and confidentiality. The participants read the information sheets, and signed the consent forms, and the participants were reminded of their right to withdraw from the study at any time. The focus group was recorded to enable the data to be transcribed afterwards.

At the start of the focus group, the researcher set ground rules (e.g. participants to allow others to speak without negative comments or confrontational disagreement). Therefore, the researcher created a situation where the participants felt able to contribute and discuss their views on each topic without judgment. The unstructured interview/focus group schedule for the clinical psychologists (Appendix 10) was used again for this session. Using the same approach as the clinical psychologist interview, other areas were explored spontaneously. The researcher allowed participants to speak freely and encouraged participants who were quiet to contribute to the discussion by asking for their view point. The researcher gave the participants the opportunity to say anything more about the study which they felt was important.

The clinical psychologists were asked: “would you start by telling me what your thoughts are on the idea of a health education campaign?”; “what do you see a health education campaign being?”; “what do you think a health education campaign for anorexia nervosa should consist of?”; “who would you aim the health education campaign towards?”; “do you think there will be a difference in the way healthcare professionals receive the health education campaign?”; “what would you include in the health education campaign for anorexia nervosa?”; “do you think they will take notice of the health education campaign?”; and “what difference do you think this health education campaign would make to the Welsh healthcare service?”.

Following the focus group, the researcher thanked the participants and reiterated confidentiality and the right to withdraw at any time. The researcher gave the participants the opportunity to say anything more about the study which they felt was important.

Schedule refinement prior to next stage

Following the interview and focus groups with clinical psychologists, the researcher carried out familiarisation of the data and transcription of the data prior to the next focus group. The clinical psychologists discussed that HCPs often lacked knowledge regarding AN, and the impact that this had upon patients who had the disorder. This was generated spontaneously by the participants at this stage, as the clinical psychologists reflected upon the occasions where their patients described experiences with HCPs who lacked knowledge of AN. The Social Marketing approach states that focus groups should refine and clarify issues that are discussed. At first, the initial strategy and the target audience should be identified. The data indicated that the purpose of the campaign should be to raise awareness of AN in HCPs using a poster. Therefore, a semi-structured interview schedule was developed so that the next focus group could discuss the message and content that a campaign designed to raise awareness in HCPs.

Pilot version of focussed task with psychology undergraduate students

A pilot version of a focussed task (Appendix 13) was given to seven undergraduate psychology students in order to assess its usefulness in gathering qualitative data. The focussed task included a short exercise regarding the design and content of the ANAC. Informed consent was sought and the right to withdraw was emphasised. Audio recording commenced and the participants started the task, which included designing a poster for HCPs regarding AN. The task required participants to complete specific tasks, including a sketch of their proposed poster including headlines. Audio recording allowed the verbal data between participants to be collected and analysed. This data was generated spontaneously, although the discussion centred on the components of the focussed task. Psychology students were chosen for the study in order to pilot the efficacy of the focussed task. The students had received lectures which covered the aetiology and diagnosis of EDs, and therefore had the relevant knowledge to contribute to a discussion regarding AN.

The data collected during the focussed task for Phase 1 were limited. For example, the discussion between students did not yield rich data, and the sketches of the posters often reflected previous campaigns proposed to raise awareness of anorexia nervosa in the general public (e.g. the television advert from the Swedish Charity Anorexi Bulimi Kontakt in 2007). The data collected was considered by the members of the research team (Laura Rees-

Davies, Dr Bev John, and Dr Susan Faulkner). Although it may be possible that the data was limited due to the choice of participant, there were also other factors that were considered.

Firstly, the focused task took at least 60 minutes to complete, whereas focus groups were carried out within a shorter time period and allowed flexibility for the researcher to ask specific questions based on responses given by participants. A small amount of the data regarding design of the poster was useful and supported the focus group data (such as large text, colours, images), the yield of data compared to that of the focus groups was much smaller. On reflection, the research team decided that the focussed task did not allow such flexibility and unfortunately this limited the data that was gathered. The data were included in the final analyses but no further focussed tasks were conducted.

Focus groups with health psychologists-in-training

Two focus groups were conducted with health psychologists-in-training ($n=9$). Participants were recruited during their course workshops, where they were given a brief overview of the study by the researcher. This included information regarding the aim of the study (to develop an intervention to raise awareness of AN in HCP), the length of time it would take, why they were being asked to participate, and they had the right to refuse to participate or withdraw at any time.

During the focus group, informed consent was sought and the right to withdraw was emphasised. A semi-structured focus group schedule (Appendix 11) was used throughout which allowed the researcher to follow any themes that emerged by asking questions that were not specified on the schedule. Questions were based upon the evidence derived from data gathered during the interview and focus group with clinical psychologists. This allowed the researcher to explore relevant areas of interest in more detail. The researcher chose to focus upon asking the students what they would include in a campaign that was designed to raise awareness of AN in HCPs. It was made explicit to participants that the purpose of the campaign would be to raise awareness of AN in HCPs using a poster:

“I am conducting research into the way patients with anorexia nervosa experience the care they receive in Wales. I have interviewed patients with anorexia nervosa. One of the themes that has emerged is that lack of awareness of anorexia nervosa amongst healthcare professionals. This lack of awareness has an effect on the way that patients experience their treatment. Therefore, we have decided to construct a series of posters which address this lack of knowledge. The poster will also set out to alert healthcare professionals to the possibility that their participant may have anorexia nervosa. I would like to talk to you today about what you think should be included in the poster”.

Appendix 11: Focus group schedule (Study 2: Health psychologist-in-training)

The participants were asked “can you discuss what would make a good poster for HCPs about AN?”; “Why do you think that would make a good poster?”; “can anyone else think of a better way of conveying that information to the HCPs?”; “what text would you include in the poster?”; “what colour or graphics would you include on the poster?”; “what contact details would you have on the poster?”; and “How many chunks of information would you have on the poster?”.

Schedule refinement prior to next stage

Following data collection, the researcher carried out familiarisation and transcription. Preliminary results suggested that participants discussed the location of where the posters should be placed, the types of HCPs that would see the poster, the images of the poster, the design/layout, the advice included for HCPs, sources of further information and logos. The participants also discussed a variety of different slogans that could be the headline of the posters. The researcher wrote a different focus group schedule for use with the mental health nursing students so that the audience reactions could be established, and the message refined. This approach was recommended by the social marketing approach to intervention development.

Focus groups with mental health nursing students

Mental health NSs were recruited during lectures to take part in focus groups. The researcher gave a brief talk on the study background and asked for volunteers to participate in the study (with remuneration of lunch provided). This included information regarding the aim of the study (to develop an intervention to raise awareness of AN in HCP), the length of time it would take, why they were being asked to participate, and they had the right to refuse to participate or withdraw at any time.

All students agreed to be part of the study. At the time of the focus group, informed consent was sought from the mental health nursing students and the right to withdraw was emphasised. Focus groups were conducted using the focus groups schedule (Appendix 12) and the list of possible headlines for posters (Appendix 14). Three focus groups were conducted ($n=14$), each one week apart. This time was given in order to allow sufficient time to transcribe the data. Results were preliminarily analysed in between focus groups to allow for progression of the interview schedule content if required. Notes were made on the interview schedule by the researcher.

During the focus groups, the interviewer discussed the results of the previous focus groups with the participants. For example, the researcher told the participants where the previous participants had suggested that the posters should be displayed. Then they group were asked were there any other places that they could suggest. The design, content, images, advice and referral recommendations were also discussed. After the discussion, the participants were given a list of possible headlines that had emerged from previous groups and asked to discuss them. The purpose of this was to follow the social marketing approach and refine the message of the intervention.

Results from formative research with HCPs

Data were collected and transcribed verbatim from of the interviews and focus groups with HCPs or HCPs-in-training. This enabled the researcher to analyse the data and provide structure to it whilst maintaining the original account. Data were analysed using thematic analysis (Braun & Clarke, 2006) using the qualitative analysis package Atlas-ti (version 6.0). Participants discussed several areas of the development of an ANAC for HCPs, including reasons for creating the ANAC, an effective campaign dissemination method, the purpose of the ANAC (including awareness, approaching the person with AN, and referral advice), the target audience/area, and the design of the poster (including the image, effective slogans/text, and slogans suggested by participants).

Why develop the Anorexia Nervosa Awareness Campaign?

Each focus group discussed the reasons for developing the ANAC, such as current issues with the healthcare service or the characteristics of the patient with anorexia. Participants also discussed why the campaign was required. Reasons included a lack of education about

anorexia which resulted in HCPs having only limited knowledge about the disorder. Figure 7 shows the thematic map of reasons to develop the ANAC.

Participants proposed that the campaign could be used to raise awareness of anorexia in HCPs. Participants also alluded to the limited training that HCPs may have received regarding AN and why a campaign would be useful. Some participants believed that although patients with anorexia may be in denial or nervous about asking for help, that they would prefer to be asked rather than it be ignored. Several groups discussed the stereotype that is usually associated with anorexia and the problems that this can cause in diagnosis and referral (e.g. young females who are severely emaciated). The stereotype of females only having the disorder was discussed, and participants stated that males also developed anorexia. Furthermore, patients who may have anorexia may not always be young.

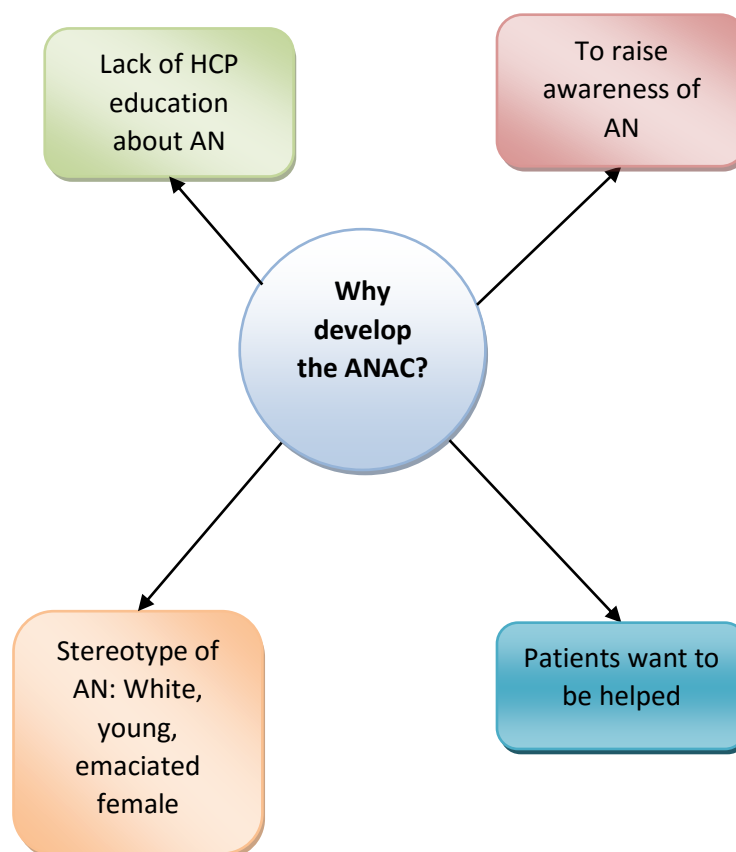


Figure 7. Thematic map of reasons to develop the Anorexia Nervosa Awareness Campaign

The results support the findings in Study 1, and evidence from the literature, which suggest that HCPs have a lack of knowledge regarding AN (Currin, Waller & Schmidt, 2008;

Linville, Benton, O'Neil & Sturm, 2010; Striegel-Moore, Leslie, Petrill, Garvin & Rosenbeck, 2000), and that educational interventions should be devised for HCPs regarding the disorder (Linville et al., 2012; Linville et al., 2010; Rees-Davies et al, 2011).

The views of HCPs regarding the purpose of the campaign should be sought in order to triangulate the findings of the patients in Study 1. According to the social marketing approach, HCPs are the target audience of the current campaign and therefore consumer orientation and insight is an integral part of the intervention development (NSMC, 2013). Furthermore, it is important to establish whether there was a difference between the views of HCPs and patients with AN.

The results also confirm that the HCPs want to feel competent at their roles. The SDT (Ryan & Deci, 2000) suggests that people are more likely to have a higher quality external (internally regulated) motivation to engage in the suggested behaviour if they feel competent to do so. Consequently, if the HCP does not feel competent to manage patients with AN due to lack of knowledge regarding the disorder and uncertainty regarding appropriate communication, then they will be less motivated to engage in their caring role with the patient. Furthermore, lack of awareness is likely to impact upon the TA with the patient, making the patient resistant to engage in treatment and thus thwarting the basic need for relatedness of both the HCP and patient.

The HCPs in Phase 1 confirm AN is often a condition that is affected by stereotypes. They reported that the stereotypes should be challenged, supporting authors who suggest that the stigmatising beliefs of HCPs should be challenged ((Thompson-Brenner et al., 2012). In contrast to the findings of Mond and colleagues (2006), Crisp (2005), and Stewart and colleagues (2008), the HCPs in Phase 1 did not appear to have a negative attitude towards patients with the disorder or ambivalence regarding the seriousness of the condition. Instead, the HCPs pointed out that the reason a campaign should be developed is because patients want to be helped.

Table 11. Subthemes and quotations from the theme ‘Why develop the ANAC?’

Subtheme	Quote	Source
Raise awareness of AN	<i>“You’ve raised their awareness and they think ‘oh how am I going to tackle this’. They might then go off and research a bit and read what they need to check for”</i>	Clinical psychologist
Patients want to be helped	<i>“They would really like to be asked and want to be helped”</i>	Clinical psychologist
Stereotype of AN	<i>“You don’t see them naked so that’s why, when you go to the GP surgery no one is going to walk in in a tight outfit, specially not an anorexic person. And some people, you know, because of the bones you have in your face, like I don’t think for example I could get really skinny on my face at all. It wouldn’t happen because of the structures in your bones. So you see people who are anorexic who you can tell that something is wrong because obviously they are not healthy looking. The skin colour, you know, the eye colour...you can tell but still they don’t look like that ((gesticulated a thin face)). Certainly not in the early stages anyway and it’s better to catch, you know, the condition and try to treat it um as soon as it’s there”</i>	Health psychologist-in-training
	<i>“I do think that there needs to be an awareness that...it could be a man and it is predominantly women but I think men get missed big time”</i>	Clinical psychologist
	<i>“Age ranges, male, female, different ethnicities because it can happen. It happens to everybody. As you said, not just the stereotypical eighteen to thirty-year-old female. I think that would have a major impact. People don’t associate maybe males with anorexia”</i>	Mental health NS
Lack of HCP education about AN	<i>“I think it’s good because to some health professionals that might be their only bit of education on anorexia. We don’t do it in class. We know bits and bobs from what we’ve picked up”</i>	Mental health NS

Effective awareness medium

Table 12 outlines the themes and subthemes for “effective awareness medium”. Participants in the first interview and focus group with the clinical psychologists discussed the different mediums that could be used to convey the message of the campaign. Suggested media included email, one or more posters, TV advertisements, Leaflets, a website, and staff training. The positive and negative aspects of each were discussed. The clinical psychologists suggested that the poster could include a link to a website that would provide further information for HCPs. The clinical psychologists also discussed the problem with using training as part of the campaign, including the time and cost implication.

Table 12. Subthemes and quotations for the theme ‘Effective awareness medium’

Subtheme	Quote	Source
Email	<i>“The beautiful thing about it [email] is it’s very organic in that it, you don’t know really you can send something out. You never know what happens to it and then somebody thinks ‘oh I’ll send that on to someone else’ and you haven’t controlled for any of that”</i>	Clinical psychologist
	<i>“I think it’s going to be too much work to try and assess an email” “If you’re inundated with emails you just might delete delete delete without reading them all”</i>	Clinical psychologist
Posters	<i>“I think when people are in a waiting area that’s what they look at. They read posters ‘cause they’re bored” “I think the problem is you’re going to be very limited as to what people will take from a poster”</i>	Clinical psychologist
TV advertisement	<i>“I don’t know what else you could do really unless you’ve got a huge budget like TV announcements which you know some voluntary organisations do”</i>	Clinical psychologist
Leaflets	<i>“Do you leaflet all GPs? Do they read them? Do they throw them out?”</i>	Clinical psychologist
Website	<i>“[The poster] would just direct people to various websites that would give people all the information in terms of how to ask. What to ask”</i>	Clinical psychologist
Training	<i>“You can’t get [GPs] to come to training”</i>	Clinical psychologist

Promotion and Price

Promotion refers to the media used to disseminate the message. Campaigns have been designed to promote healthy behaviours and discourage unhealthy behaviours in order to improve the health of the public. Particularly relevant to the current study are the campaigns that have been used to promote appropriate healthcare professional behaviour. In order to design an appropriate intervention, not only must the message be designed to change the HCP behaviour, but getting the message to the correct audience in the most effective way is just as crucial (Randolph & Viswanath, 2004).

For the current study, the clinical psychologists were asked what the medium of intervention should be. Involving the audience in the decisions regarding intervention development is a central feature of the social marketing approach. Overall, the HCPs suggestions included email, one or more posters, TV advertisements, Leaflets, a website, and staff training. The positive and negative aspects of each were discussed.

Firstly, email was felt to be an inappropriate intervention method. Although the HCPs identified that it may be shared on to other HCPs, there may be ethical issues in obtaining emails addresses of participants and gaining consent. Furthermore, the emails would be difficult to track, and it would be hard to determine whether HCPs had actually read the email or not. The clinical psychologists referred to times where they received emails that they weren't expecting and noted that they usually deleted them without reading them.

The clinical psychologists in the current study identified that TV advertisements could be used for the intervention. Indeed, a meta-analysis of mass media campaigns by Derzon & Lipsey (2002) found that radio, video and television were found to have greater effects on behaviour than campaigns using print based media. The clinical psychologists continued by discussing the problem of including TV advertisements as part of the campaign, including the time and cost implication not only for the researcher during the design, but for the HCPs who may find it difficult to find time to watch an intervention video.

The clinical psychologists suggested that a poster would be a simple method of disseminating basic information about AN. The HCPs identified that the posters would be limited in the amount of information that could be provided, but could include a link to a website enabling HCPs to seek further information. The clinical psychologists referred to using leaflets as part of the campaign but suggested that they likelihood would be that the leaflet would not be read by HCPs. Furthermore, in comparison to posters, the cost of leaflets would be higher given that one would need to be sent to every HCP.

Posters are commonly used for health promotion, behaviour change and importantly for the current study, promoting healthcare professional behaviour that adheres to best practice. For example, a recent study found that employees who saw health promotion posters were found to acquire knowledge and positive attitudes about vegetable intake and physical activity (Sugiyama et al., 2011).

Effective visual images in posters have the power to engage and elicit behaviour changes that improve health. This is a key reason why public health posters have become a fundamental way for governments to disseminate messages about health. Posters are cheap to produce and majority being seen by many (Barrett, 2010). Until today, the use of posters are still valid, vital and being considered as a fundamental communication tool to boost awareness among the public (Bu & Fee, 2010).

A study by Ward and Hawthorne (1994) revealed that patients in a hospital notice the availability of the posters and they read them. The longer they wait for the appointment, the more they are likely to read the posters. Their study also showed that there was a need for more information by the patients. The study showed that “posters are a suitable medium for health promotion, it would be interesting to see if their messages are effective in the process of changing patients’ behaviour and lifestyles (Ward & Hawthorne, 1994; 585).

The body of evidence regarding the use of posters suggests that they can be used as the sole component, or as part of a multimodal approach to behaviour change. Careful attention to the design of the campaign message and the poster(s) is critical, but thereafter implementation of a basic poster campaign is fairly simple and requires little to no effort on the part of the targeted individuals. This makes a poster intervention a reasonable “first step” (Andersen, Sargeant & Weese, 2014) given that they are easy, cheap and simple to produce in comparison to other intervention designs (Berg, 2005).

For example, Suguyama, et al. (2011) report that the cost of interventions need to be considered per employee, and that poster interventions are a more cost-effective approach to changing employee behaviour than development of audio-visual materials. The approach of using printed materials could alter the norms of employee behaviour if it presents an appropriate message with a population-based intervention strategy (Rose, 2001).

Given the limited resources of the researcher in the current study, cost-effectiveness was a key feature during media selection. Indeed, “price” should be considered in relation to the target audience, and the medium of intervention should be chosen that is simple (relating to the feedback of the clinical psychologists’ interview/focus group) (NSMC, 2013). Therefore, it was worth establishing whether posters are a suitable medium to raise awareness of AN in HCPs and encourage HCPs to seek further information regarding the disorder.

Posters have been used for a long time in health promotion, and target a wide range of issues such as dental hygiene (Brown, 1969), exercise (Andersen, Franckowiak, Snyder, Bartlett, Fontaine (1998), smoking (Auger, Wright & Simpson, 1972; Groth-Marnat, Leslie & Renneker, 1996), Condom promotion (Alstead, et al., 1999), sexually transmitted diseases (Department of Health and Social Security, 1982). Unfortunately, the literature regarding the use of posters as the intervention media for HCP behaviour change reports mixed results with regard to its efficacy. For example, research suggests that the impact of posters on hand hygiene has been variable, can be short term and sometimes cannot be separated from the effect of other interventions (Jenner, Jones, Fletcher, Miller & Scott, 2005; Naikoba & Hayward, 2001). For example, Jung, Senthilselvan and Salopek (2010) aimed to find out whether sun awareness posters led to inquiry of skin cancer and sun protection measures in patients. They found that only half of the patients noticed the posters, and less than one tenth of inquiries regarding skin cancer were attributed to the posters. The authors concluded that organisations which produce and disseminate posters should consider beyond focus groups when they design their posters and consider field testing their products to ensure they are reaching the target audience and having a beneficial effect, otherwise posters are simply decorative.

Anderson, Sargeant & Weese (2014) sought to find out whether the presence of a poster intervention for hand hygiene compliance was successful. The posters were designed to include gain framed messages, emphasis on minimisation of losses/barriers, reminders of personal applicability and appeal to obligation to protect others. The presence of the posters had no significant effect on compliance, although some staff reported that they felt the poster did increase their personal awareness of the need to perform hand hygiene, and the posters had some effect on product contact times. The authors conclude that although the poster campaign had limited effect on its own, it could still be used as a component of a multimodal hand hygiene campaign. Indeed, posters are often incorporated into multimodal interventions for improving HCP hand hygiene in healthcare facilities (Forrester, Bryce & Mediaa, 2010; Randle, Clarke & Storr, 2006; Public Health Ontario, 2008).

A multimodal campaign designed and evaluated by Williams (1987) found that first two interventions (soap and posters) brought about a significant increase in the frequency of handwashing and the third and fourth interventions (video and leaflets) resulted in a further

significant improvement, which was maintained until the fifth intervention (publicity). However, a six-month follow-up measurement of handwashing frequency found a return to the baseline level.

Target audience/area

The campaign should be aimed at a specific group (Mah et al., 2006) the audience would be HCPs, as the impact of knowledge/lack of knowledge regarding the disorder is apparent (Rees-Davies et al., 2011; Pereira et al., 2006; Hugo, Kendrick, Reid & Lacey, 2000; Zipfel et al., 2000; Herzog et al., 1996; Bryant-Waugh et al., 1992).

Every group discussed the potential target audience of the campaign, and the places that the posters would be located. The groups discussed locating the campaign within a healthcare setting (hospitals e.g. gastro wards, diabetes clinics; CAMHS; GP surgeries; counsellor centres; rehabilitation centres; and dental practices) and other community settings (schools; gyms/leisure centres; youth clubs, universities). Specifically, within these locations, the poster could be placed in/on: the back of the toilet door, staff rooms, clinical practice rooms, corridors, waiting areas, the nurse office, billboards, notice boards, treatment rooms, doors, and locker rooms.

Participant suggested that the campaign could be specifically targeted towards GPs, CPNs, CAMHS staff, nurses, health visitors, and other HCPs. The participants also suggested that dentists, counsellors, social workers, teachers/lecturers other school/university staff, gym staff, charity workers, youth club staff, and self-help volunteers could be targeted in the campaign. Some participants thought that the campaign should be located away from the general public for ethical reasons.

Researchers have suggested that lack of the success of the intervention may be due to insufficient exposure to the message by the target audience (Hornik, 2002; Myhre & Flora, 2000). Whichever channel an information campaign uses: leaflets, posters or TV storylines, they need high levels of exposure among their audience to be effective. Hornik's review of evaluations of public health campaigns found high exposure levels and messages that provoke changes in social norms to be key elements of effective campaigns (Hornik 2007). A systematic review by the Cochrane Collaboration found two examples of mass media campaigns that were effective in preventing the uptake of smoking among young people:

both of these had ‘reasonable’ levels of exposure over a long period of time (Sowden and Arblaster 1998). Farrelly’s review of anti-smoking mass media campaigns found substantial levels of exposure were required before a campaign would have an effect (Farrelly et al, 2003).

Randolph & Viswanath (2004) carried out a review of public health mass media campaigns and noted that few campaigns assess intermediate markers such as exposure to campaign messages, which would be useful for both midcourse correction as well as in explaining the (lack of) success of a campaign. Therefore, during evaluation of the current intervention, exposure to the posters should be assessed as well as the impact of the message itself.

The place was carefully considered using feedback from HCPs in phase 1. The posters were to be strategically positioned so that HCPs are able to pay attention to the campaign message (Fearnow-Kenney & Wynick, 2005; Foss, Marchetti & Holladay, 2005; Linkerbach & Perkins, 2005). HCPs in training from Phase 1 suggested a variety of places to locate posters: staff rooms and on the back of toilet doors were chosen as HCPs would have time to read the information.

To date, no studies have explored whether posters can be an effective medium in raising awareness of AN and encouraging HCPs to seek further information about the disorder. The evidence regarding the use of posters as the medium in other interventions for HCPs is mixed, therefore although the current HCPs expressed preference for posters, an interim evaluation should include consideration of whether exposure to the message is sufficient, as well as evaluation of the poster design and message effects.

Purpose of the Anorexia Nervosa Awareness Campaign

Participants discussed several options for the potential purpose of the campaign (see table 13 and 14). Figure 8 shows the thematic map for the purpose of the ANAC.

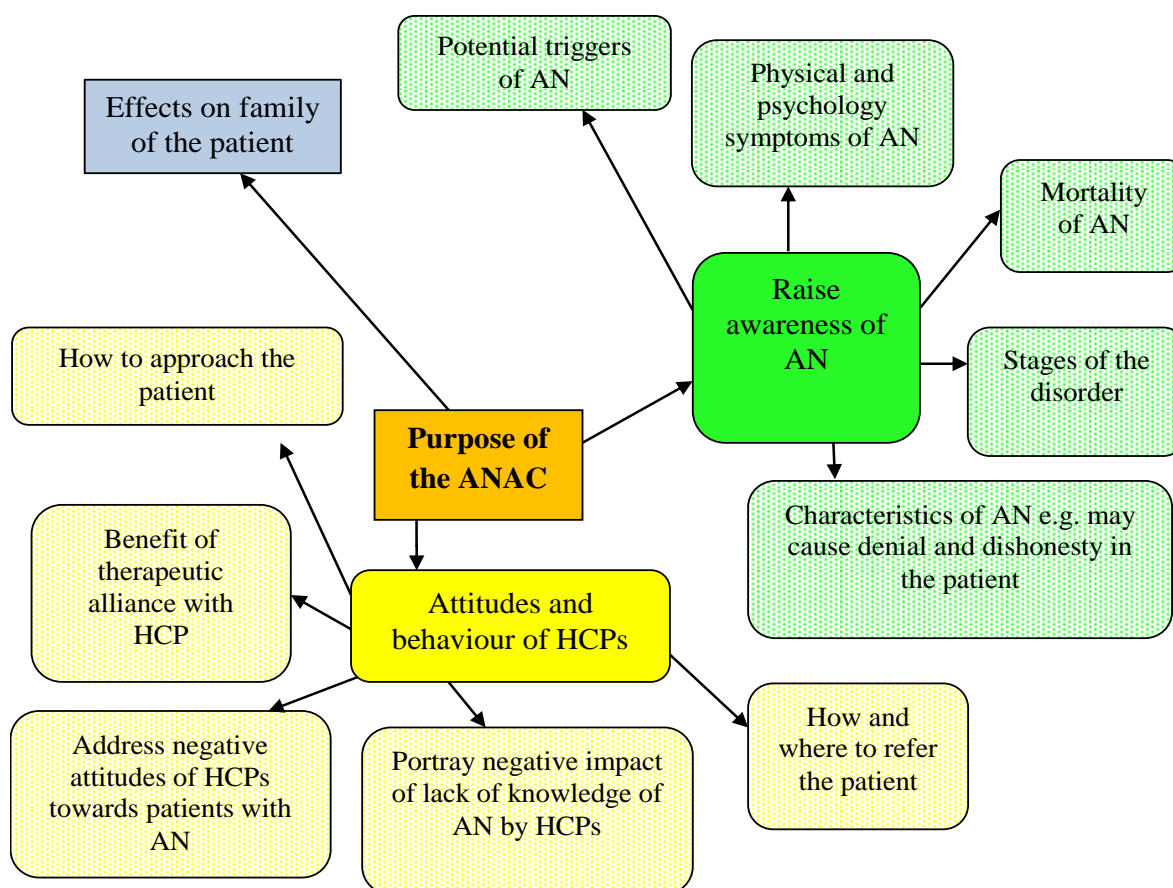


Figure 8. Thematic map of the purpose of the Anorexia Nervosa Awareness Campaign

During the focus groups, participants discussed two areas of focus for the ANAC. Firstly, the ANAC could be used to raise awareness of AN. For example, participants suggested that the campaign could highlight the serious nature of the anorexia, such as the high mortality rate. The ANAC could include the physical and psychological symptoms of the disorder.

Participants discussed awareness in depth, especially the necessity for knowledge regarding several areas of anorexia. For example, the HCP should be made aware about both the physical and psychological symptoms, and the subtypes of the disorder. Participants also suggested highlighting the different stages of the disorder that a patient may experience. All groups mentioned the deception that a person with anorexia engages in to keep the behaviours of their disorder a secret. Participants also discussed that a lack of knowledge combined with patients' ambivalence towards treatment has a negative impact the way

HCPs see their patients. Focus groups sometimes discussed including the triggers for anorexia.

The results from this theme highlight the complexity of the disorder. This posed a problem for the development of the campaign. The HCPs appeared to have a desire to learn much more about the disorder, and clearly felt that information was needed across detection, assessment, referral and appropriate treatment. The choice of poster as the medium meant that the amount of information that was presented to HCPs would need to be minimal due to lack of space on the poster. Therefore, the research team decided to include information on the poster regarding where to obtain further information about the disorder. The poster could raise awareness of the disorder and provide HCPs with a credible source of further information. The provision of information was important given that if the receiver experiences the message as a threat, they are likely to reject the information. For this intervention, if the poster highlighted their lack of knowledge regarding AN, but provided no way of increasing their knowledge, they might ignore the message to protect themselves (PMT: Rogers, 1975). The inclusion of the credible source of information would alleviate the fear by increasing the response efficacy of the viewer (Murray-Johnson & Witte, 2003). This would also increase the viewers' competence to carry out the behaviour, therefore fulfilling their basic psychological needs. This would motivate the viewer to engage in the recommended behaviour (SDT: Ryan & Deci, 2000).

Participants described the value of including referral advice within the campaign. Participants suggested possible referral options to give to patients, such as referring to a charity (e.g. B-EAT, MIND, etc.), self-help groups, treatment options, blogs, specialists, child and adolescent mental health services (CAMHS), NHS, and GPs. They also suggested possible sources information for HCPs such as Map of Medicine, Websites for information (B-EAT, NHS), phone numbers for information, and other places that may be useful for research about anorexia. Giving referral information would be a *cue to action* (HBM: Becker, 1974) and increase self-efficacy in the HCP who may treat a person who may have AN (e.g. find out more information, refer the patient to a specialist, signpost to other services, approaching a person who may have AN). This may therefore increase referrals and may result in earlier intervention (resulting in a better prognosis for the patient). In the context of the SDT (Ryan, & Deci, 2000), the information would also increase the competence of HCPs to refer patients, in turn increasing the ability of patients to enter

treatment. Referral by the HCP would also make the patient feel cared for, therefore meeting need for relatedness in both HCP and patient.

Table 13. Subthemes and quotations for the theme ‘Purpose of the ANAC: Raise awareness of anorexia nervosa’

Subtheme	Quote	Source
Highlight characteristics of the disorder	<i>“It’s like if they’re constantly...saying that they’re eating or something when that’s the thing. They’ll often ‘oh do you want to come for food’ they’re like ‘oh no no no I’ve eaten I’ve eaten already’...They hide their food away and stuff it away when they’re actually not eating it”</i>	Mental health NS
	<i>“I think they can be quite deceitful”</i>	Psychology student
	<i>‘People who’ve got it don’t particularly want to tell other people you know especially their parents ‘cause they’ll do anything they can to hide. If they’re sitting down at the table with the family for the family meal they’re going to try all ways to try and hide that food’</i>	Mental health NS
Highlight stages of the disorder	<i>“I don’t think people choose to lie. They’re scared” “Yeah as in too scared to tell you”</i>	Clinical psychologist
	<i>“It isn’t always at that stage that it’s beneficial to catch these people because you know by the time I mean for example if I ((with laughter)) decided to become anorexic it would take me an awful long time before anybody would notice that I was anorexic...and I could be it could be literally a year really before anybody would even, could even notice that ‘oh yeah she’s lost a lot of weight and now she’s looking anorexic’”</i>	Health psychologist-in-training
Highlight mortality of AN	<i>“This [anorexia] has the highest mortality rate than any other psychiatric condition and therefore has to be taken extremely seriously and it’s horrendous disease”</i>	Clinical psychologist
	<i>“How many people actually die from it?”</i>	Health psychologist-in-training
	<i>“If it isn’t treated it is a terminal illness...and people die...It is serious. It is probably one of the most serious illnesses in mental health and it isn’t dealt with correctly at the moment”</i>	Mental health NS
Potential triggers of AN	<i>“I’m not sure how much they know what can evoke or trigger anorexia maybe some points about that”</i>	Health psychologist-in-training
	<i>“I think um peer groups maybe is important...because peers affect each other especially they have some ideas to be skinny or things like that” “A certain image the group might have...They might all feel pressured to be skinny”.</i>	Health psychologist-in-training

Patients with anorexia are often in denial about the illness too and therefore they do not accept they are ill. Some groups discussed how sensitive the patient may be, and therefore the HCP will need to be careful about what they say to them. Participants expressed that they felt that patients would want HCPs who were knowledgeable about anorexia. Furthermore, they suggested that the poster could portray the negative impact caused by a lack of knowledge of anorexia (e.g. effects of inappropriate comments). Participants also discussed how the campaign addressed the issue that the HCPs were sometimes concerned about approaching and speaking to a person who may have anorexia. Yet one of the clinical psychologists argued that a poster was not suitable to provide this amount of information regarding communication skills.

Therapeutic alliance (TA) was discussed by participants including areas such as gaining trust and empathy, which is crucial in meeting the basic psychological needs of relatedness with patients (SDT: Ryan & Deci, 2000). The HCPs in the current study were aware that the TA can help or hinder recovery, supporting the concept that patients need a sense of safety, support, optimism and acceptance from HCPs (Robinson, 2000; Federici & Kaplan, 2008). This particularly relates to the patients' perceptions of treatment for AN in Study 1. Irwin (1993) and McQueen (2000) both emphasise the need to establish trust in order to develop a successful TA. The participants proposed that the campaign could highlight the importance of a TA between the HCP and patient, such as treatment adherence and better outcome.

One group discussed the benefits of communication skills and correct body language that should be used when speaking to a person who may have anorexia. This demonstrates that the HCPs are aware that the way they present themselves to patient may affect development of the TA. This relates to previous research which found that patients have difficulty in developing a TA with HCPs who are perceived as cold, disinterested or rigid (Grawe, 2007). They also discussed the negative attitudes that some HCPs have towards patients with AN, and how the campaign should address this issue.

Table 14. Subthemes and quotations for the theme ‘Purpose of the ANAC: Attitudes and behaviour of HCP’

Subtheme	Quote	Source
How to approach the patient	<i>“I think I’d want to know how I’d approach it with them because that’s going to be the most difficult. If somebody came to be and said ‘so and so’s anorexic how would I approach them to get them to admit. If they’re going to admit they’ve got a problem. So which way would you approach it?’ You can’t just say ‘oh I think you’re anorexic’...So think I need advice on how would you approach the person to begin with”</i>	Mental health NS
	<i>“I was thinking about...giving them guidelines on how to approach the person who has anorexia. Because obviously he or she isn’t going to admit it that she had it. So you could say ‘I think you are very scared. Do you have anorexia?’...Interviewing skills but in a different way. Focussing on this specific aspect. Be specific to the condition and maybe...have a website where they can go on and have more information”</i>	Health psychologist-in-training
	<i>“You’re talking about a whole range of skills they’d have to have...A detailed knowledge of the disorder...They’d have to understand and empathise where that person’s coming from...They’d have to have the kind of bedside manner or counselling or whatever empathetic skills to discuss it sensitively and that takes a long time to learn...How do you teach that in a poster?”</i>	Clinical psychologist
	<i>“Build the relationship with the patient because the repeated denials. Basically they won’t say anything if they feel they are not entrusted or you are just asking because you have to plug it into your computer...Basically turns towards the patient asked them seems interested like you said about the skills...This basically applies as well, everyone or the nurses or whoever is at the surgery”</i>	Health psychologist-in-training
	<i>“Stressing communication skills”</i>	Health psychologist-in-training
	<i>“I think we need to know where the specialist services are. Where you can get access and information from for a start”</i>	Mental health NSs

Table 14. Subthemes and quotations for the theme ‘Purpose of the ANAC: Attitudes and behaviour of HCP’ (continued)

Subtheme	Quote	Source
How and where to refer the patient	<i>“Where you can refer”</i>	Mental health NSs
	<i>“Referring them to clinical cycle or whoever they need to be referred. Family therapy”</i>	Psychology student
	<i>“Who to refer to if they get a patient who has it. Who to refer to or is best to seek advice for them”</i>	Health psychologist-in-training
	<i>“It will signpost them to where services are what to do next” “If I was in their shoes knowing that there are things that I can refer to makes me less scared of finding it [information] out”</i>	Clinical psychologist
Address negative attitudes of HCPs towards patients with AN	<i>“It’s all about building up a trusting relationship and I think the people who do well, the GPs or whatever, are those who give that a bit of time. They say ‘come and talk to me about how you’re feeling’...Not assuming that they will take over or do something. But how the hell you get that over in a poster?...You need to be sensitive you need to take your time you need not to frighten the person away ((laughs))...So it’s thinking how can you build the trust...I guess partly people who have jumped in a bit too quick or show they completely misunderstand the disorder”</i>	Clinical psychologist
	<i>“There’s a lot of people just think they’re lost causes. There’s no point in helping them until they can help themselves. But they won’t let you do anything to help them. So maybe changing some of the staff attitudes?”</i>	Mental health NS
Highlight benefit of therapeutic alliance with HCP	<i>“I’ve heard comments from all...from all areas...A lot in mental health, so mental health experts...have said some very inappropriate ((with laughter)) worrying things at times and they’ve been quite shocked...particularly about them not needing to put on too much more weight and things like that. When they clearly do” “You still do hear comments about silly girls on a diet...needing to pull themselves together and wasting healthcare time etc. etc.”</i>	Clinical psychologist
	<i>“It’s the relationship isn’t it...you’ve got to have the relationship and the context to ask those questions in the way that someone’s going to answer them truthfully”</i>	Clinical psychologist
Portray negative impact of lack of knowledge of AN by HCPs	<i>“I think a lot of them [HCPs] are ignorant because they don’t know facts about anorexia. If they were educated then I think...with anorexic types who lie and cheat a lot with what they’re doing and you think that you’ve gained their trust ... sometimes I think the health professionals seem to think ‘what the point’”</i>	Mental health NS

Product

According to the NSMC (2013), the product that is presented within the intervention is the behaviour that needs to be changed or encouraged. In the current intervention, HCPs referred to a variety of different areas of knowledge that the campaign could include. Overall, the HCPs agreed that an increase in awareness of AN was needed. This would be difficult to achieve in a poster, and therefore the purpose of the intervention was to prompt HCPs to seek further information and consider an AN diagnosis for patients in future. HCPs offered a number of different ways to capture the attention of the audience. Firstly, the audience could be addressed using a question. Furthermore, a statement by the 'patient' that related to the reason for the campaign could be included. For example, a reference to the patient feeling as though she needed to lose weight in order to receive treatment in Study 1. The PMT states that if the message invokes fear in the receiver of the message, then the message may result in defensive motivation to avoid the subject. Therefore, provision of further information regarding where HCPs could find out about AN was included using the NICE website.

If information is to engage a viewer a message that elicits some kind of emotion may have more impact. In some populations, the messages that present unusual content can be more effective than those that plainly and unemotionally state facts. Farrelly et al (2003) found that a number of studies showing that appeals using fear can impact on young people's attitudes towards smoking.

However, these 'emotional appeals' may have more impact on attitudes than on actual behaviour. Hastings and colleagues conclude that fear appeals demonstrate less impact in real world social marketing campaigns than in psychological experiments, possibly due to subjects having forced exposure to the material in experiments, sample groups that often consist of students, and measurement of short-term consequences (Hastings et al, 2004). For some behaviours, use of fear appears ineffective, for example, a meta-analysis of interventions to prevent HIV by Albarracin showed it was an ineffective strategy in HIV prevention (Albarracin et al, 2005). In some cases, fear may even have a negative effect on behaviour. One study found by Devos-Comby and Salovey showed that the use of a grim reaper advert in Australia actually reduced safe sexual behaviour; the authors felt this might be because the advert made contracting AIDs look inevitable, triggering denial in viewers (Devos-Comby and Salovey 2002).

Design of poster

While posters are often used for health promotion, their preparation is seldom described (Suguyama, et al., 2011). Therefore, it was necessary to ask the HCPs what they felt would be beneficial for the design of the poster. Each group discussed the design and formatting of the campaign. Figure 9 (and Table 15) shows the elements that were considered for the posters.

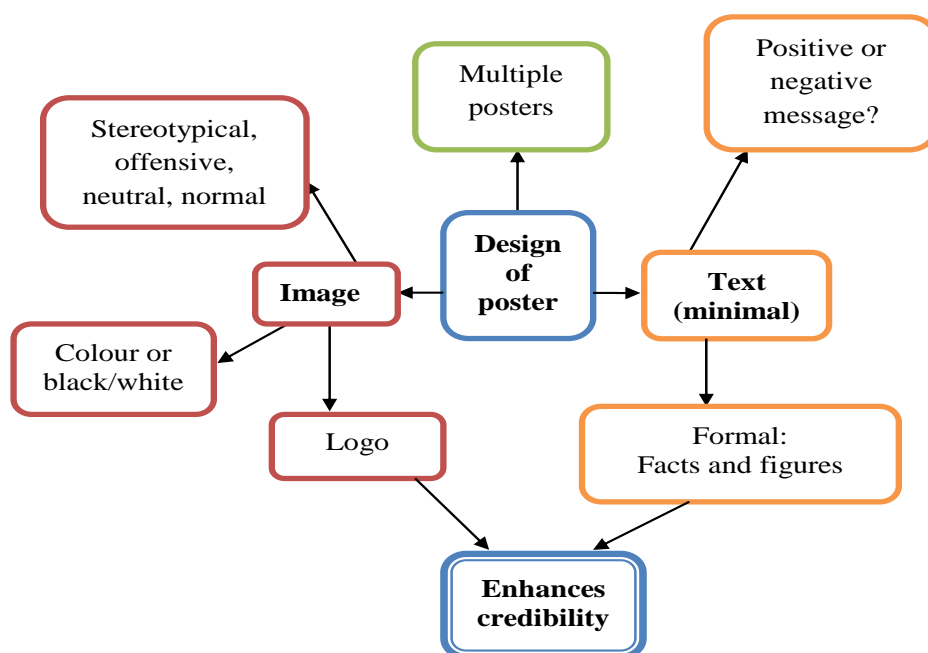


Figure 9. Thematic map for the design of the Anorexia Nervosa Awareness Campaign

Participants discussed the text of the posters, and explored the types of messages that could be portrayed to the HCPs throughout the campaign. For example, participants suggested that the message should command attention, such as asking a question or a statement. If the message was written from a clinical perspective, it would appear legitimate and trustworthy. Several participants agreed that statistics about anorexia, such as recovery rates/treatment success or mortality figures would increase the legitimacy of the campaign. Alternatively, it could be written from the perspective of the patient including direct quotes, examples of the anorexic inner voice, or their overall story. Participants discussed having a positive message (e.g. encouraging, motivating) versus a negative message (e.g. fear-arousing interventions).

Table 15. Subthemes and quotations for the theme ‘Design of poster: Text’

Subtheme	Quote	Source
Text	<i>“Bullet points, short bullet points with the facts, with the advice, with the information. Easy to read through you know. Also possibly vivid good colours”</i>	Health psychologist-in-training
	<i>“For me in the statement those statements are quite tantalising... ‘Might I have?’ and another thing ‘Might I need you to be bold?’ ‘Might I need you to be brave?’ and ‘Just say it out’ ‘Just have it out’ and bold and maybe a little bit persistent...I’m sure that some of those very good GPs etc. will go ‘oh I wonder if’ and ask very gently ‘um maybe’”</i>	Clinical psychologist
	<i>“You could put a question on it like ‘When does the anorexia start?’ so it gets them thinking about it”</i>	Health psychologist-in-training
	<i>“What I like about some posters is they’ve got the questions in bold writing and it’s something, I’m ‘I could ask that question’. It’s got the answer underneath...So it’s prompting you ‘hang on a minute that’s a good question’”</i>	Mental health NS
	<i>“It [the message] might come more strongly from the patient” “I think it might be gentler coming from the patient if you did it from the, in the first person ...I, you know because they could be saying the symptoms ‘I started to diet but I feel it’s gone out of control’”</i>	Clinical psychologist
	<i>“Quotes and stuff. Not how they feel, how they came to that. You know what it’s done to their lives” “Some quotes with personal experience of a person”</i>	Health psychologist-in-training
	<i>“Text to support it to help like understand what it’s all about”</i>	Psychology student
	<i>“You can’t put up loads like you can’t put up paragraphs of writing it has to be quite easy to read because not many people would stand there and read a poster do they”</i>	Health psychologist-in-training

Table 15. Subthemes and quotations for the theme ‘Design of poster: Text’ (continued)

Subtheme	Quote	Source
Positive or negative message?	<i>“Why don’t you have one that says ‘You can be part of the success story’”</i>	Mental health NSs
	<i>“I think if the professional sees the success rate at least they’ll think ‘well if it is going to work I’ll do it’”</i>	Mental health NSs
	<i>“Maybe showing a success story saying ‘you saved my life’ ...’By doing that you helped to save my life’”</i>	Mental health NSs
	<i>“Statistics of age groups gender that are most affected by it. Maybe things that coincide with it, maybe depression or other mental health issues that are highly correlated with anorexia”</i>	Health psychologist-in-training
Formal: Facts and figures	<i>“What statistically, what are the percentages of people who suffer with anorexia?”</i>	Health psychologist-in-training
	<i>‘more formal people might be drawn to looking at it’</i>	Psychology student
	<i>“I think you’ve got to be careful how formal you make it because a lot of young girls [nurses] don’t want to read it...They’re reading fact after fact and it’s very formal, they’re going to feel like they’re being preached to”</i>	Mental health NS
	<i>“If it was in layman’s terms rather than in medical or professional sort of terms like patients that I could follow up and look and then go off and read myself”</i>	Health psychologist-in-training

One group discussed using several posters and focussing on one theme per poster (Table 16).

Table 16. Subthemes and quotations for the theme ‘Design of poster: Multiple posters’

Subtheme	Quotation	Source
Multiple posters	<i>“Maybe then not just one poster” “If you look at the sort of the similar campaigns that I’ve looked at to do with different sort of aspects of diabetes...You can see it’s targeted at specific people and I know if you’re targeting at healthcare professionals, if there are several different things that you’re looking to draw out from that then I suppose several different posters may be useful”</i>	Health psychologist-in-training
	<i>“Have several different issues, several different posters. You could compact that onto a couple of issues on one poster. Like saying males, having a picture of a male you could have that while focussing on the different other issues we could put in writing on the poster”</i>	Health psychologist-in-training

Every group agreed that the poster should contain at least one image accompanied by a limited amount of text. This confirms poster development guidance that information volume is a factor in attracting attention, and that information overload should be avoided (Murata, Takigaw & Sakamoto, 1991). Participants suggested the image could be large, and should be the focal point of the campaign. Several participants discussed the use of vivid colour vs. black and white imaging and the benefits of both. The poster should be formal including a logo to demonstrate the credible source of the campaign.

Table 17 outlines the themes and subthemes for the image of the poster suggested by participants. Several participants suggested that the image should not be offensive. Yet other participants argued that the image should be hard-hitting in order to be remembered. Participants discussed whether they thought the image on the poster should be a male or female in order to challenge stereotypes. They also discussed using the image to challenge other stereotypes, such using an image which didn’t look like the typical person who has anorexia. The image could be of a stereotypical anorexic person, or a before and after picture. Several participants mentioned a previous ANAC where there is a girl looking in the mirror. Participants also discussed the potential ethical problems with having a pseudo anorexia sufferer image, as this person may be incorrectly identified by friends, family and others as a person with anorexia. One participant suggested a diagram would be useful. Despite humour or cartoons not being recommended in the hospital setting (Gould et al., 2007) another participant suggested that the image could be a cartoon with speech bubbles.

Table 17. Subthemes and quotations for the theme ‘Design of poster: Image’

Subtheme	Quote	Source
Stereotypical, offensive, neutral or normal	<i>“The age and gender of the actor and if like a personal picture...They might strongly stereotype it like a female condition”</i>	Psychology student
	<i>“I think you could do it as like um there is a girl and she was sat there at the table with a plate of food in front of her and you know when you’re a kid and you draw those bubbles like a cloud”</i>	Psychology student
	<i>“Pictures like of before and after or you know just maybe even like a cartoon picture just to draw them in some people find visual affects them more than just reading stuff”</i>	Psychology student
	<i>“Someone standing in front of a mirror with a skeleton...That’s the classic you know”</i>	Clinical psychologist
	<i>“A girl who’s obviously got anorexia and then like the mirror image” “That’s like a really good one and it’s like one of the main characteristics...That’s really good. That’ll be like prompting people ‘oh yeah I understand that part of it’”</i>	Psychology student
	<i>“There’s that famous picture of you know where she’s looking at herself in the mirror and she’s really thin but she sees herself really fat. That could be like ‘This is how I see myself’”</i>	Health psychologist-in-training
	<i>“The other thing I remember is that Christina Aguilera video [featured a girl with AN]”</i>	Mental health NS
	<i>“Diagrams that maybe this is the centre problem this person but maybe you hear the information from this family member or a cousin even. But as a GP you know the problem already ...with diagrams somehow visual, the visual aid of the poster”</i>	Health psychologist-in-training
<i>“I’ve seen those before and they have a good impact like looking in the mirror and being like skeletal like and then almost then it’s just a normal size. But then they think they’re big but the difference even from a normal face to their size. I think they’re good pictures to have”</i>	Mental health NS	

Table 17. Subthemes and quotations for the theme ‘Design of poster: Image’ (continued)

Subtheme	Quote	Source
Stereotypical, offensive, neutral or normal (...continued)	<i>“You want the protection of the participants. So the people who walk past and see it you don’t, so you don’t want it to be a really distressing picture put that like”</i>	Psychology student
	<i>“It’s sad to say but it’s only sort of shocking pictures that do sort of grasp your attention really. So it’s quite hard”</i>	Mental health NS
	<i>“I think you have to have something a bit shocking to make you read it sometimes”</i>	Mental health NS
	<i>“What are the ethical considerations that should be taken into account? ‘Cause you know if you did the picture and you showed someone who had it you wouldn’t want to show their face. You won’t want them being found out because of confidentiality”</i>	Psychology student
	<i>“You don’t want it to be an actor and somebody turn around to them in the street and go ‘oh I’m so glad to see you’re a lot better’...They’ll be like ‘What you on about?’”</i>	Psychology student
Colour or Black/White	<i>“Bright colours I think”</i>	Health psychologist-in-training
	<i>“I think the colour is important because that can draw you to it straight away doesn’t it? If you had something in black and white you would have another one of those, like policy or something (laughter)”</i>	Mental health NS
Logo	<i>“Definitely contact details and some like a logo or something. An NHS logo something that like informs them it’s actually legit...Not just some kid’s just drawn it”</i>	Psychology student

Participants suggested many of their own slogans or questions for the posters (see Table 18).

Table 18. Suggested headlines for the Anorexia Nervosa Awareness Campaign

Do they seem more withdrawn?
Are they losing weight?
Are you concerned about someone you know?
Do you think their diet has gone a bit far?
Have you thought about them having an eating disorder?
Could it be anorexia?
How could you make your patients feel safe about talking to you about it?
Might your service user be too scared to tell you?
Sufferers report they would like to be asked
Might they be too frightened to say something to you?
I started to diet but I feel it's gone out of control
I'm starting to lose interest in my friends
I quite like being thin but people are starting to comment
I feel guilty if I do not exercise enough
I feel I'm too scared to tell anyone
I wish that someone would ask me
I do not know what to do
It has got out of control
I'm too scared to tell anyone but I wish someone would ask me
Well I am scared it has gone a bit wrong
Maybe people will not take me seriously because I'm not that thin
I had to be a particular weight before someone would listen to me
Have you considered anorexia?
People might think I'm silly
I'm going to lie to you... will you be able to see through it?
I need you to be brave
Just have it out
I'm worried about my weight
I want to be thin
I'm scared I have lost control
Hidden truth
When does anorexia start?
Would you consider this person anorexic?
I think you are very scared do you have anorexia?
Anorexia... what you do not know
This is how I see myself
You can be part of the success story
Anorexics need YOU
By doing that you helped to save my life

Development of the pilot anorexia nervosa awareness campaign

Firstly, HCPs suggested that the ANAC should be used to generally raise awareness and knowledge of anorexia. HCPs suggested reasons for having the ANAC as the lack of

education about the disorder, confirming previous recommendations that there are deficits in training (Blum & Bearinger, 1990; Currin et al., 2009; Rees-Davies et al., 2011). HCPs suggested that a stereotype of a person with anorexia being extremely malnourished and underweight exists. This supports the results of Study 1 in which patients suggested that they need to continue to lose more weight for someone to notice their disorder and offer treatment.

HCPs suggested that the purpose of the ANAC should be to raise awareness of anorexia nervosa in several areas: symptomology, triggers of the disorder; mortality rates; stages of the disorder; and characteristics of the person with AN. More specifically, the ANAC could: Guide HCPs to seek information; instruct HCPs on how to approach a person who may have anorexia; highlight the benefit of a therapeutic alliance; address negative attitudes of HCPs towards people with anorexia; and provide information about how and where to refer those who may have the disorder. According to the SDT (Ryan & Deci, 2000) and the results from Study 1, this would provide HCPs with information that would relate to meeting the basic psychological needs of patients (relatedness, autonomy, competence) thus enhancing their external motivation to engage in treatment and recover.

The diversity of suggestions highlights the need for further training of HCPs regarding AN, again supporting earlier research (Rees-Davies et al., 2011; Currin et al., 2009; Blum & Bearinger, 1990). Due to the scope of the poster chosen for this pilot ANAC, only brief information could be included. Therefore, the ANAC was designed to be a cue to action (HBM) to raise awareness of AN, guide the HCP to seek further information and to increase intention of the HCP to consider AN when seeing future patients. According to the HBM, developing a poster as a cue to action would encourage HCPs to engage in seeking further information regarding the disorder and increase the likelihood that they will consider AN in patients in future.

Several valid suggestions were made for the setting, and type of audience, that the ANAC should be developed towards. For example, healthcare settings (e.g. hospitals) and other community settings (e.g. schools, gyms, leisure centres). Apart from healthcare professionals, the participants also suggested the ANAC could be designed for other audiences such as teachers or gym staff. In order to segment the audience, which would maximise the impact of the poster and enhance the applicability of the message, HCPs in healthcare settings who may care for a person who may have AN were chosen. The choice of HCPs in healthcare settings was appropriate given the importance of awareness and

knowledge of AN by HCPs that was reported by patients with AN in study 1 and supporting literature, namely the SDT (Ryan & Deci, 2000) outlined in the literature reviews of study 1 and 2.

The design of posters for health interventions is not often described in the literature (Suguyama, et al., 2011). Therefore, the current study relied heavily upon the qualitative data from the HCPs regarding the design. The HCPs stated that the poster should contain images as visual appeal has been cited as more influential than subject content and most likely to draw viewer attention (Rowe & Ilic, 2009). The image could be either stereotypical and possibly offensive, or normal and neutral. Due to the mixed results from the use of fear interventions and the difficulty in recruiting a person who fits the stereotypical image of a person with AN, a neutral image was chosen. This would then also avoid potential ethical issues of recruitment of models for the poster and adverse effects on the viewer of the ANAC. Furthermore, this would be congruent with the purpose of the ANAC to challenge possible negative attitudes of HCPs towards patients who do not fit the stereotypical image of the anorexic person.

In order to enhance credibility, the ANAC should contain a logo and possibly facts/figures about the disorder. The results from the participants in Phase 1 support the concept of heuristic processing of the message in the poster, as the sender of the message is seen to enhance credibility and therefore affect whether it is accepted or rejected (Salmon & Atken, 2003; Chaiken, 1987). It may also affect whether the receiver believes that the message has personal relevance. Previous research, including the TPB and HBM highlights that the person who receives the message is more likely to engage in the behaviour if they feel as though it is applicable to them. If they do not, then they are more likely to reject the message (Jenner, et al., 2007; Ajzen, 1991; Murray-Johnson & Witte, 2003; Becker, 1974). Text on the ANAC should be minimal so that it can be comprehended quickly as suggested by the communication-behaviour model of persuasion (McGuire, 1989). Marx, Nedelmn, Haertle, Dieterich & Eicke (2008) also recommended that short, simple slogans are effective for health interventions. Therefore, the current campaign chose “could it be anorexia?”.

The results confirm that HCPs feel that they lack knowledge regarding AN. Therefore, the views of both patients and HCPs combined provide justification for an intervention to raise awareness of AN. The HCPs discussed their lack of knowledge in more detail than the patients in Study 1, such as diagnostic criteria, aetiology, risk factors, treatment options, and

screening/referral procedures. The HCPs discussed the nature of the disorder, but more focus was placed upon facts, figures and evidence. Given that HCPs are taught to approach patient care from an evidence-based approach, this is unsurprising. Nevertheless, the results from the present phase indicate that although knowledge of AN is lacking, HCPs are positive towards learning more about AN, and would prefer that their knowledge was improved. Consideration of the SDT for the HCPs is also appropriate (Ryan & Deci, 2000). Provision of information for the HCPs regarding AN would enhance their feelings of competency, thus increasing motivation, to care for people with AN.

Development of the first draft ANAC

The AN awareness campaign (ANAC) was developed by combining research data from the focus groups, interviews, and focused task of phase 1, and combining them with current theory regarding health information promotion, advertising techniques and general formatting guidance on poster creation. Although the focused task was not repeated to collect data from other HCPs, the data from final year undergraduate psychology students was relevant and therefore used when the ANAC posters were developed.

Results from Phase 1 highlighted that there were four central reasons for developing an awareness campaign for AN, including to raise awareness of AN, the lack of HCP education about AN, the presence of a stereotype of anorexia as being an emaciated, young, white female; and because people who have AN want help. By including HCPs in the development of the campaign, the benefits of the campaign to other HCPs were considered.

Four posters (see figure 10, 12, 14, & 16) were created to be included in the ANAC comprising of six elements: Picture of person that does not conform to the stereotype of AN; A logo from the research institution to enhance credibility; a thought quote from the patient in the poster; a cue to action in the form of a question; A cue to action in the form of a statement with an acronym to make it memorable; and a solution to increase self-efficacy in the form of a website to locate further information.

Every poster contained the following elements: The question “Could it be anorexia?” was included to make the HCP think about whether their patient could have AN. The statement “if you suspect your patient may have anorexia: Be SURE... Study, Understand, Refer, Empathise” was designed to be a cue to action for HCPs and provide an acronym for them to

remember what they should do. The web link at the foot of the poster was designed to signpost HCPs to a place where they could find additional information regarding AN.

Poster Design

Data from Phase 1 suggested that the design of the campaign should comprise of multiple posters that included both text and images. The text that was included on the posters was deliberately concise; the words were chosen to convey the message: the desired behaviour of the HCP. By only including concise information relevant to the campaign, the poster was more likely to be remembered. If the message was remembered, the HCPs were more likely to be persuaded to engage in the behaviour (Petty & Cacioppo, 1986).

Some HCPs in Phase 1 suggested that the main images across the campaign were normal people who were incongruent to the stereotype of AN. By contradicting the stereotype of a person with anorexia being a young, white emaciated female, attention should be drawn to the poster (Rowe & Ilic, 2009) and negative attitudes toward the disorder potentially challenged. More specifically, the images included a male, a woman who is not an adolescent, and a female who does not look emaciated. This draws attention to the poster as it challenges current knowledge of the disorder. SCT suggests that in order to engage in a behaviour, the person should have the appropriate level of knowledge. Therefore, the images provide information regarding the fact that men and older people have AN. It also challenges the concept that a person must be a severely low BMI to be diagnosed as having AN, as although the person confirms to the normative beliefs (TPB) that the viewer may hold (young, white female), the person is not emaciated. The results from Study confirm that BMI should no longer be the sole factor when considering a diagnosis of AN (Study 1; WAG, 2009). Drawing attention to the poster is important given that the success of the intervention in changing behaviour depends upon whether the message captures the attention of the target audience (Murray-Johnson & Witte, 2003). Furthermore, the image may elicit central processing of the message as it provokes thought of the viewer. This will increase the likelihood that the viewer accepts the message (Petty & Cacioppo, 1986).

Inclusion of facts from the point of view of the patients in Study 1 was included in order to invoke a sense of responsibility and susceptibility in the HCPs (HBM; TPB; Jenner et al., 2005; Fishbein, 1984). A quotation from a pseudo-patient (the person in the image on the poster) who may have AN was included in order to capture attention and challenge current

negative attitudes by HCPs. As it was a potential patient, the HCP would experience a sense of responsibility and would be more likely to engage in the behaviour recommended by the campaign (TPB; Jenner et al., 2005; Fishbein, 1984).

The question “Could it be anorexia?” was a headline suggested by the HCPs in Phase 1. The headline was selected as it invoked a sense of personal responsibility (TPB; Jenner et al., 2005; Fishbein, 1984). According to the HBM, TPB and PMT the viewer must perceive the message as being applicable to them, enhancing their perceived susceptibility. If they do not perceive the message to be for them, they will not believe that they are required to change their behaviour. By using the word ‘patient’ in the statement before the acronym, the HCP would understand that any patient could have AN.

The intervention developer also needs to be aware that the viewer may experience guilt and fear when viewing this statement, and perceive it as a threat (Murray-Johnson & Witte, 2003; PMT). More specifically, this would occur if the HCP did not feel that they are able to respond appropriately to the message. Therefore, cues to action regarding how and where to seek further information was included. This had been included to increase HCPs self-efficacy to carry out the desired information-seeking behaviour, (SCT; HBM; TRA; PMT), increase their perceived behavioural control (TPB) and ability to engage in proposed behaviour (TRA), add to their normative expectations for information seeking behaviour, and invoke a sense of personal responsibility (TPB, Jenner et al., 2005; Fishbein, 1984).

An acronym was developed by the research team (Laura Rees-Davies, Dr Bev John, Dr Susan Faulkner) and included in the poster: “SURE” (Study, Understand, Refer, and Empathise). The statement before the acronym was designed to be thought-provoking and capture the attention of the viewer, enhancing the likelihood that the reader will be persuaded by the message (Petty & Cacioppo, 1986). The acronym was developed so that it enhanced control beliefs by referring to the viewer’s patients and directing them to carry out the behaviours in the acronym. If the viewer felt that they were in control of carrying out the behaviour, then the behaviour becomes more likely. The Self-Determination Theory (SDT) also applies to the HCPs in the current study as well as the patients in Study 1. The SDT proposes that the HCP would be more motivated to engage in a behaviour should they feel that they have control over diagnosis management of the disorder, rather than relying on other HCPs to notice first (Ryan & Deci, 2000).

The SURE acronym was devised by the researcher reading through the transcripts from both Study 1 (interviews with patient who had AN), and Phase 1 from Study 2 (interviews and focus groups with HCPs). The researcher looked for words that would reflect the aim of the ANAC: to raise awareness of anorexia nervosa. For example, words such as ‘awareness’, ‘understanding’, ‘empathy’, ‘referral’, ‘therapeutic relationship’, ‘knowledge’, ‘expectations’, ‘care’ and ‘study’. The researcher noted from the Eating Disorders: A Framework for Wales (2009) that HCPs need to be aware the symptoms of AN and to refer patients for diagnosis of AN. Both the patients from Study 1 and the HCPs from the current study reported the need for HCPs to increase their knowledge (Study) and develop a deeper understanding of the characteristics of the disorders (Understand). Furthermore, patients in Study 1 often referred to failure of HCPs to refer them to specialist services (Refer). Finally, the importance of a caring approach when working with patients who have AN was reported by both patients and HCPs in Study 1 and 2, and the importance of this to developing a TA (Empathise).

The researcher also noted that patients in Study 1 highlighted that an understanding of EDs and the ability to empathise with a person who had AN was important when developing a therapeutic alliance; factors which were important for treatment outcome and satisfaction. This would also emphasise the need for relatedness between HCP and patient (SDT: Ryan & Deci, 2000). Therefore, the researcher chose the words ‘understand’ and ‘empathise’. The researcher tried different combinations of words and attempted to spell an acronym until the word ‘SURE’ was created. The word ‘SURE’ would be a cue to action, not only by reminding the HCPs of the individual factors (study, understand, refer, empathise) but overall could remind the HCP that they needed to be ‘sure’ of the symptoms and referral procedures of AN, and their ability to notice patients who may have the disorder. The use of a direct statement might also increase motivation to comply (TPB). Furthermore, the request by authority would make the viewer more likely to be persuaded by the message (Cialdini, 1993).

Conversely, the motivation may be external as the viewer interprets a loss of control by being directed (Be SURE) to carry out the behaviour (SDT). This would contradict the control that would be felt by having the ability to carry out initial management of the disorder described earlier. Therefore, this should be considered when the campaign is evaluated. The acronym was checked by the research team, who agreed that it adequately reflected the purpose of the ANAC.

A website was included as a cue to action to direct HCPs to look for further information regarding the disorder. The website would also ensure that they HCPs were provided with a source of further information regarding AN. A sense of threat/guilt/fear could be brought about by the receiver feeling they have limited knowledge about the disorder. Murray-Johnson and Witte (2003) advocate using fear interventions only in cases where target audience members possess response efficacy, and perceived ability to easily perform the recommended response behaviours promoted in the campaign. According to the PMT, if the HCPs possess response efficacy when they view the intervention, this will result in an adaptive response to the message and the HCP is more likely to carry out the desired behaviour.

It is important to meet the basic psychological need of HCPs to feel competent in order to be motivated to care for patients with AN (SDT: Ryan & Deci, 2000). Therefore, the NHS website was provided so that HCPs were not left with a sense that they had a lack of knowledge regarding AN, but did not know where to access appropriate information. The website was included to increase the HCPs' confidence to seek further information, therefore increasing the likelihood that they will carry out information seeking behaviour (self/response efficacy: SCT; TPB; HBM; PMT). Furthermore, similar to using the logo from the university as a source of credibility, the NHS website would enhance the credibility of the source of information in the website, increasing the likelihood that the viewer will trust the message (Salmon & Atkin, 2003; Gladwell, 2000).

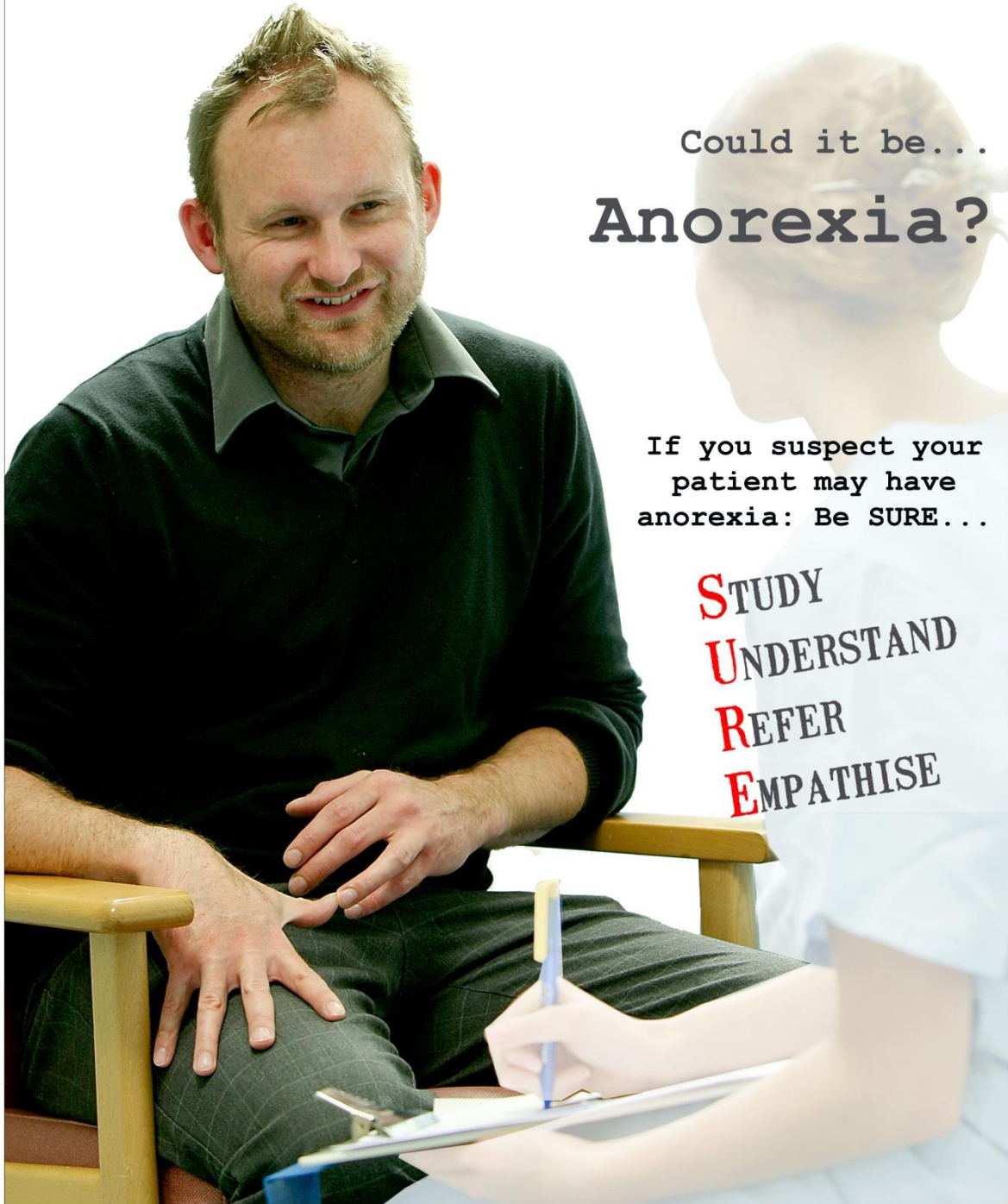
The HCPs in Phase 1 reported that they would prefer to have a logo so that the message could be deemed to be from a credible source. This supports the concept of heuristic processing, whereby a person may retrieve from memory a particular decision rule that can be used to evaluate the message, such as evaluating the sender credibility (Chaiken, 1987). The message must be deemed from a sources that can be trusted (Salmon & Atkin, 2003; Gladwell, 2000). A credible, authoritative source will enhance the likelihood of the viewer being persuaded by the message (Cialdini, 1993). Therefore, the logo of the University of South Wales was included as a source of authority. The institution that was developing the intervention was featured as the source of information to enhance credibility.

An image of a HCP was included in Poster A (figure 10). This was chosen to enhance the viewers' susceptibility/vulnerability to the message. According to Cialdini (1993), the viewer is more likely to be persuaded to accept the message if they feel that they can identify

with the people in the intervention. The uniform is not clear, but the blue colour uniform is identifiable. Therefore, this could reduce the perceived susceptibility of the message by other HCPs. As a precaution, the image was blurred and faded as much as possible, although it should be noted that this could have an effect on the perceived susceptibility to the message by other types of HCPs.

Figures 11, 13, 15, and 17 show how each of the constructs of the models of behaviour change or principle of persuasion map onto each poster.

I can't be ill... I'm a man.



Could it be...

Anorexia?

If you suspect your patient may have anorexia: Be SURE...

STUDY
UNDERSTAND
REFER
EMPATHISE



For symptomology and advice visit;
www.nhs.uk/conditions/anorexia-nervosa/pages/introduction.aspx

Figure 10. Poster A: Challenging the female stereotyp of anorexia nervosa

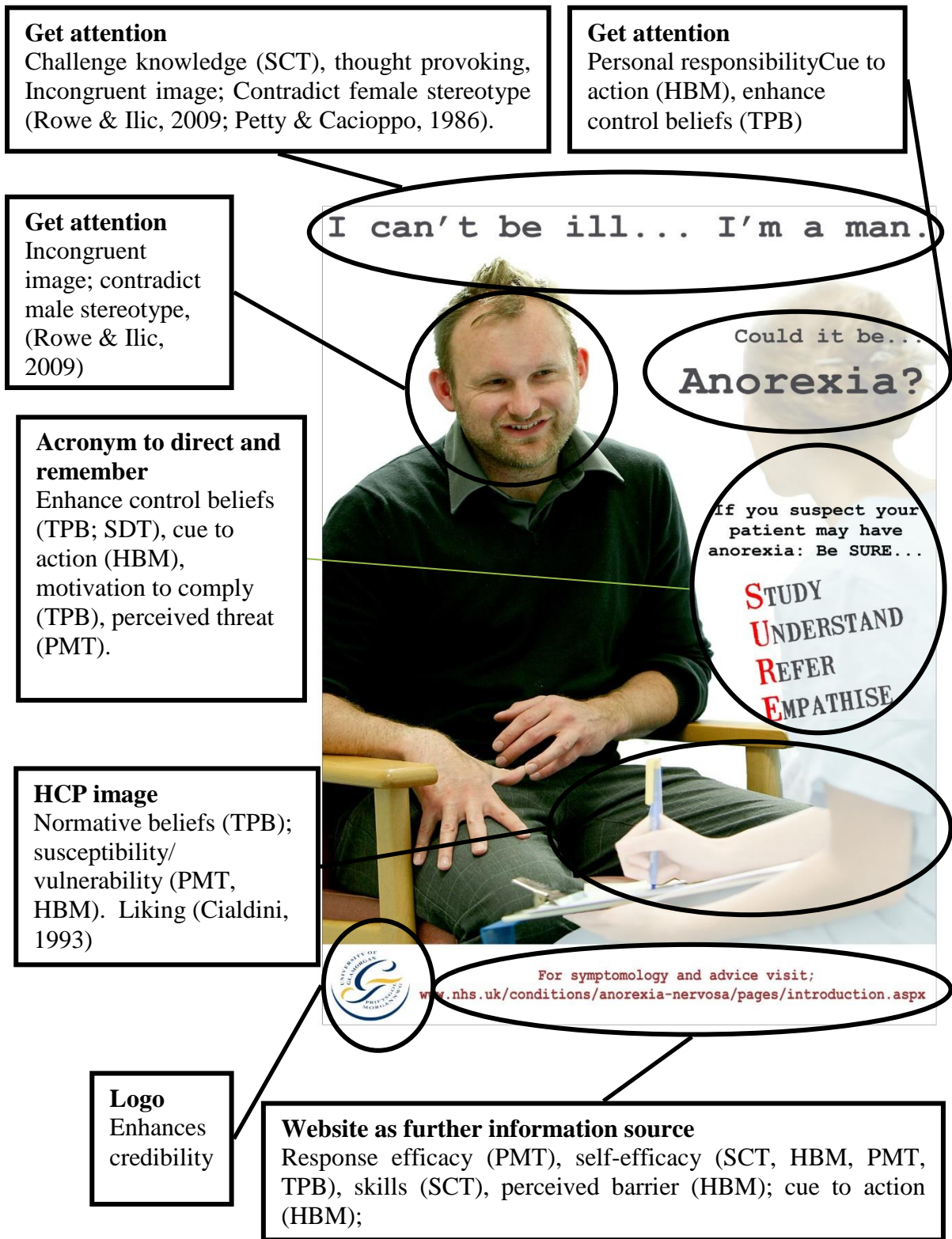


Figure 11. Poster A: Challenging the female stereotype of anorexia nervosa (showing location of theoretical constructs)

Poster B was developed to highlight that patients may not actively seek help for AN. The phrase “I may not want your help... but I need it” illustrated that patients may appear resistant to help but they still require intervention. The image of a female who does not look emaciated challenges the typical stereotype that people may have of AN. Patients may not present immediately as severely underweight. The female also looks strong and serious, reflecting that the patient may be resistant to help. Figure 13 includes description of how each element of the poster maps onto various models of social cognition.

I may not want
your help...
but I need it.

Could it be...
Anorexia?

If you suspect your patient may
have anorexia: Be **SURE...**

**STUDY
UNDERSTAND
REFER
EMPATHISE**

For symptomology, and advice visit
www.nhs.uk/conditions/anorexia-nervosa/pages/introduction.aspx

UNIVERSITY OF
GLAMORGAN
PRIFYFYSIOL
MORFONISTYD

Figure 12. Poster B: Highlighting the service user resistant to professional help

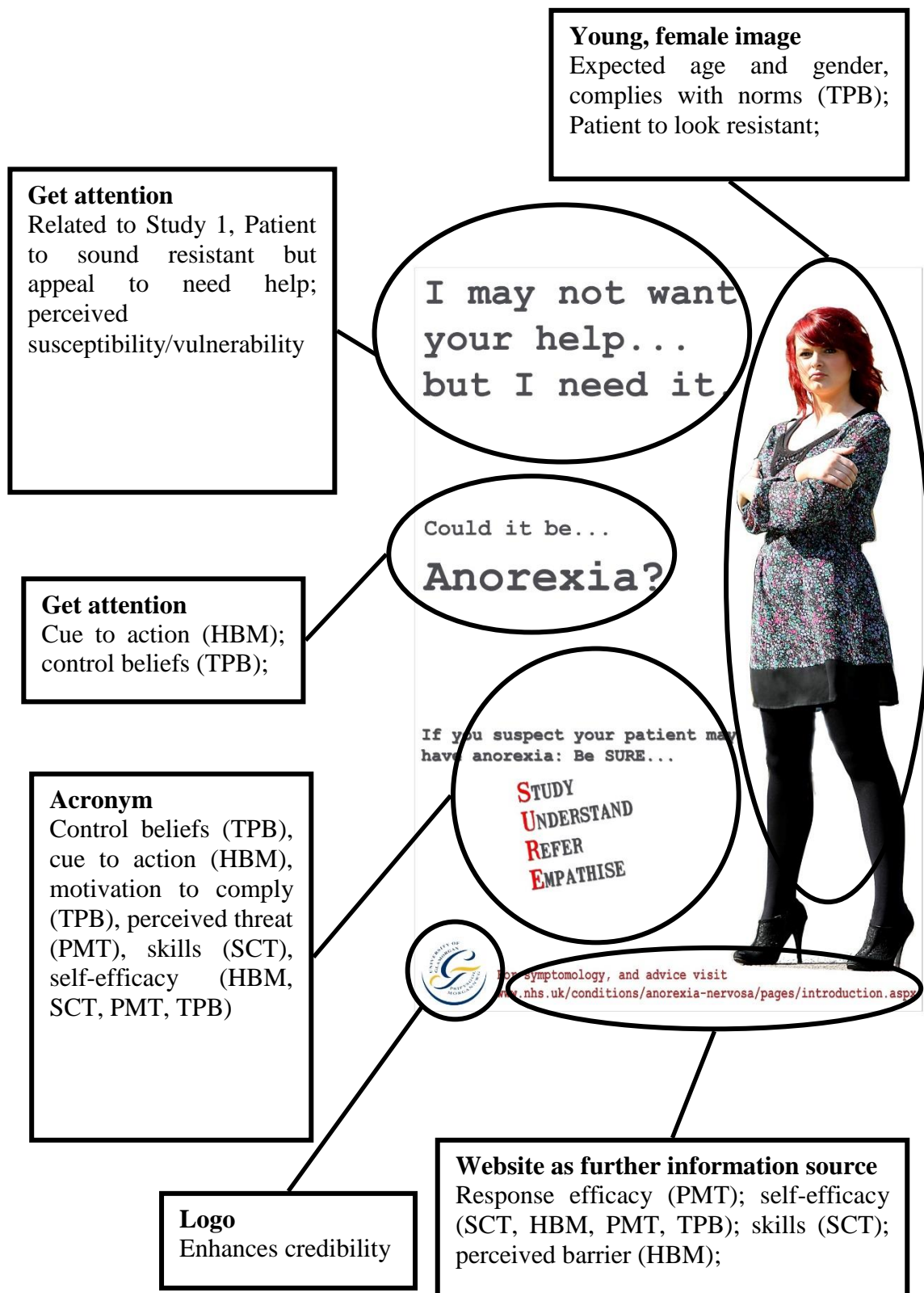


Figure 13. Poster B: Highlighting the service user resistant to professional help (showing location of theoretical constructs)

Poster C was developed to highlight that patients may feel that they are not thin enough to warrant treatment. The phrase “Maybe if I was thinner someone might notice” reflects the need for some patients to lose weight in order to be considered anorexic and get professional help. The female is the same person as that of Poster C. The female is in the gym using the equipment in order to demonstrate she is actively seeking to lose weight. Figure 15 includes description of how each element of the poster maps onto various models of social cognition.

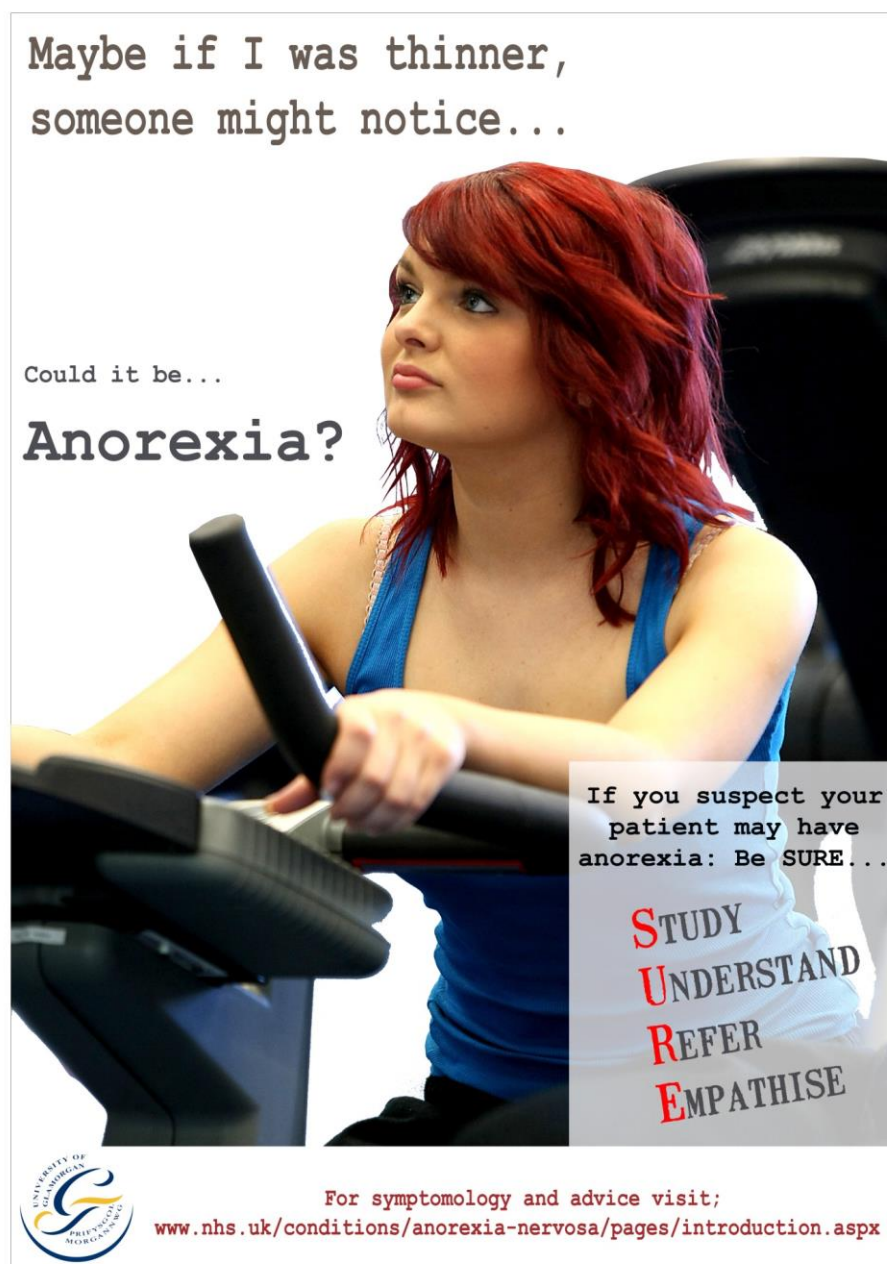


Figure 14. Poster C: Highlighting the need for diagnosis prior to severe weight loss

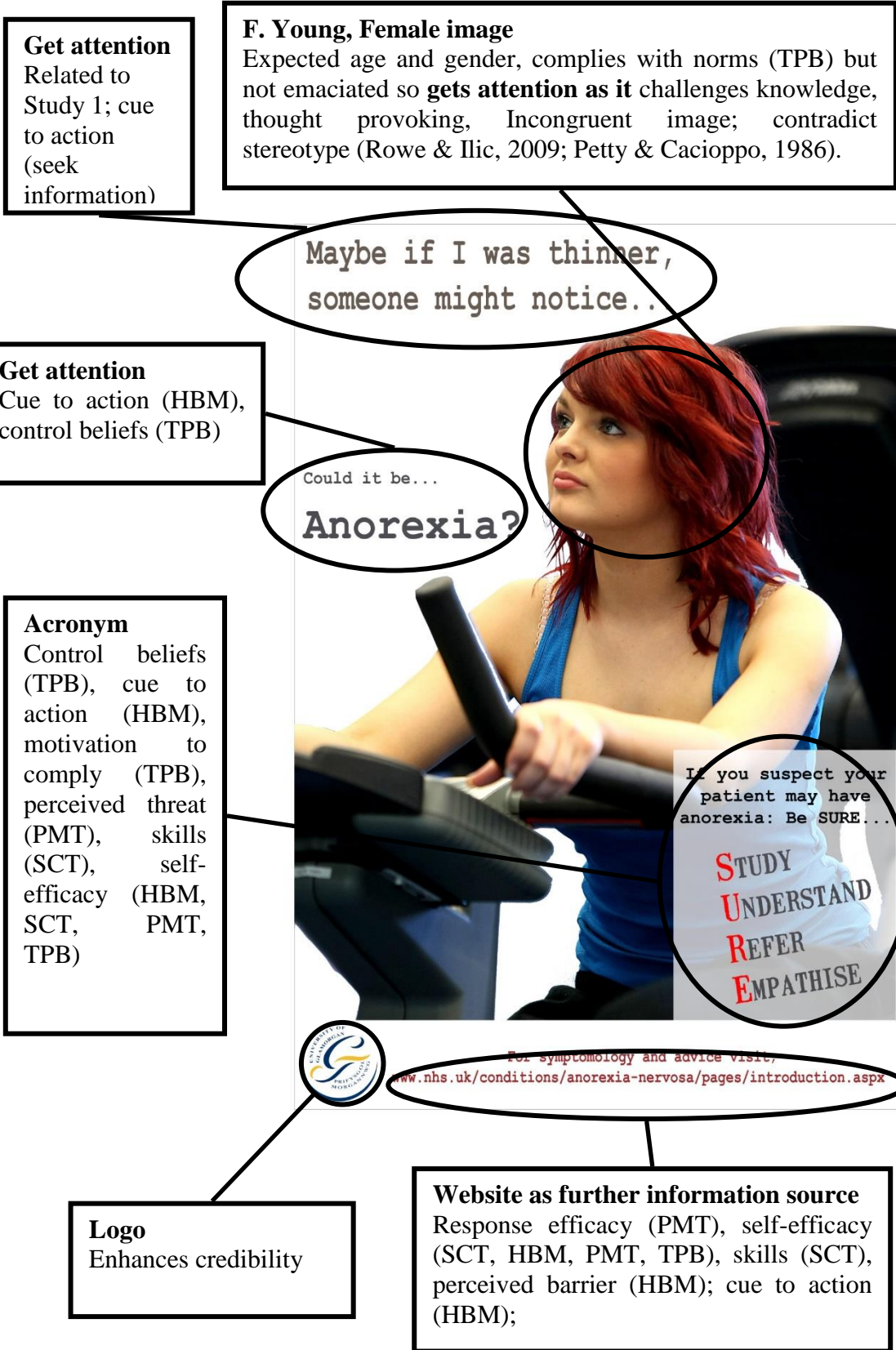


Figure 15. Poster C: Highlighting the need for diagnosis prior to severe weight loss (showing location of theoretical constructs)

Poster D was developed to challenge the stereotype that patients with anorexia are only adolescent or young females. Despite this period being the average age of onset, patients may present with anorexia later in life. Indeed, according to participants in Study 1, some patients developed anorexia early in their lives but never been diagnosed. Therefore, the need for awareness and diagnosis of this population was highlighted. The statement “I’m too scared to ask, please ask me” also highlights that patients with AN may be too nervous to ask for help and therefore HCPs should make the inquiry. Figure 17 includes description of how each element of the poster maps onto various models of social cognition.

I'm too scared to
ask you...
Please,
ask me.

Could it be...
Anorexia?

If you suspect your patient may
have anorexia: Be **SURE...**

STUDY
UNDERSTAND
REFER
EMPATHISE


 For symptomology and advice visit;
www.nhs.uk/conditions/anorexia-nervosa/pages/introduction.aspx

Figure 16. Poster D: Challenging the stereotype of young female anorexia nervosa patient



Figure 17. Poster D: Challenging the stereotype of young female anorexia nervosa patient (showing location of theoretical constructs)

Phase 2: Process evaluation of the anorexia nervosa awareness campaign by healthcare professionals-in-training

The purpose of phase three and four was to carry out process evaluation of the poster and amend the intervention if necessary. The aim of Phase 2 was to ask HCPs to evaluate the ANAC and establish whether the medium raised awareness of AN, specifically made HCPs look for more information and manage initial care of a patient with AN.

Method

Gaining NHS Ethical Approval

The first, informal application was made to a local health board research and development committee with all appropriate supporting documents (information sheet, consent form, focus group schedules). The research and development committee met on the 2nd November 2011 to review the proposal and supporting documents and approval was granted subject to receipt of a research passport.

Design

Data were collected using a mixed-methods approach utilising an unrelated, repeated measure quasi-experimental questionnaire which also included qualitative questions. Figure 18 outlines the allocation of participants to quasi-experimental or control conditions. Participants in the quasi-experimental condition and control condition were all given the same questionnaires to ensure everyone had the same research experience. The independent variable for the experimental condition was the introduction of the ANAC, whilst the control condition did not receive any intervention. The dependent variable was the evaluation score given to the poster design. The researcher ensured that the posters were not seen by the NSs by collecting data from the control group prior to displaying the posters.

Participant selection and recruitment

The researcher sought to recruit participants from GP surgeries in one Welsh local health board. At the time of data collection, the health board had 135 GP surgeries which employed a range of HCPs including GPs, nurses, and auxiliary nurses. The researcher emailed 21 of the surgeries in order to establish interest and possible recruitment of the study. Two surgeries replied to the email and agreed to participate. After sending details of the online questionnaire to one of the two surgeries, the practise manager disseminated the

email to staff at the surgery. Despite this, no HCPs completed the questionnaire. The other surgery failed to reply to further emails from the researcher despite showing initial interest.

The researcher phoned other GP surgeries in the local health board, and experienced increasing resistance to participate in the research. When practise managers were contacted, they were often unavailable, unable or unwilling to discuss the research. Messages were left to contact the researcher but no phone calls were returned. As the only option left to recruit participants was to physically attend all surgeries in the local health board area, the researcher decided that this recruitment method was beyond the scope of the project and an alternative sample and recruitment method was chosen to accompany the recruitment method of attending GP surgeries.

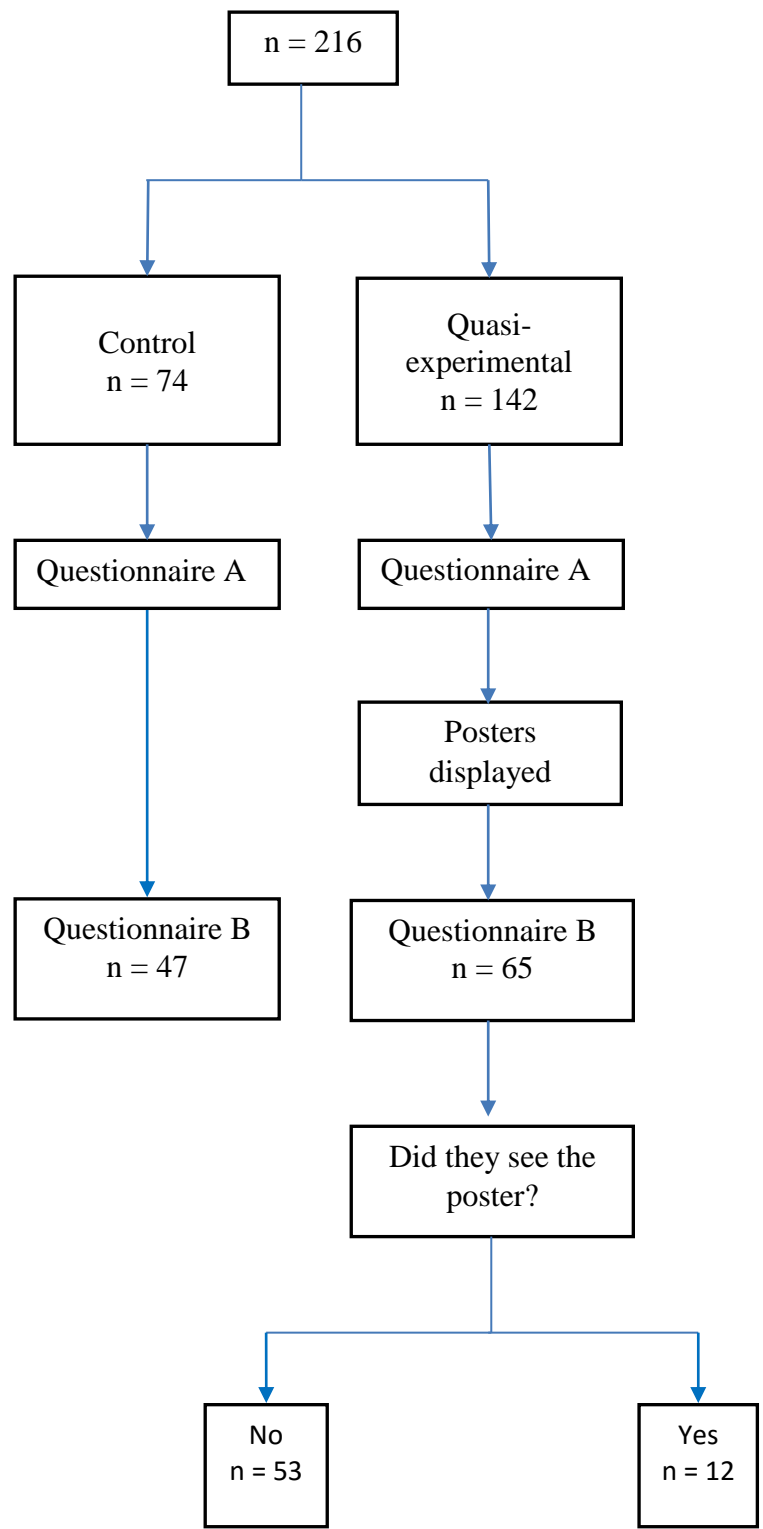


Figure 18. Flow diagram outlining participant allocation to (quasi-experimental or control) conditions and subsequent design procedure

The researcher had an established working relationship with the department of nursing at the University of South Wales following recruitment of participants for Study 2: Phase 1. Therefore, participants were recruited from the nursing student cohort. NSs who were asked to participate in the evaluation of the ANAC had all completed at least one hospital placement prior to recruitment. Therefore, they had experienced direct contact with patients and were therefore able to comment on the ANAC from the perspective of a HCP.

The level of qualification was not part of the original inclusion criterion. Therefore, the final sample included NSs and nursing auxiliaries working at NHS hospitals in the South Wales area. This increased the ecological validity of the data, as a wider sample cohort were accessed and agreed to participate.

Participants

Participants were HCPs, specifically NSs (adult branch) ($n=216$) from the University of South Wales. The participants from this phase had not taken part in any other phases. HCPs were defined, for the purposes of this study, as anyone who works in a caring capacity towards patients. This did not include staff that worked within a healthcare setting but did not have a caring role towards patients (e.g. Canteen staff, cleaners, administrative staff etc.). From the nursing students, twenty-seven also indicated that they worked as auxiliary nurses. There was no preference when recruiting participants and those participating did so as a result of opportunistic sampling. At the University of South Wales, each course leader gave permission for students to be recruited.

There were 142 people in the quasi-experimental condition (129 females and 13 males). Sixty-five of those people went on the complete questionnaire B (63 females and 2 males). There were 74 people in the control condition (70 females and 4 males). Forty-seven of those people went on to complete questionnaire B (43 females, 3 males, 1 participant did not complete the question). Overall, participants ($n=216$), included 199 females and 17 males, ages ranged from 18 to 51 years, the mean age 28.12 years ($SD=8.18$).

Materials

No current questionnaire existed that were suitable for the purpose of assessing a poster campaign regarding anorexia nervosa. Two questionnaires were developed: Questionnaire A and Questionnaire B.

Questionnaire A

Questionnaire A (Appendix 15) was designed to establish participants' perceptions and experience of AN prior to the implementation of the ANAC. Before the questions, information regarding the purpose of the study was provided so that the participant was able to give informed consent. Questionnaire A included two sections, A and B. Section A comprised of demographic questions in order to establish participant age, gender, job title, duration of role, grade they were employed and place of work.

Section B comprised of a five-point Likert scale response table. The participants were asked to imagine a patient whom they think may have AN and then respond to the following statements: "I would be able to identify a service user who may have anorexia nervosa"; "I would know where to refer a service user who may have anorexia nervosa"; "I would know how to refer a service user who may have anorexia nervosa"; "I feel confident I could signpost services to a service user who may have anorexia nervosa"; "I am confident I can access appropriate information on anorexia nervosa"; "I would seek advice from a colleague or supervisor if I suspected a service user may have anorexia nervosa"; "I believe I need more training on anorexia nervosa*". The questions were generated by the research team by considering the aim of the poster intervention.

The asterisk on the last question then related to an open ended follow-up question "* If you feel that you need more training on anorexia nervosa, please describe what it is you require training on".

The participant was thanked and contact details were provided should the participant want further information. Debrief information regarding the purpose of the study, why they were chosen and information regarding confidentiality was included.

The items used in Questionnaire A all related specifically to the aims of the intervention, and to the data that was collected during Phase 1 of Study 2. The HCPs in Phase 1 suggested that they wanted to know how to identify, refer, and signpost patients with AN. Furthermore, the participants in Phase 1 indicated that they required further training regarding AN. Therefore, this question was included and an open-ended response included to that the data from Phase 1 could be confirmed with the current type of HCP.

Questionnaire B

Questionnaire B (Appendix 16) was designed to include the consent information, Section A and Section B from Questionnaire A, and a further three sections, C, D and E regarding the ANAC. The questions were generated by the research team by considering the aim of the poster intervention.

Section B asked whether the HCP had submitted answers previously to Section A and B, as this would indicate if the participant had already participated.

Section C asked whether the participant was aware of an anorexia nervosa awareness campaign. The responses “yes”, “no”, and “not sure” were provided. This was to ensure that the message had been noticed, as previous research suggests that sometimes the campaign may not be seen and this will prevent the intervention from being effective at raising awareness and intended behaviour (Hornik 2007).

The participant was then asked to describe each of the posters in the campaign. The purpose of this question was to establish what parts of the poster campaign were memorable. This was based upon persuasion literature which suggests that in order for the poster to influence the audience, it should be memorable so that it can be retrieved for future behaviour (Communication-behaviour model: McGuire, 1989).

In Section D participants were asked to respond “yes”, “no”, or “undecided” to whether the posters were “appealing”, “memorable”, “Irrelevant”, “Informative”, “Detailed”, “Unclear”, “Quick to understand”, and “complex”.

In Section E, participants were asked to record their responses on a five point likert scale for the following questions: “The poster has made me more confident in being able to refer a service user who may have anorexia nervosa”, “The poster made me question my prior knowledge of anorexia nervosa”, “The poster has made me more confident in being able to access appropriate information on anorexia nervosa”, “The poster has made me more confident in being able to ask a colleague about anorexia nervosa”, “The poster has given me new information about anorexia nervosa”, and “The poster has made me aware of how to signpost services to a service user who may have anorexia nervosa”. The purpose of the questions was to evaluate whether the participant felt that the poster had any effect on their confidence to refer, signpost services, access further information, ask a colleague. The questions were also designed to establish whether the poster had given them any new information or made them question their prior knowledge of AN. The purpose of these questions was to see whether the poster had provided new information regarding AN or challenged their current knowledge of the disorder.

The last question in Section E was an open-ended question which asked participants “do you have any further comments on the content/layout of the poster?” This allowed the participant to include any further information that was necessary. The research team were aware that the social marketing approach advocated the use of feedback during the process evaluation phase and so open-ended responses may elicit further useful data.

Cronbach's alpha (Cronbach, 1951) was calculated for Section E of Questionnaire B and was found to be of good reliability (6 items; $\alpha = .82$) (George & Mallery, 2003). All sections were checked for face and content by the research team (Laura Rees-Davies, Dr. Bev John, and Dr. Susan Faulkner). Furthermore, the questionnaire was piloted on two HCPs and deemed to be acceptable for the purpose of the study.

Procedure

Week 1: Participants were given a Questionnaire A which asked about their perceptions of AN. Participants were required to give fully informed consent prior to completing the questionnaire. Participants did not have to complete the questionnaire if they did not wish to and were given the opportunity to withdraw at any time. Following completion of the questionnaires, the four ANAC posters were displayed in the University for four weeks. The posters were located on twelve designated poster boards in three areas outside classrooms and simulated wards. Posters were removed after four weeks had lapsed unless the university preferred that they remain in situ.

Week 5: All HCPs who completed questionnaire A were given Questionnaire B, which included the original questions from week 1 questionnaire A. The questionnaire also contained questions that asked the participant whether they had seen the poster ANAC, and how they would evaluate the ANAC. Furthermore, Questionnaire B asked for participants' thoughts on AN as a result of seeing the ANAC.

Phase 2 Results

There were seventy-four people in the control condition (70 females and 4 males). Forty-seven of those people went on to complete questionnaire B. There were 142 people in the quasi-experimental condition. Sixty-five of those people went on to complete questionnaire B.

Of the 65 people in the quasi-experimental condition who completed questionnaire B, only 12 people indicated that they had seen the ANAC posters. This meant that the data from the 53 people who had not seen the poster could no longer be included in the quasi-experimental condition, as they had not been exposed to the intervention. Therefore, the low number of

participants for the quasi-experimental condition (n=12) would not be appropriate for statistical comparison of pre- and post-intervention data.

Therefore, only data from Questionnaire A (Section B) were used to describe participants' responses for each point on the Likert scale (including percentage and 95% confidence intervals). Thematic analysis (Braun & Clarke, 2006) was used to analyse the qualitative responses from the open-ended questions.

Quantitative Data: Nursing Students' Awareness of Anorexia Nervosa

NSs (n=216) completed Section B of Questionnaire A. Table 19 shows the frequency of type of responses category to each statement. The majority of NSs "agreed" that they would be able to identify a person who may have AN (n=109), and that they could access information on AN (n=105). The majority of NSs "strongly agreed" that they would seek advice from a colleague or supervisor if they suspected a person may have AN (n=139), and that they feel that they need further training about AN (n=135). The majority of NSs "disagreed" that they were confident they could signpost services (n=94) and that they would know how (n=95) and where (n=81) to refer someone who may have AN.

Table 20. Frequency of responses (including percentages and 95% confidence intervals) by nursing students from Questionnaire A (Section B):
Detection, assessment and referral of anorexia

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
I would be able to identify a patient who may have AN	1 0.5% (CI: -0.44, 1.44)	11 5.1% (CI: 2.17, 8.03)	81 37.5% (CI: 31.04, 43.96)	109 50.5% (CI: 43.83, 57.17)	14 6.5% (CI: 3.21, 9.79)
I would know how to refer a patient who may have AN	22 10.3% (CI: 6.23, 14.37)	95 44.4% (CI: 37.74, 51.06)	59 27.6% (CI: 21.61, 33.59)	35 16.4% (CI: 11.21, 21.07)	3 1.4% (CI: -0.17, 2.97)
I feel confident I could signpost services to a patient who may have AN	23 10.7% (CI: 6.57, 14.83)	94 43.7% (CI: 37.07, 50.33)	64 29.8% (CI: 23.69, 35.91)	33 15.3% (CI: 10.49, 20.11)	1 0.5% (CI: -0.44, 1.44)
I know where to refer a patient who may have AN	15 6.9% (CI: 3.52, 10.28)	81 37.5% (CI: 31.04, 43.96)	52 24.1% (CI: 18.4, 29.8)	63 29.2% (CI: 23.14, 35.26)	5 2.3% (CI: 0.3, 4.3)
I am confident I can access appropriate information on AN	13 6.1% (CI: 2.89, 9.31)	33 15.4% (CI: 10.56, 20.24)	43 20.1% (CI: 14.73, 25.47)	105 49.1% (CI: 42.4, 55.8)	20 9.3% (CI: 5.41, 13.19)
I would seek advice from a colleague or supervisor if I suspected a patient may have AN	1 0.5% (CI: -0.44, 1.44)	2 0.9% (CI: -0.36, 2.16)	5 2.3% (CI: 0.3, 4.3)	68 31.6% (CI: 25.39, 37.81)	139 64.7% (CI: 58.31, 71.09)
I believe I need more training on AN	1 0.5% (CI: -0.44, 1.44)	0 0% (CI: 0, 0)	8 3.7% (CI: 1.18, 6.22)	72 33.3% (CI: 27.01, 39.59)	135 62.5% (CI: 56.04, 68.96)

[95% Confidence Intervals used]

Figure 19 displays the number of participant responses for each point of the Likert Scale, the percentage of NSs and confidence intervals (CIs) for each response. The majority of NSs “agreed” that they would be able to identify a person who may have AN ($n=109$, 50.46%). The bar graph shows that although just over half of the total sample “agreed” with this statement, a large proportion of the sample also chose “undecided” ($n=81$, 37.5%). Furthermore, the CIs for both statements marginally overlap. Therefore, the results should be interpreted with caution before concluding that most NSs feel they are able to identify a person who has AN. The results indicate that a large proportion also feel unsure about diagnosis, indicating that this should be a cause for concern.

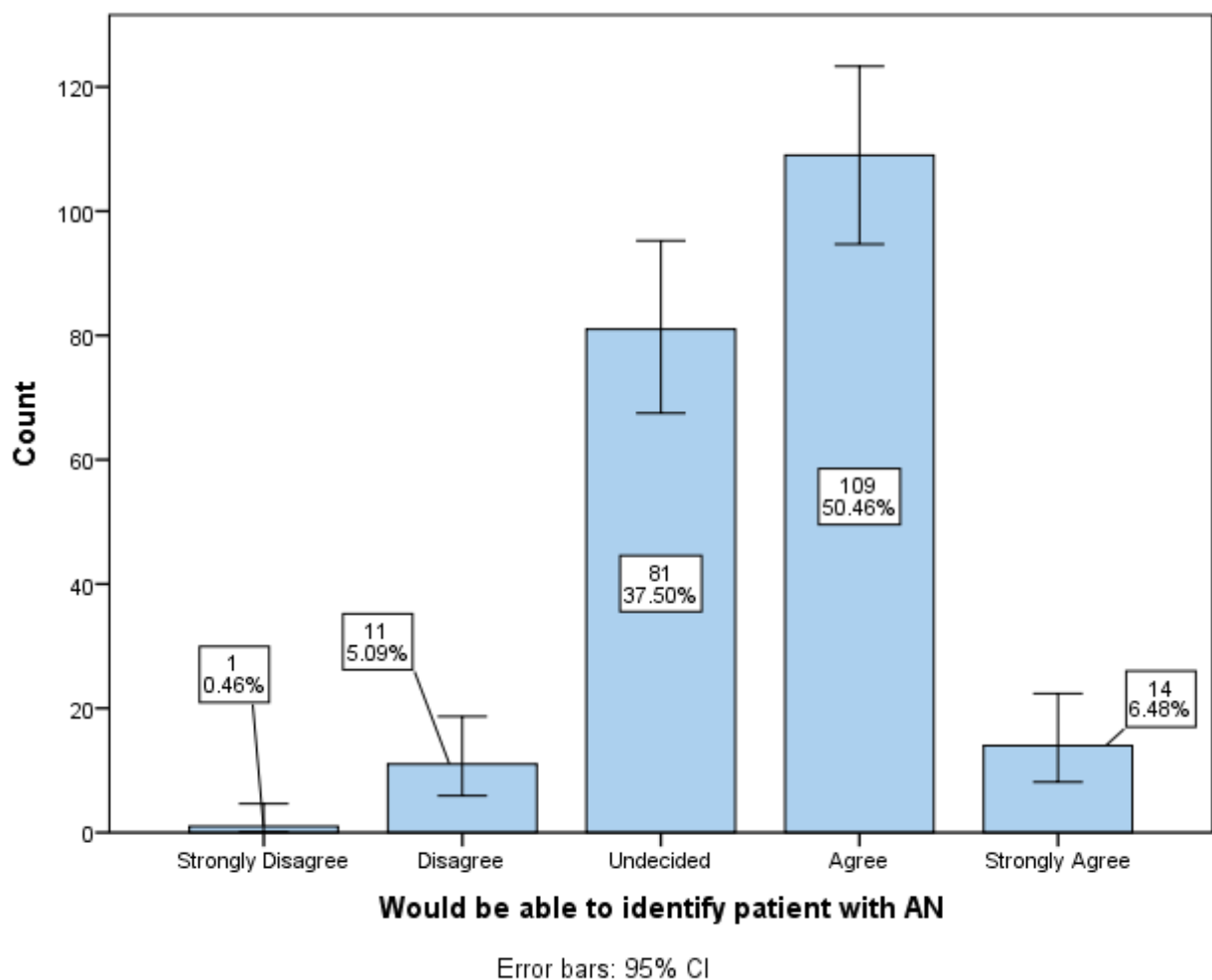


Figure 19. Bar graph showing number, percentage and CIs for NSs responses to the statement “I would be able to identify a patient who may have AN”

Figure 20 displays the number of participant responses for each point of the Likert Scale, the percentage of NSs and confidence intervals (CIs) for each response to the statement “I am confident I can access appropriate information on AN”. The majority of NSs “agreed”

($n=105$, 49.07%), and almost another tenth of participants felt they “strongly agreed” with the statement ($n= 20$, 9.35%). The CIs indicate that HCPs would prefer to “agree” that they feel confident that they could access information regarding AN. Nevertheless, it is still important to note that the remaining proportion of participants indicated that they were “undecided” ($n=43$, 20.09%), “disagreed” ($n=33$, 15.42%) or “strongly disagreed” ($n=13$, 6.07%), indicating that some of the NSs require advice to look for appropriate further information.

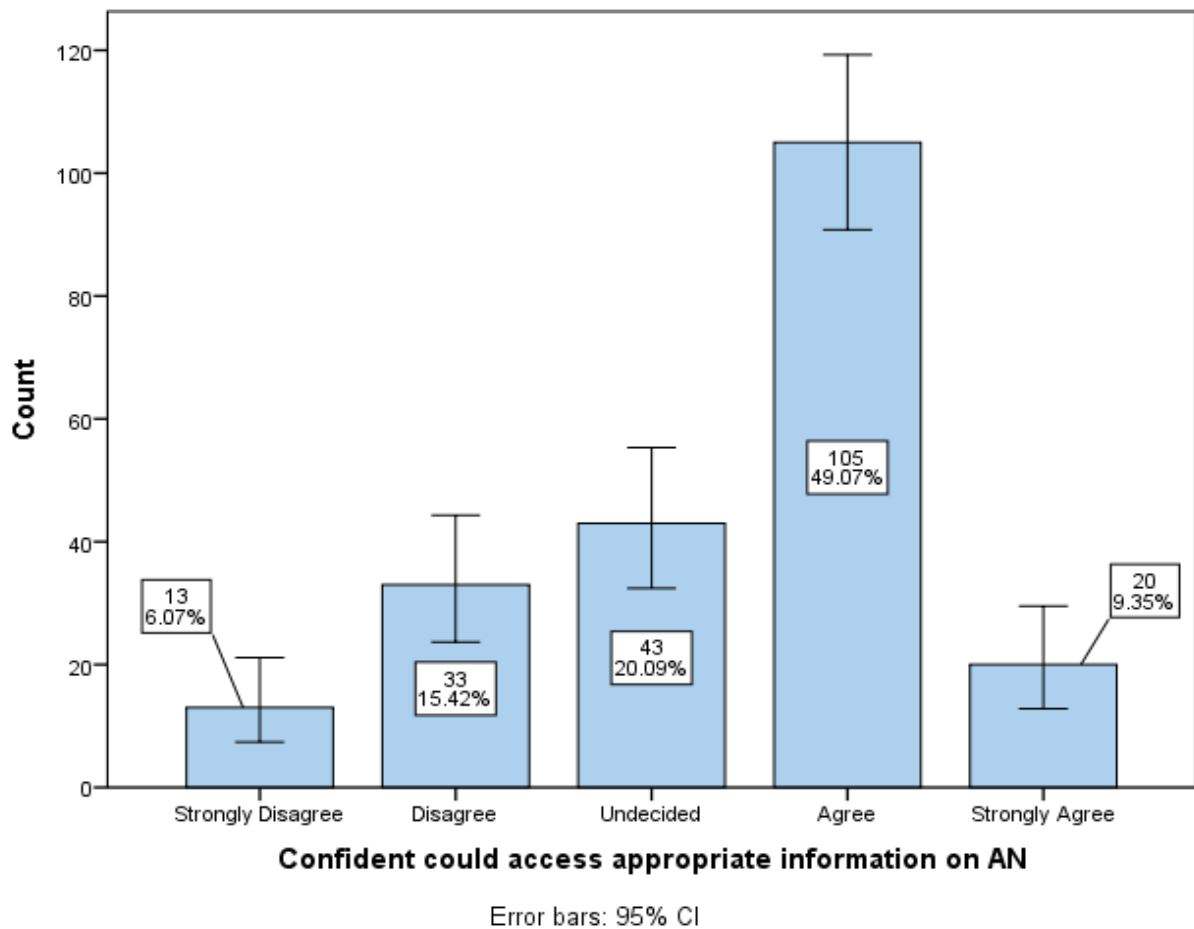


Figure 20. Bar graph showing number, percentage and CIs for NSs responses to the statement “I am confident I can access appropriate information on AN”

Figure 21 displays the number of participant responses for each point of the Likert Scale, the percentage of NSs and confidence intervals (CIs) for each response to the statement “I would seek advice from a colleague or supervisor if I suspected a patient may have AN”. The majority of NSs “strongly agreed” ($n=139$, 64.65%) or “agreed” ($n= 68$, 31.68%) that they would seek advice from a colleague or supervisor if they suspected a person may have AN ($n=139$, 64.65%). The CIs indicate that these responses would usually be preferred by

NSs over “undecided”, “disagree” and “strongly disagree”. Only a small number of NSs ($n=8$) indicated that they were undecided or would not seek advice from a colleague or supervisor.

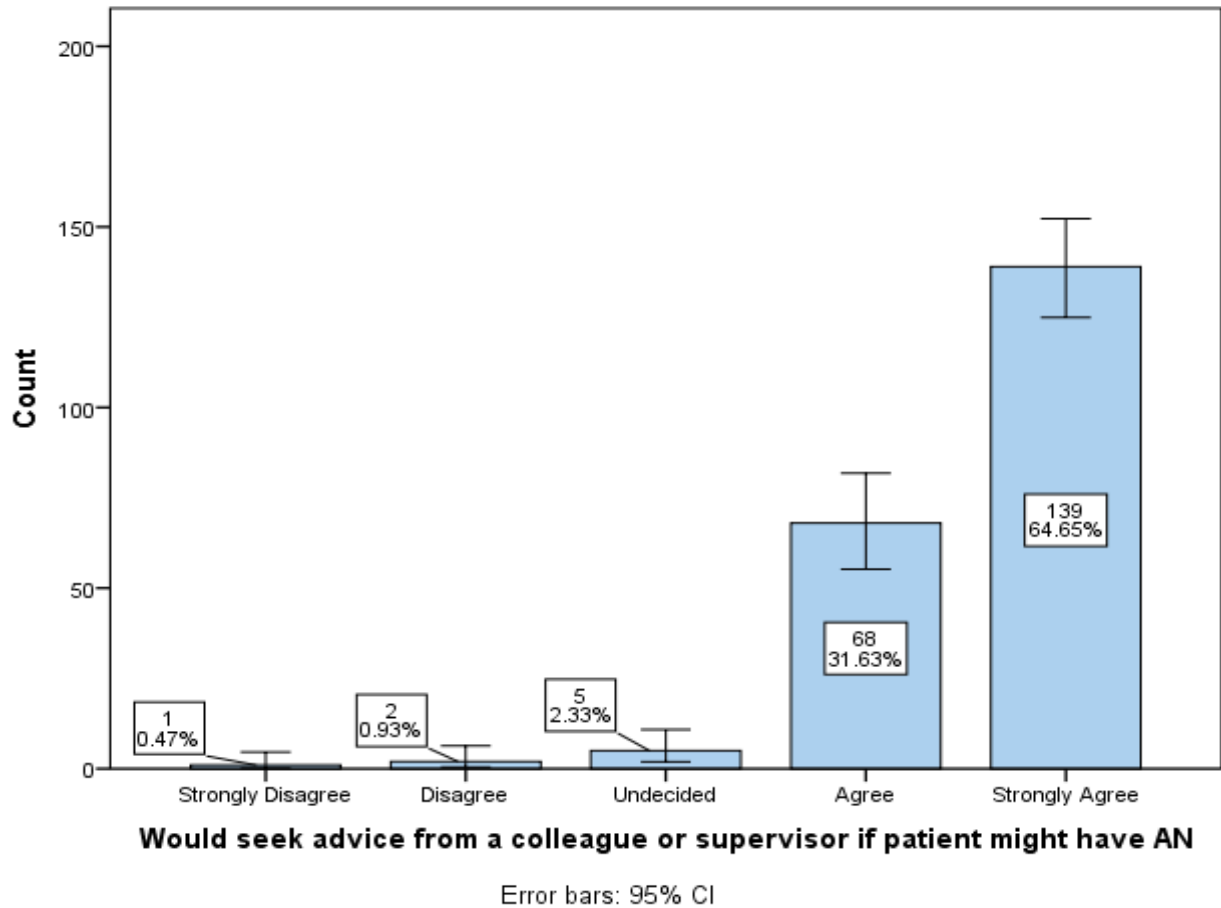


Figure 21. Bar graph showing number, percentage and CIs for NSs responses to the statement “I would seek advice from a colleague or supervisor if I suspected a patient may have AN”

The majority of NSs “disagreed” that they would know *how* ($n=95$) and *where* ($n=81$) to refer a patient who may have AN. Figure 22 displays the number of participant responses for each point of the Likert Scale, the percentage of NSs and confidence intervals (CIs) for each response to the statement “I would know *how* to refer a patient who may have AN”. Most NSs were “undecided” ($n=59$, 27.57%) or “disagreed” ($n=95$, 44.39%) that they knew how to refer a patient with AN, whereas only a small proportion “agreed” ($n=35$, 16.36%) or “strongly agreed” ($n=3$, 1.4%) with the statement.

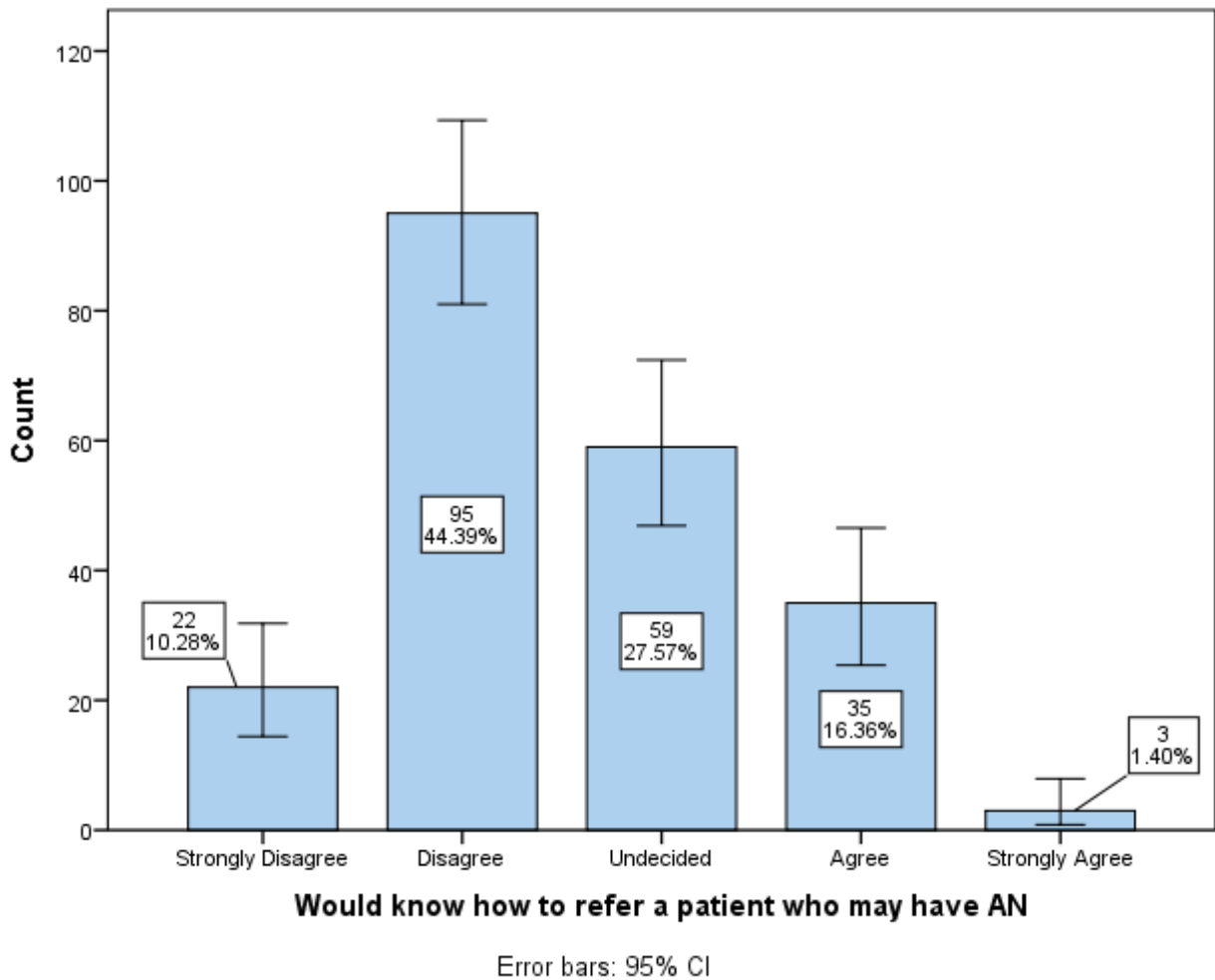


Figure 22. Bar graph showing number, percentage and CIs for NSs responses to the statement “I would know *how* to refer a patient who may have AN”

Figure 23 displays the number of participant responses for each point of the Likert Scale, the percentage of NSs and confidence intervals (CIs) for each response to the statement “I know *where* to refer a patient who may have AN”. A large proportion of the NSs felt that they were “undecided” ($n=81$, 37.5%) or “disagreed” ($n=52$, 24.07%) that they knew where to refer a patient with the disorder. Conversely, 63 (29.17%) “agreed” that they knew where to refer patients. The CIs for the three preferred responses overlap, indicating that it is difficult to distinguish whether NSs are, or are not, confident in where to refer patients.

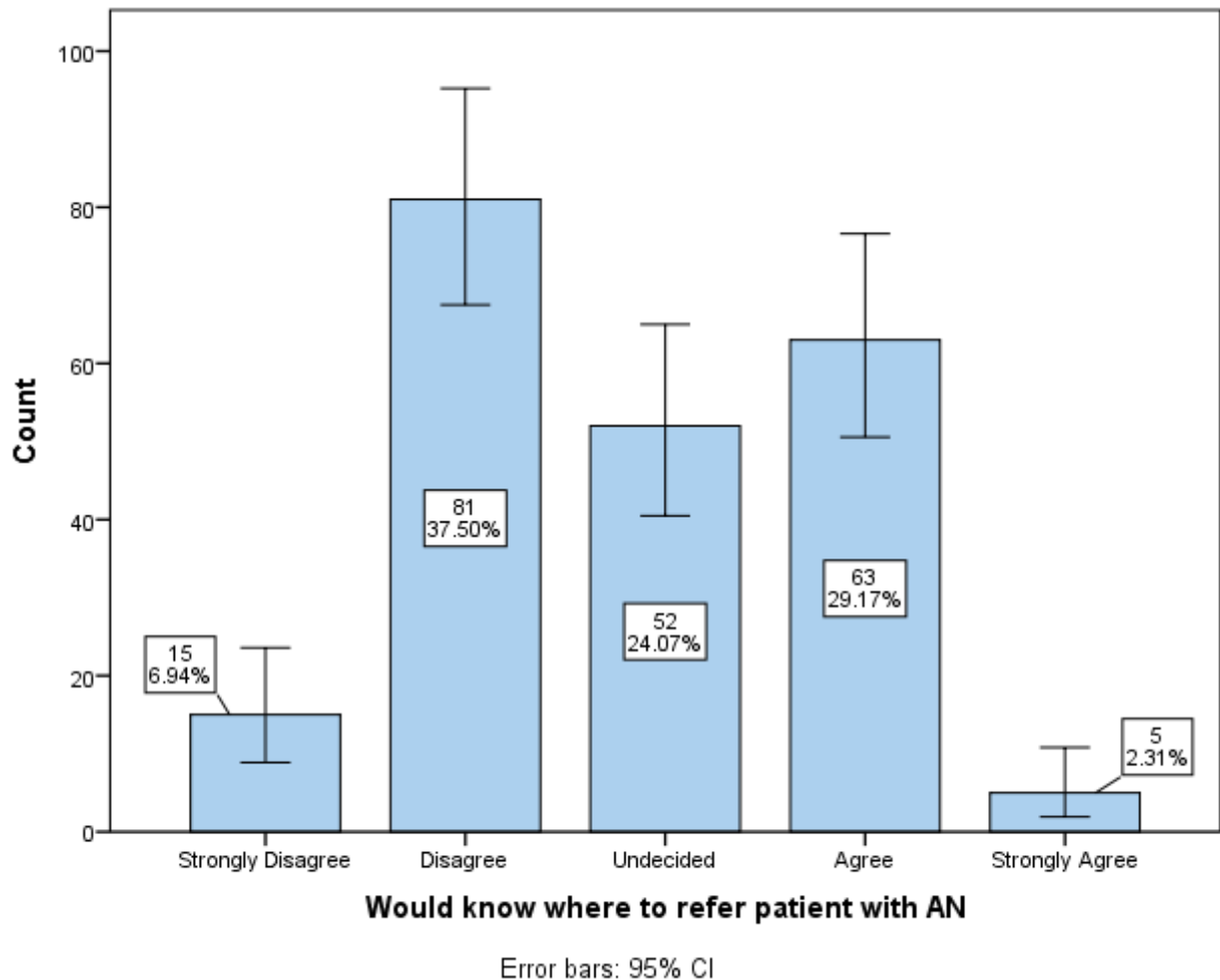


Figure 23. Bar graph showing number, percentage and CIs for NSs responses to the statement “I know where to refer a patient who may have AN”

Figure 24 displays the number of participant responses for each point of the Likert Scale, the percentage of NSs and confidence intervals (CIs) for each response to the statement “I feel confident I could signpost services to a patient who may have AN”. The majority of NSs “disagreed” that they were confident they could signpost services ($n=94$, 43.72%). Although 33 (15.35%) felt confident they could signpost services, some NSs were either “undecided” ($n=64$, 29.77%) or “strongly disagreed” ($n=23$, 10.70%). The CIs indicate that there is a preference by NSs to disagree or be uncertain whether they could signpost services.

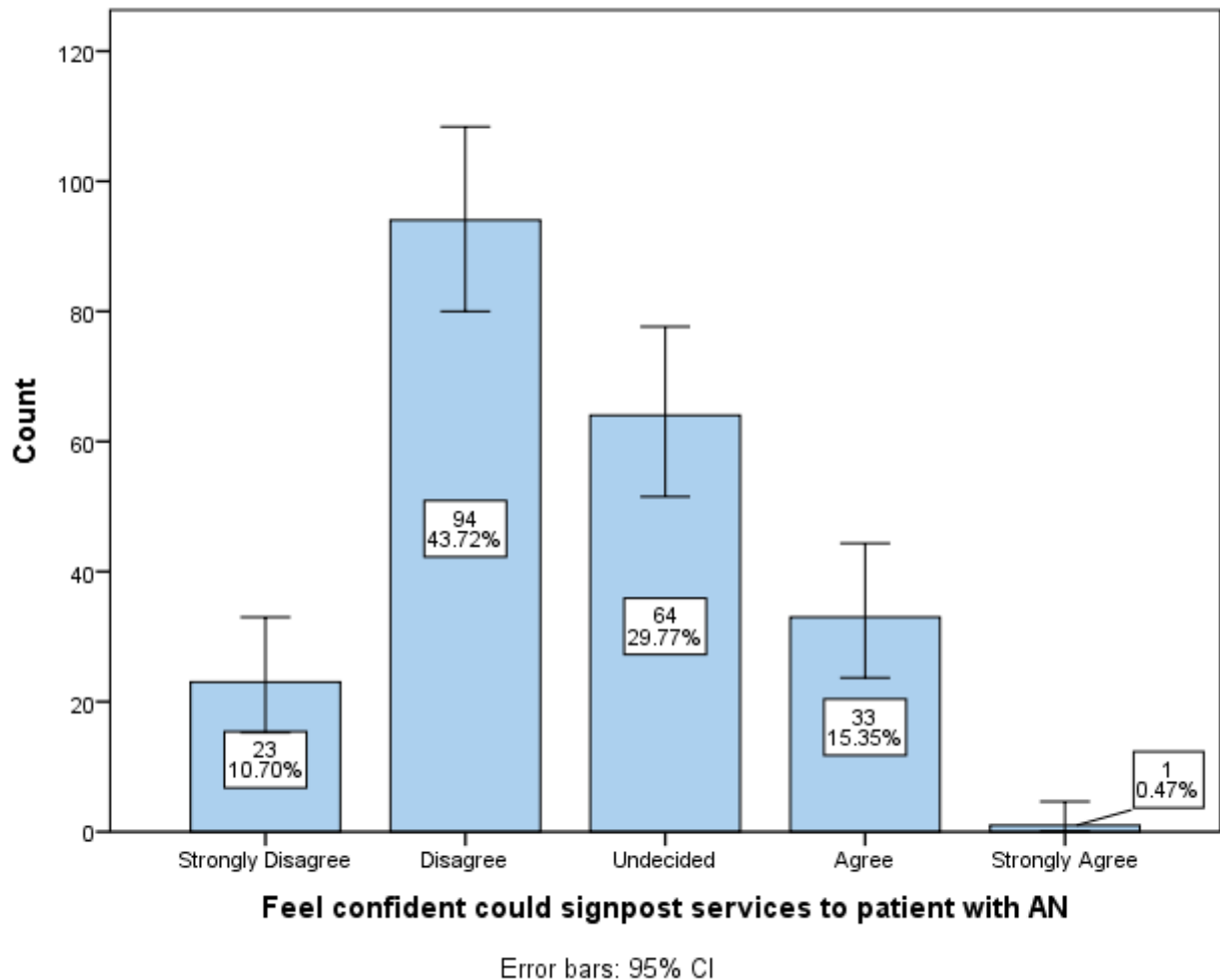


Figure 24. Bar graph showing number, percentage and CIs for NSs responses to the statement “I feel confident I could signpost services to a patient who may have AN”

Figure 25 displays the number of participant responses for each point of the Likert Scale, the percentage of NSs and confidence intervals (CIs) for each response to the statement “I believe I need more training on AN”. The majority of NSs “strongly agreed” that they feel that they need further training about AN ($n=135$). A further 33.33% of NSs also “agreed” with the statement, and the CIs show a clear preference by NSs to respond that they require further training on the disorder. No NSs disagreed with the statement, only 3.7% were undecided, and one participant disagreed.

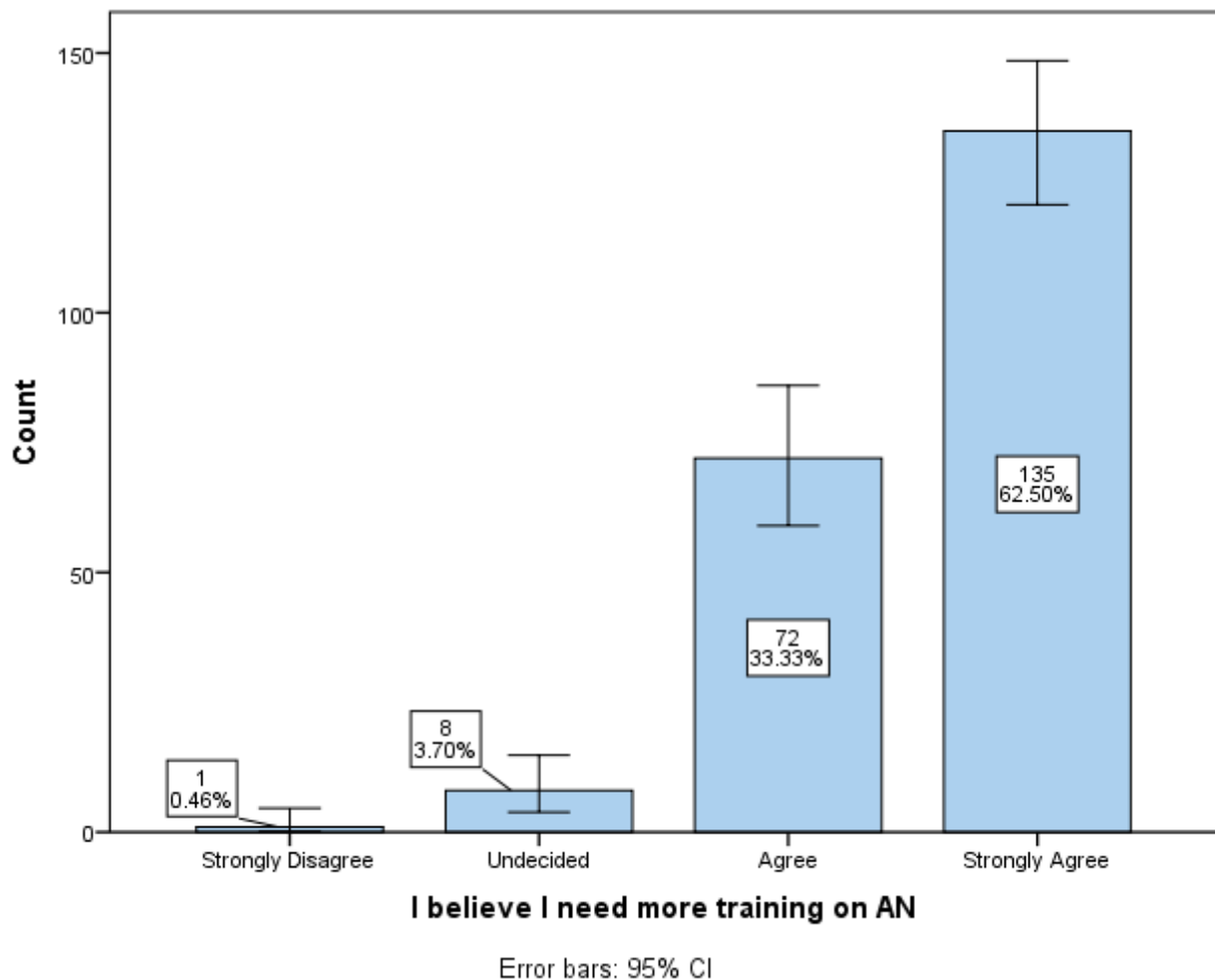


Figure 25. Bar graph showing number, percentage and CIs for NSs responses to the statement “I believe I need more training on AN”

Qualitative Data: Nurses Further Training regarding Anorexia Nervosa

Thematic (Braun & Clarke, 2006) and content analysis was conducted on the responses by nurses to the open-ended questions. Content analysis was chosen as an adjunct to thematic analysis so that the frequency of coded instance could be recorded and preferences for themes would be evident. Four super-ordinate themes were extracted from data for question “If you feel you need more training on AN, please describe what it is you require training on” from questionnaire A (Section B). The four themes were: knowledge of AN characteristics; appropriate referral of a patient with AN; treatment available for AN; and approaching the patient with AN. Table 20 shows the themes, subthemes and frequency of codes for each, including the percentage of participants who wrote an answer relating to each theme.

Table 20. Themes and frequency of subthemes from Questionnaire A (Section B): Further training requirements for nursing students regarding anorexia nervosa

Theme	Subtheme	Quote	Frequency of coded instances
Knowledge of anorexia nervosa characteristics	General information about AN	<p><i>“Learn more about anorexia nervosa as a whole”</i></p> <p><i>“All areas of anorexia nervosa”</i></p> <p><i>“Everything”</i></p> <p><i>“I think more training is needed”</i></p>	77
	How to recognise AN	<p><i>“Warning signs”</i></p> <p><i>“How to recognise anorexia”</i></p> <p><i>“Knowledge on anorexia symptoms”</i></p>	82
	Diagnosis of AN	<p><i>“How it is diagnosed”</i></p> <p><i>“How to assess and what tools would be used”</i></p> <p><i>“Diagnosis”</i></p>	9
	Causes/risk factors for AN	<p><i>“Identification of risks”</i></p> <p><i>“Causes”</i></p>	6
	Mental health issues associated with AN	<p><i>“I would require more training on the mental health issues”</i></p> <p><i>“How to understand the mental side of anorexia”</i></p> <p><i>“Psychological aspects of the illness”</i></p>	15
	Physical effects on the body	<p><i>“effects on body”</i></p> <p><i>“Physical effects on body”</i></p>	7

Table 20. Themes and frequency of subthemes from nursing students regarding further training requirements for anorexia nervosa (continued)

Theme	Subtheme	Quote	Frequency of coded instances
Approaching the patient with AN	How to advise patients with anorexia	<i>“Appropriate information to give patients”</i> <i>“How to advise”</i> <i>“Advice”</i>	9
	How to support the patients with anorexia	<i>“How to offer support”</i> <i>“How to offer sufficient support”</i>	17
	Dealing with the patient with anorexia	<i>“How to deal with the situation”</i> <i>“How to nurse”</i>	7
	How to approach the patient for the first time regarding AN	<i>“How to approach people with anorexia nervosa in a way which is most likely to lead to them seeking help”</i> <i>“How to talk to a patient suspected of suffering from the disease”</i>	13
	How to approach resistant patients	<i>“What do you do if a person does not want the help”</i>	1
	Health promotion	<i>“Health promotion”</i>	1

Table 20. Themes and frequency of subthemes from nursing students regarding further training requirements for anorexia nervosa (continued)

Theme	Subtheme	Quote	Frequency of coded instances
Treatment available for AN	How to treat AN	<i>“How to treat anorexia” “What help can be given?” “How would you treat them on the ward?”</i>	30
	What services are available for AN	<i>“What NHS services are available” “I’m not aware of the services available to a person suffering with this disorder”</i>	33
	Support groups	<i>“Support groups”</i>	2
	Expected outcome of referral/treatment	<i>“Expected outcomes of referral” “Outcomes”</i>	2
	Management of AN	<i>“Management”</i>	5
Appropriate referral of a patient with AN	How to make a referral	<i>“I would require training on how to refer” “Referral” “How to refer”</i>	59
	Where to make a referral	<i>“Where to refer” “Points of contact” “Referring people on to other healthcare professionals”</i>	49
	How to document a referral	<i>“How to document those referrals”</i>	1

Knowledge of AN characteristics had six subthemes: general information about AN; how to recognise AN; diagnosis of AN; causes/risk factors for AN; mental health issues associated with AN; and physical effects on the body. Appropriate referral of a patient with AN had three subthemes: how to make a referral; where to make a referral; and how to document a referral. Treatment available for AN had five sub-themes: how to treat AN; what services are available for AN; support groups; expected outcome of referral/treatment; and management of AN. Approaching the patient with AN had six subthemes: how to advise patients with anorexia; how to support the patient with anorexia; dealing with the patient with anorexia; how to approach the patient for the first time regarding AN; how to approach resistant patients; and health promotion.

Discussion of nursing students' evaluation of the anorexia nervosa awareness campaign

Firstly, it is crucial to acknowledge that data collection analysis intended for this phase was not successful given that only 12 participants in the quasi-experimental group saw the posters of the ANAC. The posters were displayed on notice boards that NSs were expected to view regularly for course information. Therefore, there are a number of reasons that could explain why the NSs did not see the posters. The HCPs in Phase 1 suggested locating the posters in a variety of locations, such as notice boards or the back of toilet doors. Unfortunately, the university would only allow the posters to be displayed on the designated notice boards for the NSs. As exposure to the poster is brief and non-interactive (Rhodes & Wolitski, 1992) the ANAC posters should have been strategically positioned in unique locations where they are more likely to be noticed (Fearnow-Kenney & Wynick, 2005; Foss, Marchetti & Holladay, 2005; Linkerbach & Perkins, 2005). For example, Foss and colleagues (2005) gave students posters and offered them financial rewards for displaying them in their student rooms. Unsurprisingly, when surveyed, nearly two thirds of first year students reported learning about the campaign by seeing the posters. The authors explained that they made the posters stand out by designing them to be an unusual colour (white image on black background) and avoiding display on noticeboards that were cluttered with other materials. Therefore, restriction of the location of the posters may have meant that the students did not notice them amongst the other educational materials. Furthermore, students may also be rushing between lectures, and have little time to look at posters that were not directly related to their course.

The posters may have been too small to capture the attention of the NSs. For example, a study exploring the use of posters as prompts for stair use found that the size of the poster affected whether the desired behaviour was observed. More particularly, the larger posters (A1 and A2) had a significant impact on stair use compared to the smaller posters (A3) (Kerr, Eves, & Carroll, 2010). The posters used in the current study were A3 size, and therefore the poster may not have been large enough to draw attention.

Ultimately, the lack of poster views meant that the poster could not be assessed appropriately. This emphasised the importance of careful consideration when choosing the size and positioning of the poster. Furthermore, the poster may be more successful as part of a multimodal campaign including other sources of information such as audio-visual media.

Although significant attention was paid to the design and content of the poster, the level of exposure to the message is crucial for campaign success.

Nursing Students Feedback regarding Knowledge of AN

Although the NSs did not see the poster, useful qualitative and quantitative data were gathered from the questionnaire regarding aspects of care for patients with AN. There was a clear preference by NSs to agree or strongly agree that they required further training regarding AN. NSs also often completed the open-ended question which asked what they felt they required further training on. This echoes the findings in Phase 1 that HCPs feel they need to know more about the disorder.

Just over half of the NSs agreed that they would be able identify a patient with AN. Although this appears to be positive, it is important to note that a large proportion of the remaining NS were undecided. Therefore, it important to note that the NSs feel uncertain about the characteristics of the disorder. This was echoed by the qualitative responses to the where students described the further training they required. For example, the NSs wanted more knowledge of AN, particularly general information about its characteristics and how to recognise the disorder. Some NSs also wanted to know AN risk factors, comorbidity of other mental health problems and physical effects of the disorder on the patient.

The majority of NSs either strongly agreed or agreed that they knew where to look for appropriate information regarding AN. Nevertheless, it is still important to note that the remaining proportion of students were uncertain or did not know where to look for further information regarding AN. Therefore, the results suggest that some NSs do not feel able to identify a patient with AN, and would not know where to look for further information. Although some NSs agreed that they could signpost a patient with AN to other services, most NSs reported that they either disagreed or were undecided.

The majority of NSs did not feel that they knew *how* to refer a patient who may have the disorder. The results regarding whether NSs knew *where* to refer patients was not as clear. Some NSs indicated that they knew where to refer patients, yet others did not. Qualitative responses by students also confirmed that NSs wanted to know more about how and where to make referrals. The results warrant clarity of referral procedures for NSs who suspect their patient may have AN. Fortunately, most NSs would seek advice from a colleague or supervisor if they thought that a patient had AN. This means that at best, the NSs would pass

on their concerns to other HCPs. This does not mean that the outcome will be positive as the HCP they speak to may not be aware of AN either. Therefore, although it is important to pass on concerns, knowledge of the characteristics of the disorder would be useful so that NSs can be more confident in their assessment of the disorder.

NSs also wanted further information regarding how to communicate with patients who may have the disorder. For example, they wanted to know how to approach the patient for the first time about the disorder, and then how to advise and support them. This indicates that NSs may lack confidence in communicating with patients who have the disorder.

NSs reported that they wanted to know how to treat a person with AN. A small number of the NSs wanted to know about management of AN, the expected outcome of referral and treatment and support groups that were available.

The open-ended answers by NSs suggests that they require extensive in-depth training regarding several aspects of the disorder. This supports previous research which has noted the need for HCPs to increase their awareness of their disorder (Rees-Davies et al., 2011; Blum & Bearinger, 1990; Currin et al., 2009). Fortunately, this motivation for further information is crucial, as education may induce voluntary behaviour change in HCPs (Rothschild, 1999). Increased knowledge of AN facilitates the therapeutic alliance between a HCP and patient (Rees-Davies et al., 2011; Pereira et al., 2006), therefore further training is recommended. It is important to consider that because the nurses were currently in training, they were likely to answer yes to this question. Nevertheless, it is an important indication that the training that nurses do receive as part of the undergraduate degree with regard to AN is limited, and the trainees feel there are several areas of which they would prefer more in-depth training. Furthermore, it is important to note that despite being at undergraduate level, such students are in contact with patients during their placements. Similarly, staff that are in a caring role (such as nursing auxiliaries) may not have received any formal nursing or medical training. Therefore, knowledge of the disorder, given the implications on therapeutic alliance and possible treatment outcome, should be a priority during training of all staff in contact with patients with anorexia.

Lack of viewing of the posters by the NSs meant that the poster content could not be evaluated. The NSs students did not see the posters placed around campus, and therefore the

ANAC was not fully evaluated during phase 3. More careful consideration to the location of the posters would need to be paid in future evaluation phases.

The results of this phase also confirm that NSs want further information regarding the disorder. Unfortunately, it was beyond the scope of a poster to include all the details that the NSs sought regarding AN. Indeed, they reported that they would like training on several areas such as detection, assessment, referral and treatment of the disorder. According to the communication-behaviour change model (McGuire, 1989) the message on the poster should be comprehended and remembered in order to be accepted. To that end, the message needed to be kept clear and simple. This contradicts the information that NSs desire regarding AN. This suggests that although the posters were chosen to raise awareness in a context where time is precious, NSs would actually prefer to have extensive training.

Phase 3: Further evaluation of the anorexia nervosa awareness campaign by healthcare professionals-in-training

Phase 2 was designed to evaluate whether the ANAC raised awareness of AN in HCPs. Due to the low number of NSs (adult branch) who saw the ANAC poster in phase 2, the aim of the study was not met. Therefore, a further stage of data collection where forced viewing of the ANAC was necessary in order to evaluate the content of the poster prior to evaluation of the impact of the poster in a healthcare setting. The results from the forced viewing evaluation in this phase could be combined with the results of Phase 2 to determine whether a poster was a suitable medium for the ANAC. The aim of this phase was to gather feedback regarding the design and content of the poster. This would enable the researchers to modify the posters if necessary.

Method

Design

Data were collected during a single phase using an evaluation questionnaire to ascertain HCP perceptions of their ability to manage person with anorexia. Participants were also asked to evaluate their perception of the effect and content of the poster.

Participants

Participants were recruited from the chiropractic clinic at the University of South Wales. The research team felt that it was necessary that a new participant population were used in this phase. The NSs (adult branch) participants had already completed questionnaire A during phase 4. The questionnaire may have highlighted a gap in their knowledge regarding AN, prompting them to seek further information prior to data collection of phase 4. Therefore, it was not appropriate to ask them to complete the questionnaire again, and so participants who had not taken part in the study previously were chosen.

Chiropractic practitioners-in-training were considered HCPs as they were in a caring role towards patients ($n=42$). As chiropractic is a complementary and alternative therapy (CAM), people with AN may seek treatment for the disorder itself, or for problems that may be associated with the disorder (e.g. gastrointestinal complaints). A comprehensive case history is taken prior to treatment and symptoms are also checked throughout. Therefore, if a person who did not have a diagnosis of AN attended a chiropractic practitioner for treatment, it is entirely possible that the practitioner would be in a position to detect, assess and refer that person for treatment. Inclusion of chiropractic practitioners-in-training who had access to patients increased the ecological validity of the data. From the chiropractic students, participants were 15 males and 27 females; ages ranging from 19 to 43 years; mean age 24.29 years ($SD= 4.82$). There was no preference when recruiting participants from this sample group and those participating did so as a result of opportunistic sampling. At the University of South Wales, each course leader gave permission for data to be collected.

Materials

No current questionnaire existed that were suitable for the purpose of assessing a poster campaign regarding AN. The evaluation questionnaire was modified for the chiropractic students. The campaign evaluation questionnaire v3 (Appendix 17) was designed to establish participant perceptions of AN following implementation of the ANAC. The questionnaire contained the same study information as Questionnaire A that was used for the NSs in Phase 3.

The research team retained three sections from the NSs questionnaire. Section A comprised of demographic questions in order to establish participant age, gender. Questions from the

previous questionnaire relating to job title, duration of role, grade they were employed and place of work were not included as they were designed specifically for NSs. The section asking participants if they had seen the ANAC and to describe the posters was not applicable for this phase as viewing of the poster was forced.

In Section B participants were asked to respond “yes”, “no”, or “undecided” to whether the posters were “appealing”, “memorable”, “Irrelevant”, “Informative”, “Detailed”, “Unclear”, “Quick to understand”, and “complex”. The purpose of this was to explore whether the participants thought the poster was viewed in a positive or negative way by participants. The communication-behaviour model suggests that the message should be attractive and memorable in order for the intervention to be effective (McGuire, 1989).

Section C of the questionnaire for chiropractic students was the same as Section E of the NSs questionnaire. In Section C, participants were asked to record their responses on a five point likert scale for the following questions: “The poster has made me more confident in being able to refer a service user who may have anorexia nervosa”, “The poster made me question my prior knowledge of anorexia nervosa”, “The poster has made me more confident in being able to access appropriate information on anorexia nervosa”, “The poster has made me more confident in being able to ask a colleague about anorexia nervosa”, “The poster has given me new information about anorexia nervosa”, and “The poster has made me aware of how to signpost services to a service user who may have anorexia nervosa”. The purpose of the questions was to evaluate whether the participant felt that the poster had any effect on their confidence to refer, signpost services, access further information, ask a colleague. The questions were also designed to establish whether the poster had given them any new information or made them question their prior knowledge of AN. The purpose of

these questions was to see whether the poster had provided new information regarding AN or challenged their current knowledge of the disorder.

The last question in Section C was an open-ended question which asked participants “do you have any further comments on the content/layout of the poster?” This allowed the participant to include any further information that was necessary. The research team were aware that the social marketing approach advocated the use of feedback during the process evaluation phase and so open-ended responses may elicit further useful data.

Cronbach’s alpha was calculated for Section C of the evaluation questionnaire and was found to be of acceptable reliability (6 items; $\alpha = .72$) (George & Mallery, 2003). The questionnaire was checked for face and content by the research team (Laura Rees-Davies, Dr. Bev John, and Dr. Susan Faulkner). Furthermore, the questionnaire was piloted on two HCPs and deemed to be acceptable for the purpose of the study.

A PowerPoint presentation (Appendix 18) was used to instruct participants what to do during data collection (e.g. no conferring, hand the questionnaires back in to the researcher, the image of the poster that they were to look at)

Procedure

HCPs were asked to participate in the study during the introductory slides on the PowerPoint presentation. Participants were then given the evaluation questionnaire about their perceptions of AN and the ANAC. Participants were required to give fully informed consent prior to completing the questionnaire. Participants did not have to view the posters or complete the questionnaire if they did not wish to and were given the opportunity to withdraw at any time. The four ANAC posters were displayed on an overhead projector to participants and each was displayed for one minute. HCPs were then given the evaluation questionnaire.

Phase 3 Results

Frequency of responses for each statement were recorded (including percentage and confidence intervals), and qualitative data were analysed using thematic and content analysis. This included frequencies and non-parametric tests of distribution for the statement response categories; and thematic analysis for the open-ended question responses (Braun & Clarke, 2006).

Quantitative Data: Evaluation of Anorexia Nervosa Awareness Campaign by Chiropractic Students

Table 21 shows the responses (frequency, percentage and confidence intervals) by chiropractic students to the evaluation statements regarding the ANAC.

Table 21. Frequencies of responses (including percentage and confidence interval) by chiropractic practitioners-in-training to evaluation statements regarding the anorexia nervosa awareness campaign

	Yes	No	Undecided
Appealing	21 50% (CI: 34.88, 65.12)	12 28.57% (CI: 14.91, 42.23)	9 21.43% (CI: 9.02, 33.84)
Memorable	21 50% (CI: 34.88, 65.12)	11 26.19% (CI: 12.89, 39.49)	10 23.81% (CI: 10.93, 36.69)
Irrelevant	33 82.5% (CI: 70.72, 94.28)	1 2.5% (CI: -2.34, 7.34)	6 15% (CI: 3.93, 26.07)
Informative	21 50% (CI: 34.88, 65.12)	12 28.57% (CI: 14.91, 42.23)	9 21.43% (CI: 9.02, 33.34)
Detailed	5 11.9% (CI: 2.11, 21.69)	28 66.69% (CI: 52.44, 80.94)	9 21.43% (CI: 9.02, 33.34)
Unclear	28 66.69% (CI: 52.44, 80.94)	8 19.05% (CI: 7.17, 30.93)	6 14.29% (CI: 3.71, 24.87)
Quick to understand	31 73.81% (CI: 60.51, 87.11)	6 14.29% (CI: 3.71, 24.87)	5 11.9% (CI: 2.11, 21.69)
Complex	32 76.19% (CI: 63.31, 89.07)	7 16.67% (CI: 5.4, 27.94)	3 7.14% (CI: -0.65, 14.93)

[95% confidence intervals used]

Figure 26 shows the number, percentage and CIs for each response category. The majority of chiropractic students reported that the poster was appealing (n=21, 50%). It is important to draw attention to the overlapping CIs for each response. Although it appears that the majority of students find the poster appealing, the result suggests that this may not be applicable to all chiropractic students. Therefore, caution is advised when interpreting the results for this statement.

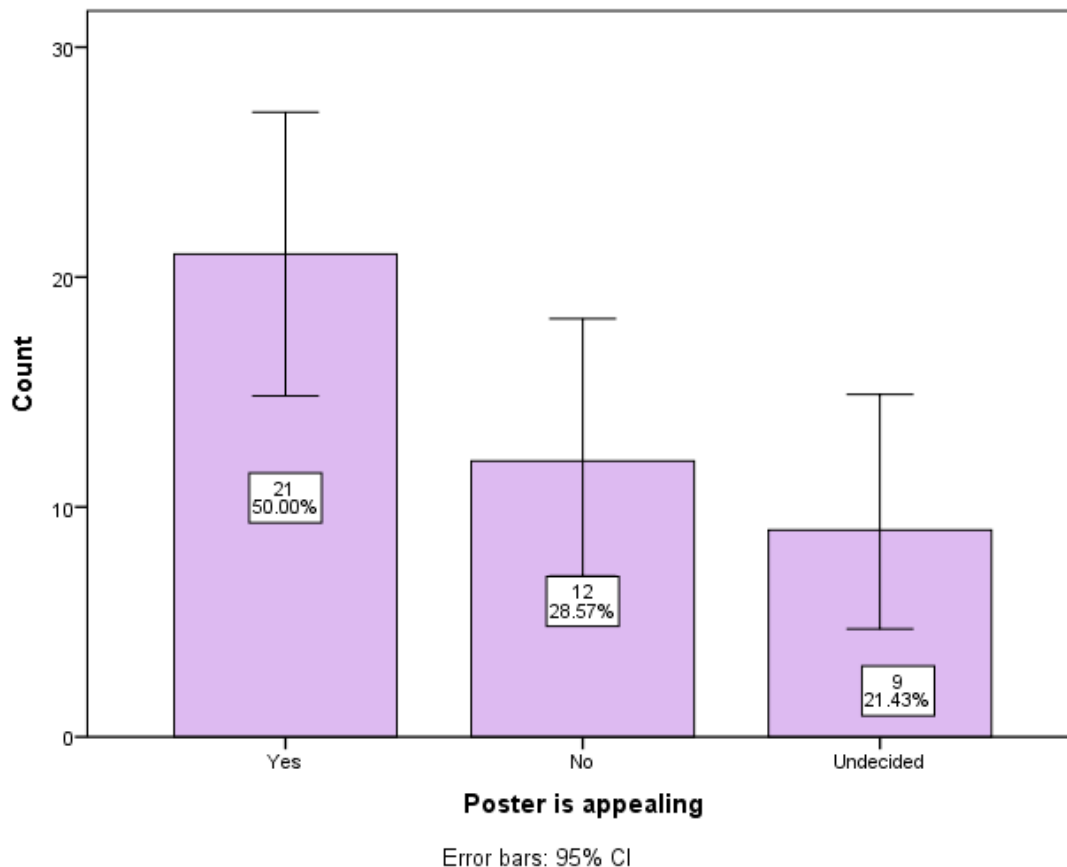


Figure 26. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “poster is appealing”

Figure 27 shows the number, percentage and CIs for each response category for the statement “poster is memorable”. It is important to draw attention to the overlapping CIs for each response. The majority of chiropractic students reported that the poster was memorable (n=21, 50%), yet the other half report that they either felt the poster was not memorable (n=11, 26.19%) or were undecided (n=10, 23.81%). Although it appears that the majority of students find the poster memorable, the result suggests that this may not be applicable to all

chiropractic students. Therefore, caution is advised when interpreting the results for this statement.

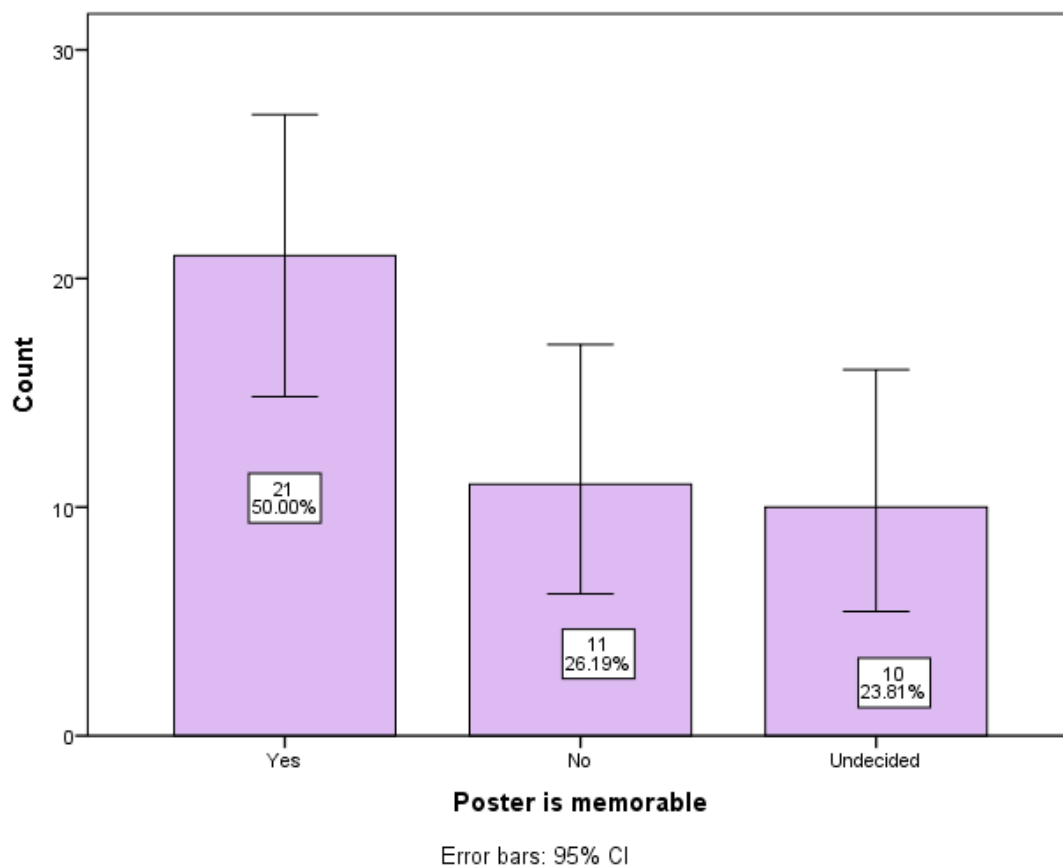


Figure 27. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “poster is memorable”

Figure 28 shows the number, percentage and CIs for each response category for the statement “poster is irrelevant”. The majority of chiropractic students reported that the poster was irrelevant ($n=33$, 82.5%), and the confidence intervals indicate a clear preference for this response.

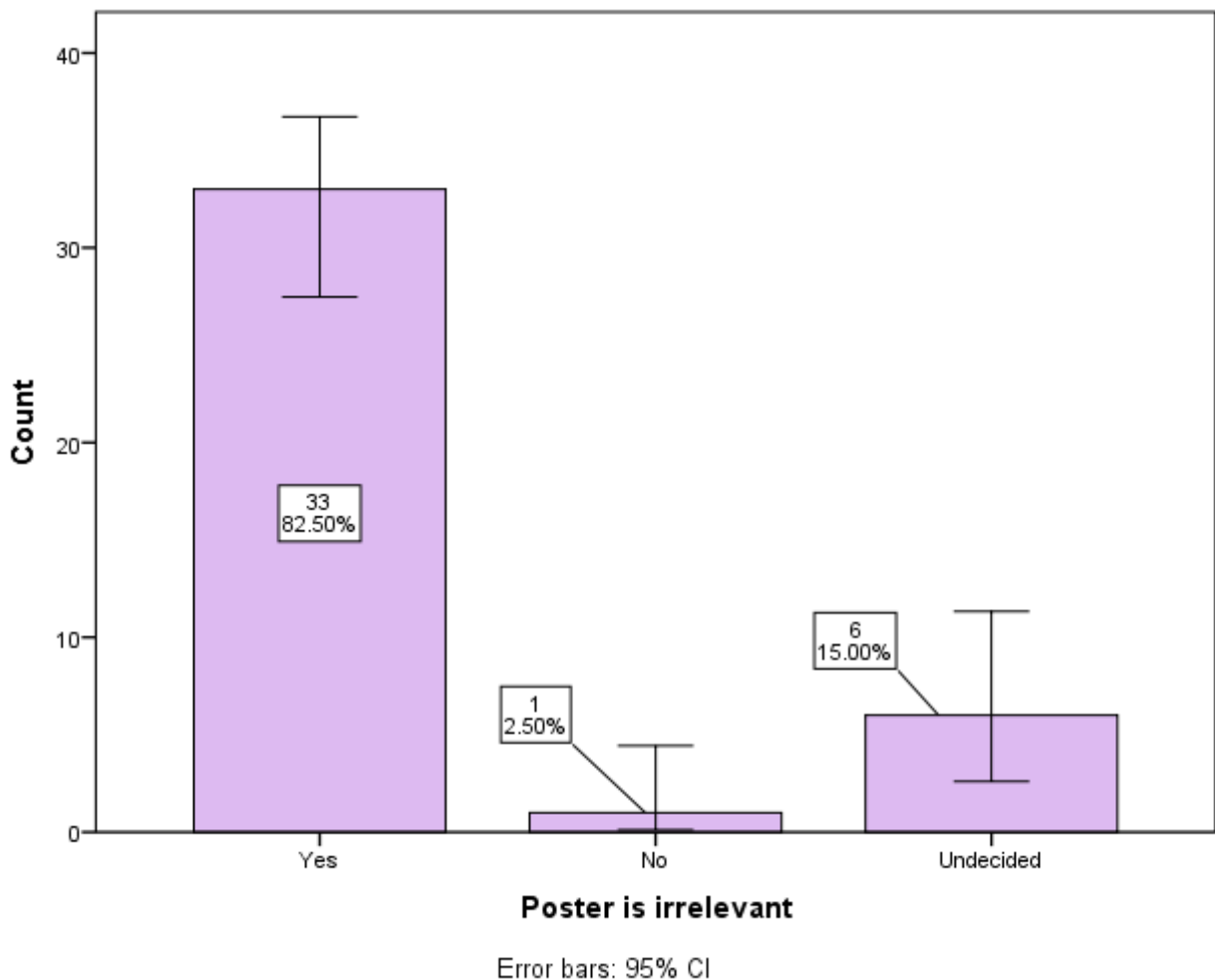


Figure 28. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “poster is irrelevant”

Figure 29 shows the number, percentage and CIs for each response category for the statement “poster is informative”. The majority of chiropractic students reported that the poster was informative (n=21, 50%), yet the remaining participants felt it was not informative (n=12, 28.57%) or were undecided (n=9, 21.43%). It is important to draw attention to the overlapping CIs for each response. Therefore, although it appears that the majority of students find the poster informative, the result suggests that this may not be applicable to all chiropractic students. Therefore, caution is advised when interpreting the results for this statement.

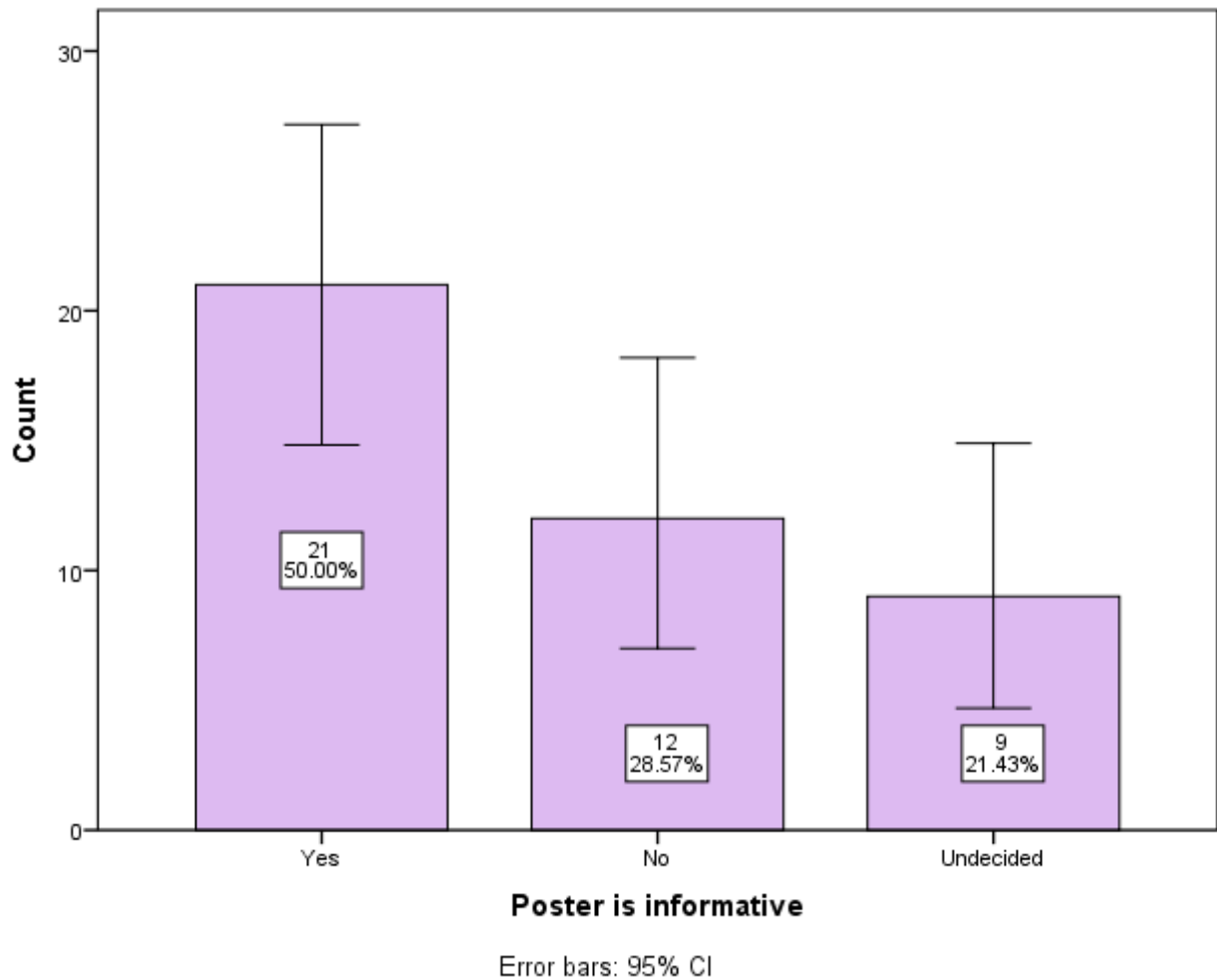


Figure 29. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “poster is informative”

Figure 30 shows the number, percentage and CIs for each response category for the statement “poster is detailed”. The majority of chiropractic students reported that the poster was not detailed (n=28, 66.67%), and the CIs indicate a clear preference for this response.

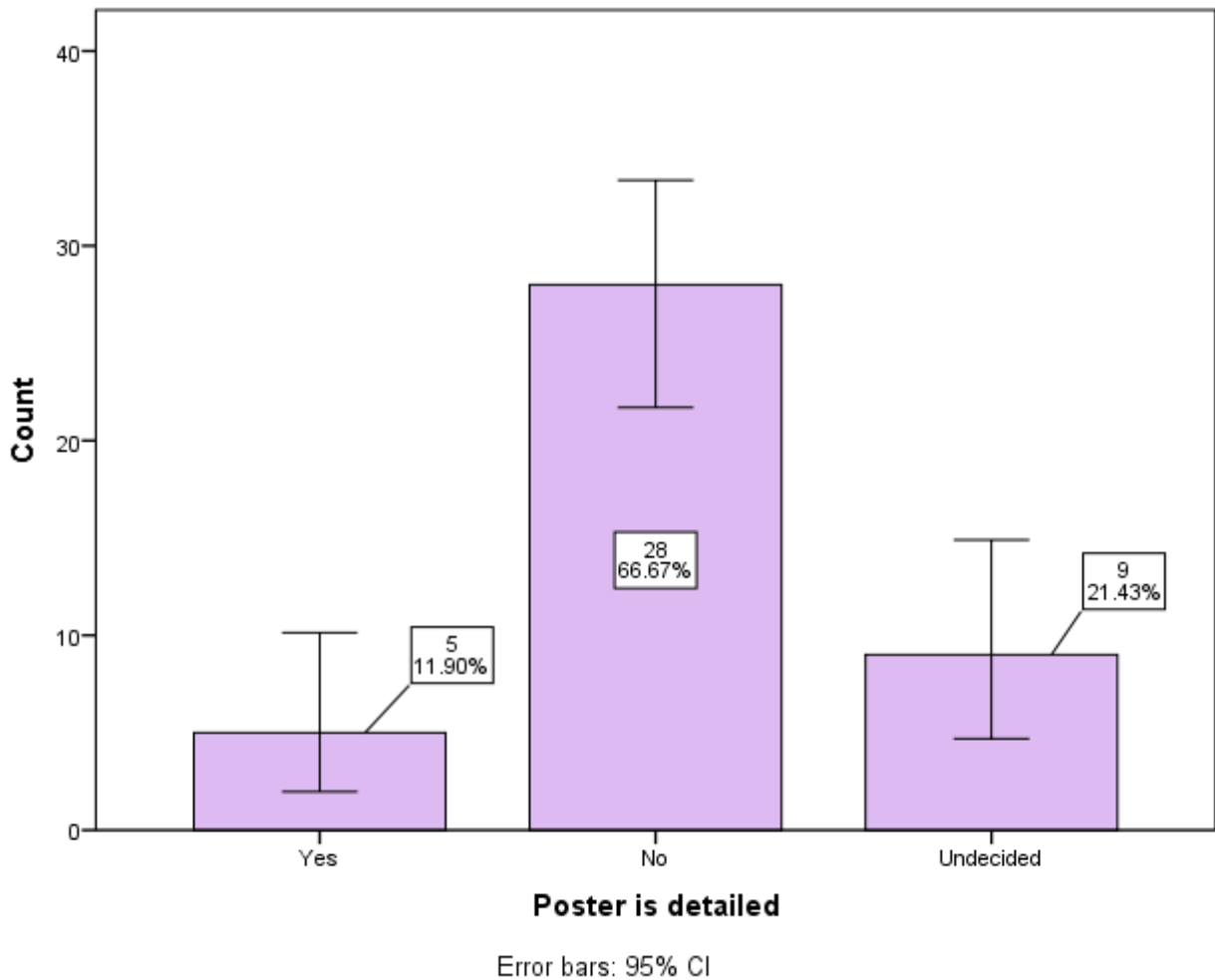


Figure 30. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “poster is detailed”

Figure 31 shows the number, percentage and CIs for each response category for the statement “poster is unclear”. The majority of chiropractic students reported that the poster was unclear (n=28, 66.67%) and the confidence intervals indicate a clear preference for this response.

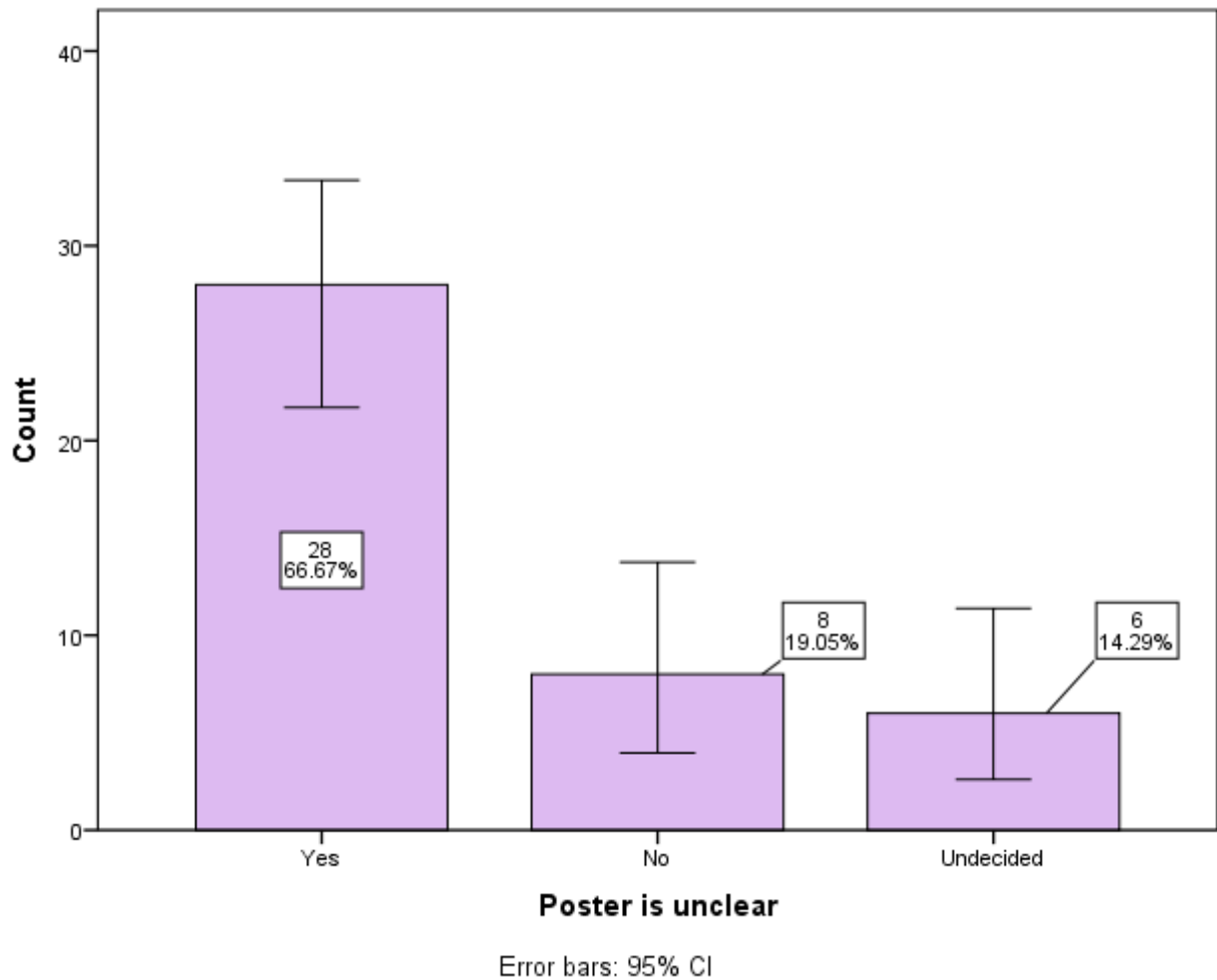


Figure 31. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “poster is unclear”

Figure 32 shows the number, percentage and CIs for each response category for the statement “poster is quick to understand”. The majority of chiropractic students reported that the poster was quick to understand (n=31, 73.81%) and the confidence intervals indicate a clear preference for this response.

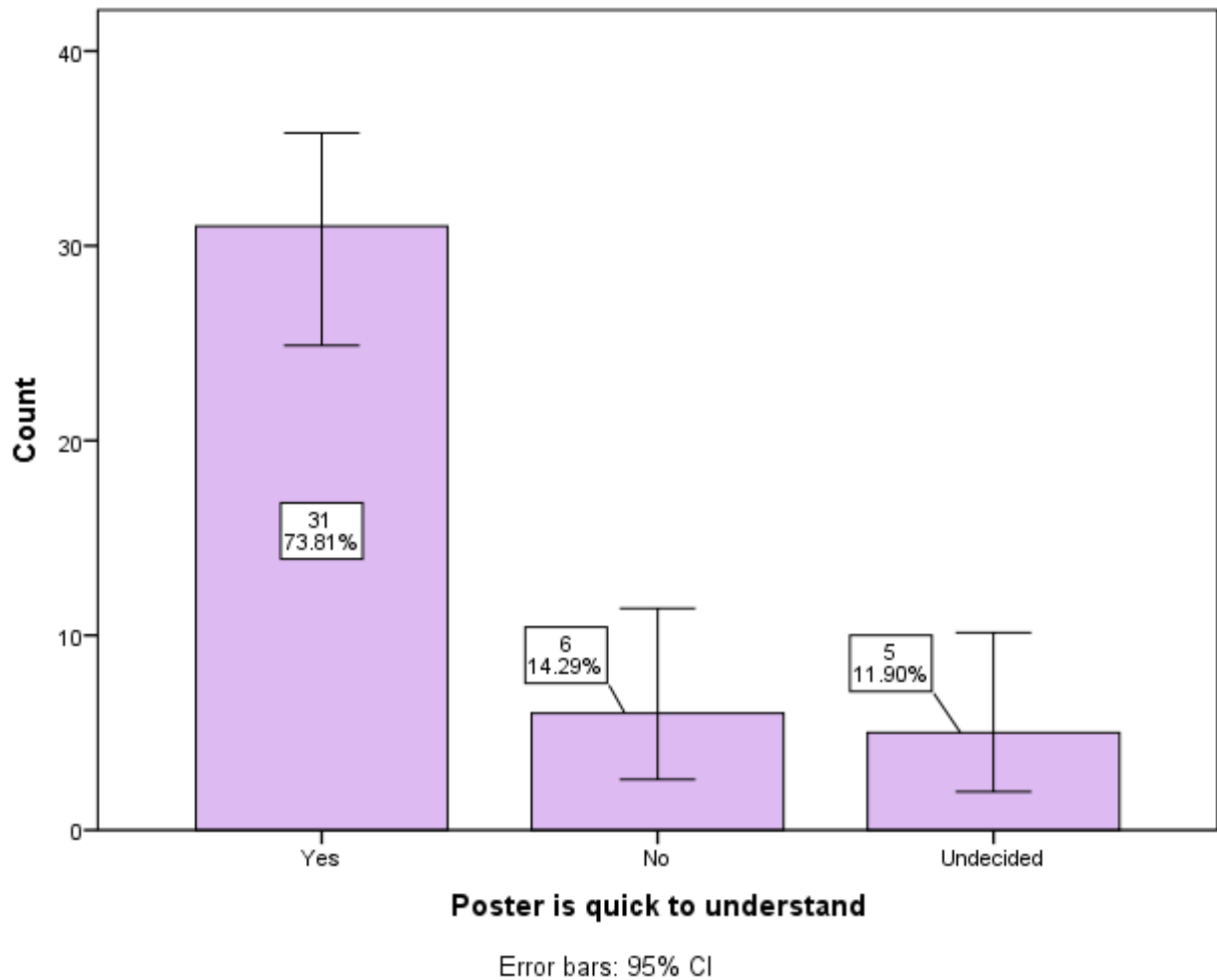


Figure 32. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “poster is quick to understand”

Figure 33 shows the number, percentage and CIs for each response category for the statement “poster is complex”. The majority of chiropractic students reported that the poster was complex (n=32, 76.19%) and the confidence intervals indicate a clear preference for this response.

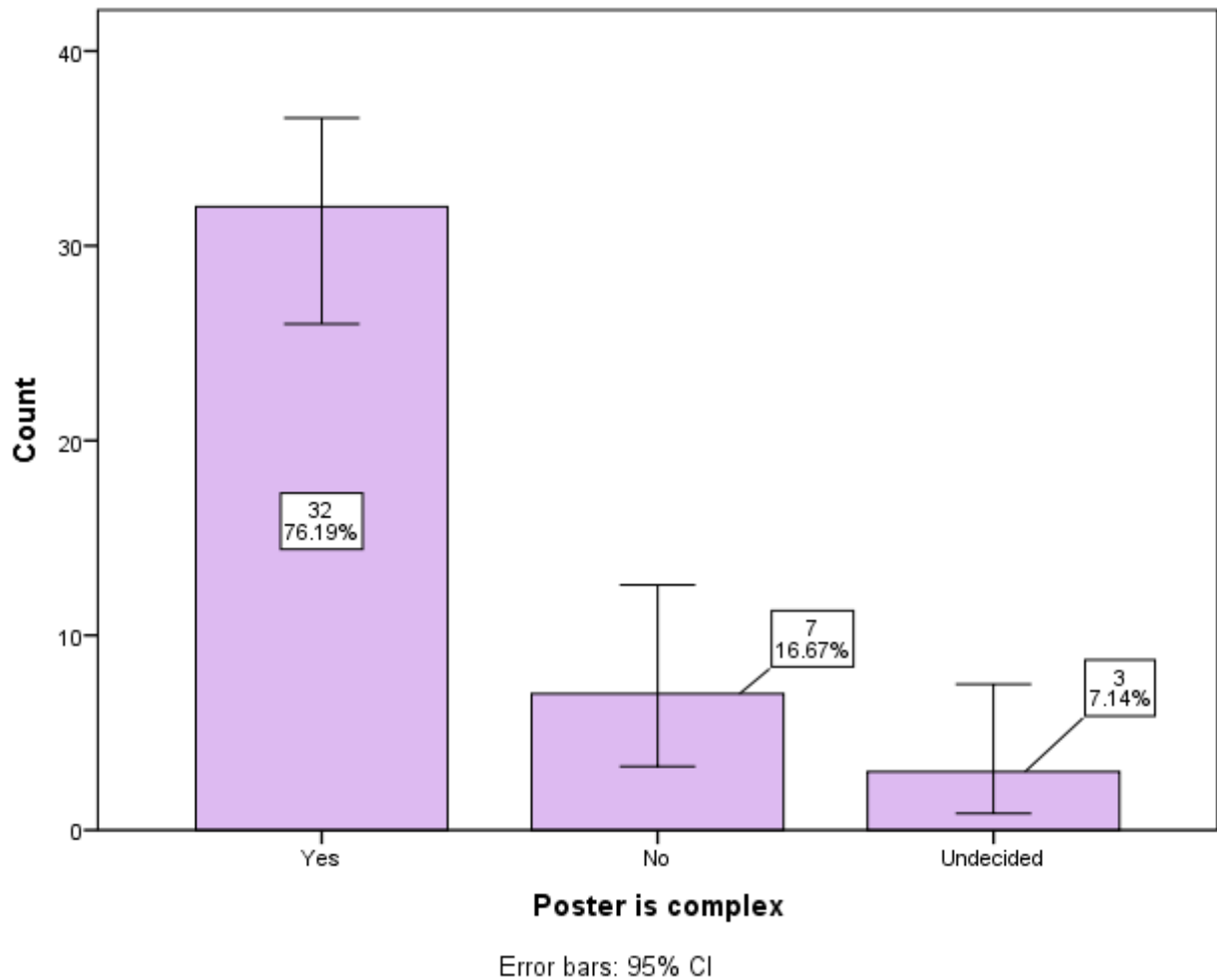


Figure 33. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “poster is complex”

Effect of anorexia nervosa awareness campaign on knowledge, referral and behaviour of chiropractic practitioners-in-training

Table 22 shows the frequency of chiropractic participant responses statements regarding the effect of the poster on knowledge, referral and behaviour towards people with AN by chiropractic practitioners-in-training.

Table 22. Frequency of responses (and percentage) by chiropractic practitioners-in-training to statements regarding effect of poster on knowledge, referral and behaviour towards service users with anorexia nervosa

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
The poster has made me more confident in being able to refer a patient who may have AN	0 0% (CI: 0, 0)	21 50% (CI: 34.88, 65.12)	13 30.9% (CI: 16.93, 44.87)	7 16.7% (CI: 5.42, 27.98)	1 2.4% (CI: -2.23, 7.03)
The poster made me question my prior knowledge of AN	1 2.4% (CI: -2.23, 7.03)	15 35.7% (CI: 21.21, 50.19)	3 7.1% (CI: -0.67, 14.87)	17 40.5% (CI: 25.65, 55.35)	6 14.3% (CI: 3.71, 24.89)
The poster has made me more confident in being able to ask a colleague about AN	2 4.8% (CI: -1.66, 11.26)	9 21.4% (CI: 9.0, 33.8)	5 11.9% (CI: 2.11, 21.69)	24 57.1% (CI: 42.13, 72.07)	2 4.8% (CI: -1.66, 11.26)
The poster has given me new information about AN	3 7.1% (CI: -0.67, 14.87)	24 57.1% (CI: 42.13, 72.07)	5 11.9% (CI: 2.11, 21.69)	9 21.4% (CI: 9.0, 33.8)	1 2.4% (CI: -2.23, 7.03)
The poster has made me aware of how to signpost services to a patient who may have AN	2 4.8% (CI: -1.66, 11.26)	17 40.5% (CI: 25.65, 55.35)	11 26.2% (CI: 12.9, 39.5)	10 23.8% (CI: 10.92, 36.68)	2 4.8% (CI: -1.66, 11.26)

[95% confidence intervals used]

Figure 34 shows the number, percentage and CIs for each response category for the statement “the poster has made me more confident in being able to refer a patient who may have AN”. The majority of chiropractic students disagreed (n=21, 50%), or were undecided (n=13, 30.95%) about whether the poster increased their confidence to refer a patient with AN. It is important to note the overlapping CIs for the responses, indicating that no firm conclusions may be met regarding the response to this statement.

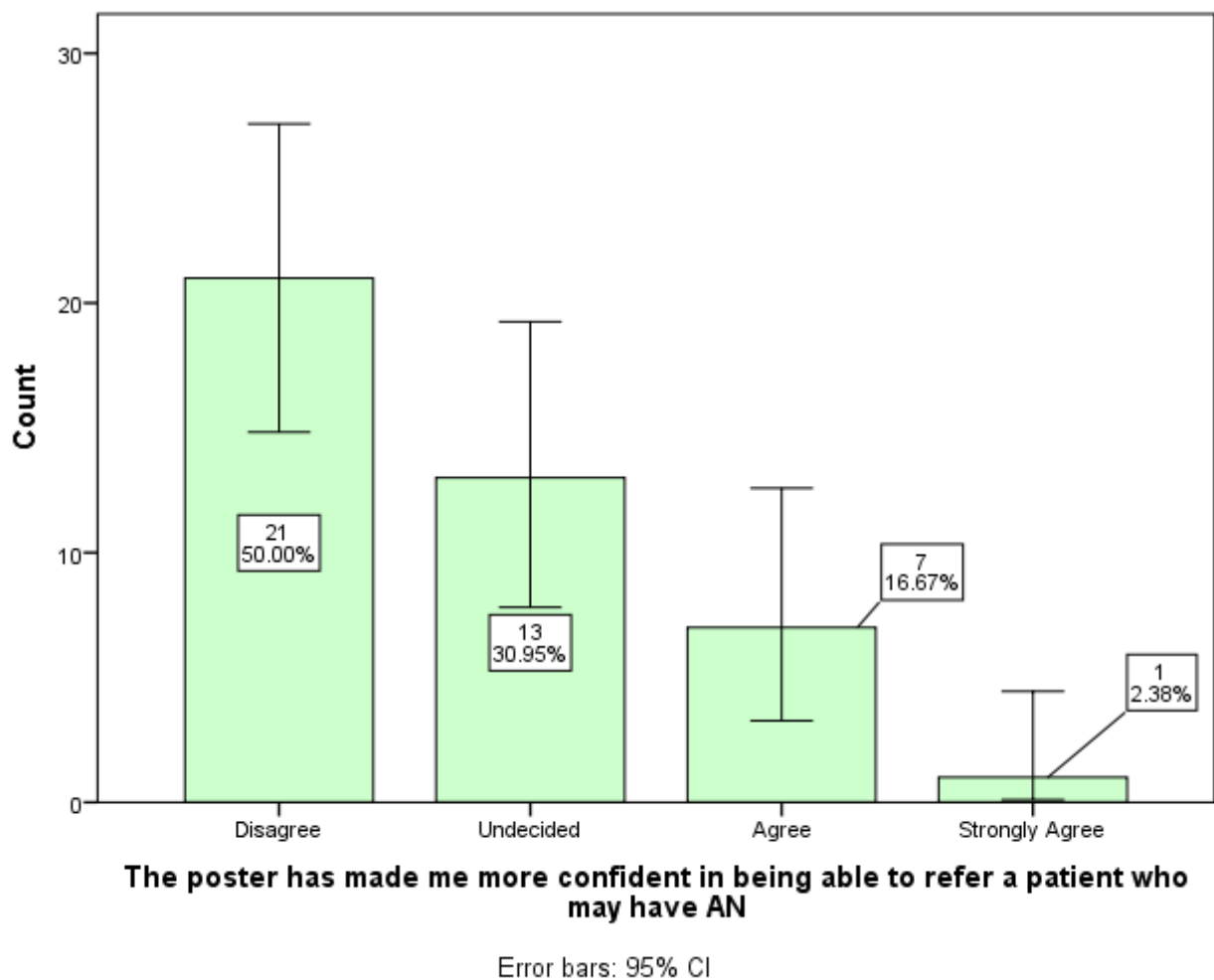


Figure 34. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “the poster has made me more confident in being able to refer a patient who may have AN”

Figure 35 shows the number, percentage and CIs for each response category for the statement “the poster has made me more confident in being able to refer a patient who may have AN”. The results were mixed, as similar numbers of students either disagreed (n=15, 35.71%), or agreed (n=17, 40.48%) with the statement.

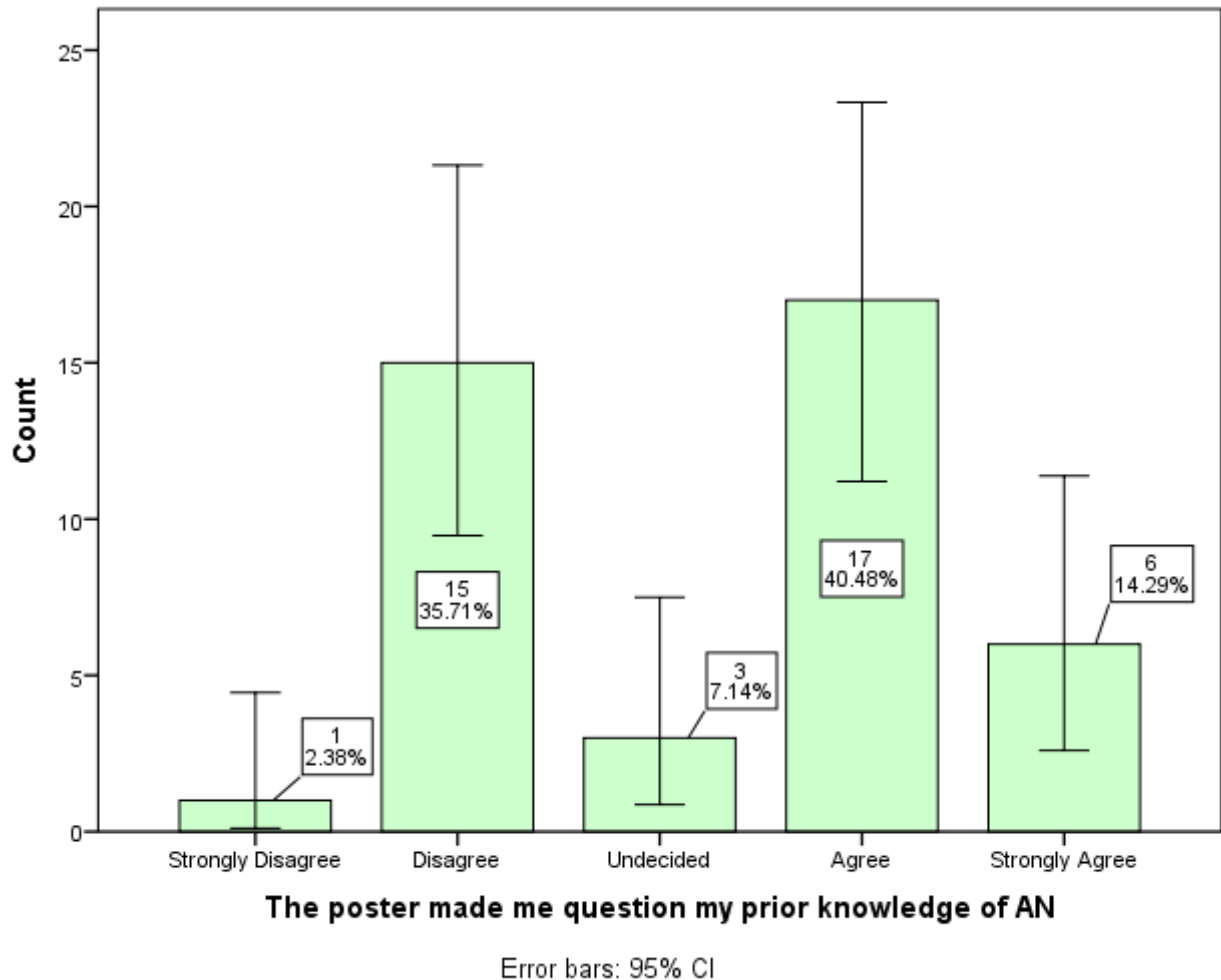


Figure 35. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “The poster made me question my prior knowledge of AN”

Figure 36 shows the number, percentage and CIs for each response category for the statement “the poster has made me more confident in being able to refer a patient who may have AN”. The majority of chiropractic students agreed (n=24, 57.14%) that the poster made them more confident to ask a colleague about AN, and the CIs indicate a clear preference for this statement. Nevertheless, it is important to acknowledge that some participants were undecided (n=5, 11.90%), disagreed (n=9, 21.43%), or strongly disagreed (n=2, 4.76%) with the statement.

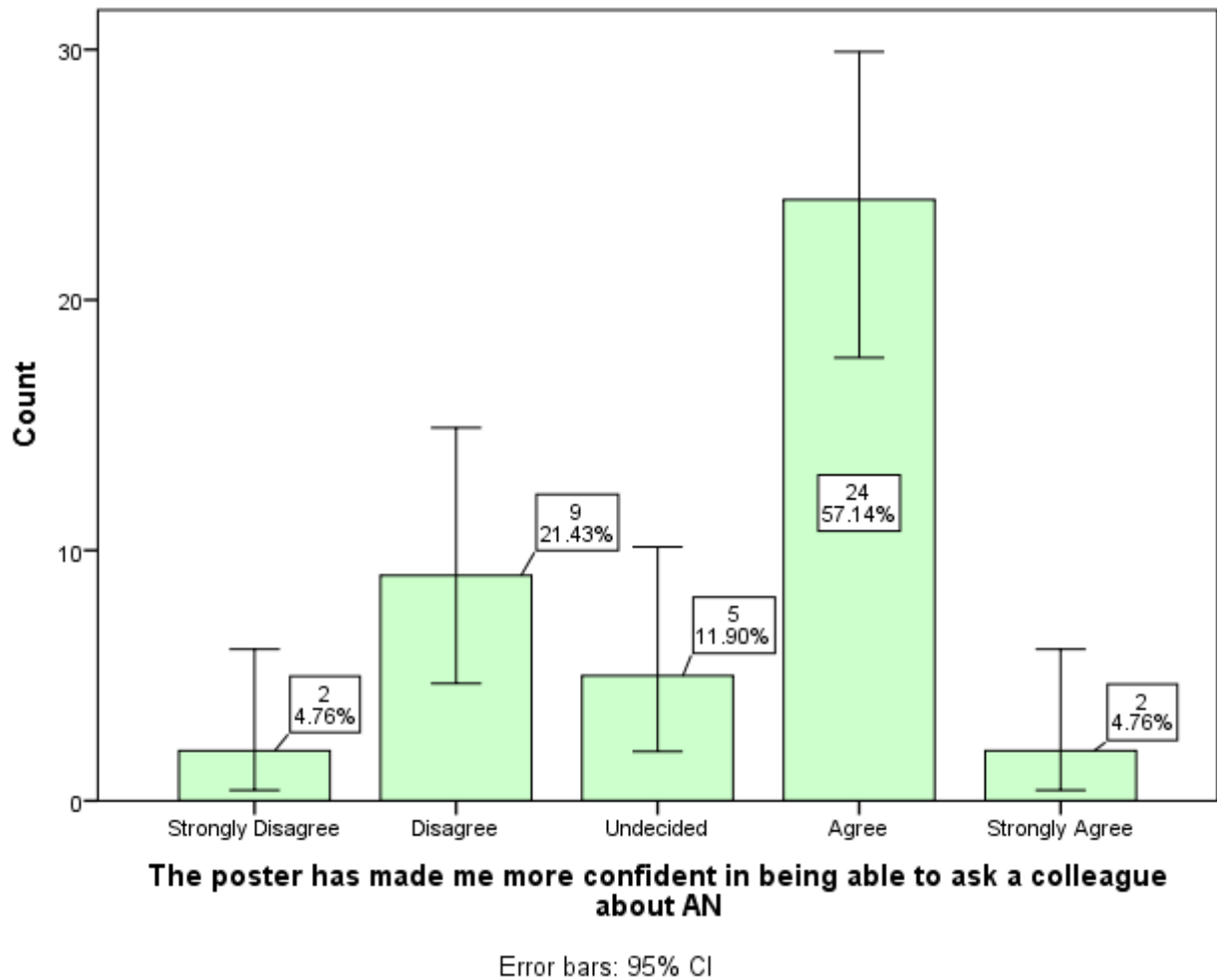


Figure 36. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “the poster has made me more confident in being able to ask a colleague about AN”

Figure 37 shows the number, percentage and CIs for each response category for the statement “the poster has made me more confident in being able to refer a patient who may have AN”. Although some participants agreed (n=9, 21.43%), the majority of chiropractic students disagreed (n=24, 57.14%) that the poster gave them new information about AN. The CIs indicate a clear preference for the students to disagree with the statement.

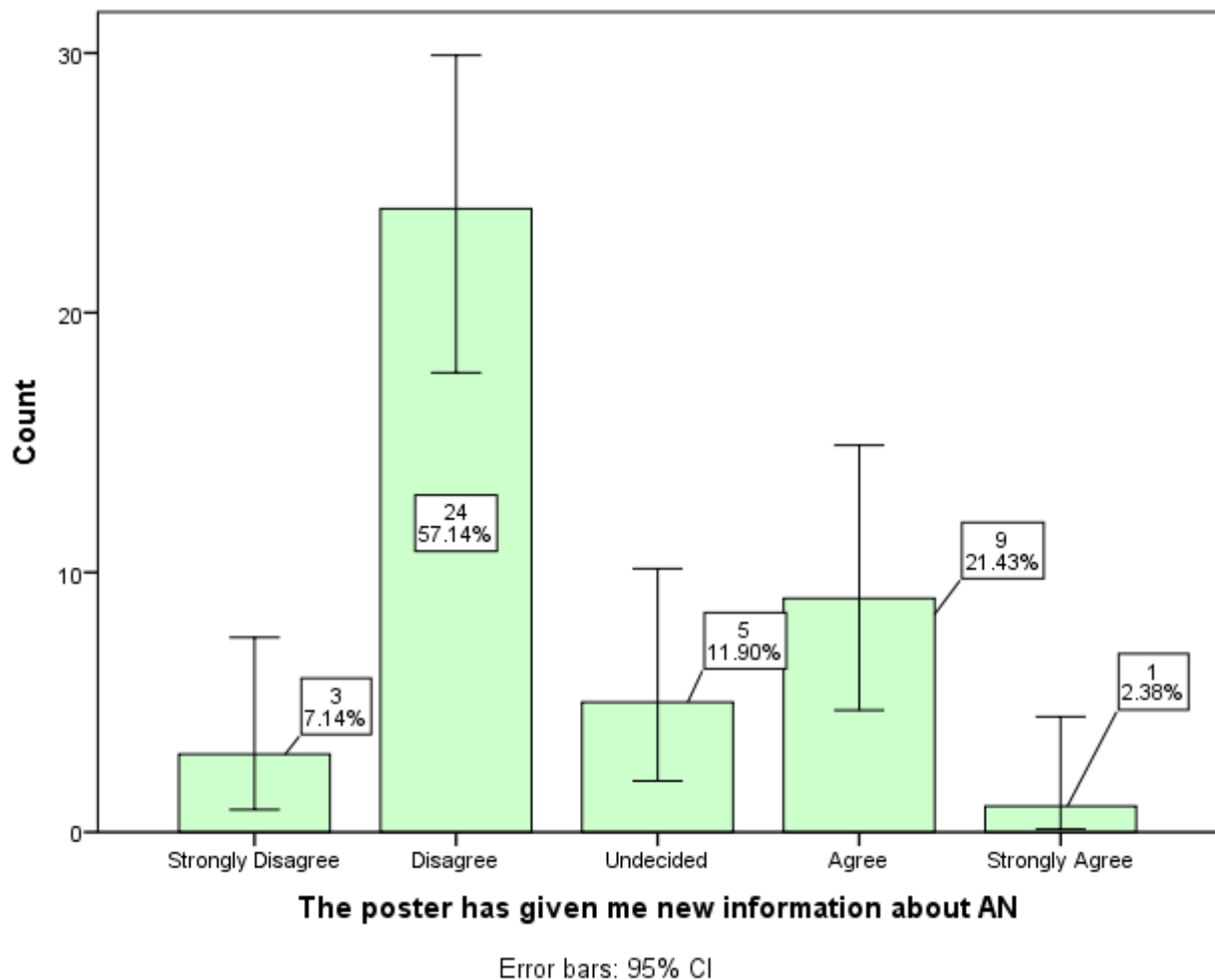


Figure 37. Bar chart of frequency, percentage and confidence intervals of each response category for the statement “the poster has given me new information about AN”

Figure 38 shows the number, percentage and CIs for each response category for the statement “the poster has made me more confident in being able to refer a patient who may have AN”. The results for this statement were mixed. Although some students agreed (n=10, 23.81%) most of the remaining students disagreed (n=17, 40.48%) or were undecided (n=11, 23.81%). The overlapping CIs confirm that no firm conclusions can be drawn from the results regarding whether the poster made the students aware of how to signpost services for AN.

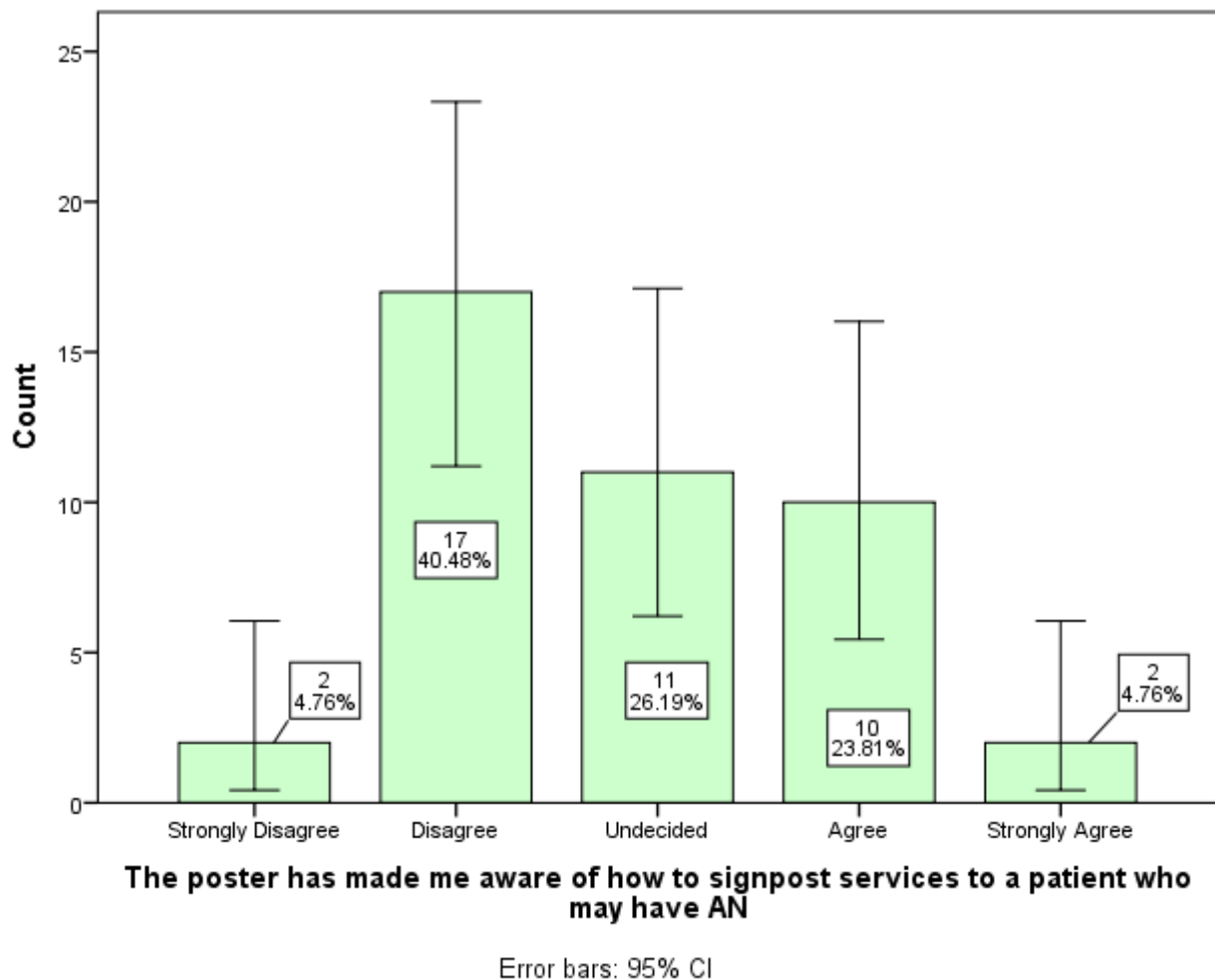


Figure 38. Bar chart of frequency, percentage and confidence intervals for each response category for the statement “The poster has made me aware of how to signpost services to a patient who may have AN”

Qualitative Data: Comments by chiropractic practitioners-in-training regarding the content and layout of the ANAC

Thematic analysis (Braun & Clarke, 2006) was carried out on the qualitative data gathered from answers to the open ended question “Do you have any further comments on the content/layout of the poster?” Table 23 shows the themes and subthemes of the responses given by HCPs.

Table 23. Themes/subthemes regarding content and layout of the Anorexia Nervosa Awareness Campaign

Theme	Subtheme	Evidence
Message	Needs to be able to stand alone	<i>“Poster is not clear enough if you see it alone”</i>
	Explain sufferer statement	<i>“Relation in some of the poster between the patient’s statement and the text ‘could it be anorexia nervosa?’”</i>
	Writing too small	<i>“Too small font” “Further advice NHS website should be made more visible”</i>
	Unclear message	<i>“A couple were unclear” “Too cluttered and unclear” “Be clearer on contact info”</i>
Referral	Phone number of service. Address of service. Less complicated/shorter	<i>“Phone number or address for help services should be present and prominent” “Couldn’t remember the website! Isn’t that essential?”</i>
	Web link for information	<i>“Wasn’t overly informative or shared where to refer, how to get help etc.”</i>
	Where to refer patients	
Shock value	Change picture to typical anorexic person Shock image may help people remember	<i>“Pictures of people actually suffering from anorexia would be more effective and attention demanding”</i>
Retention of information	Difficult to remember	<i>“Not eye-catching or memorable” “It should be easy to memorise”</i>
Symptoms of AN	No information about symptoms	<i>“Couldn’t see any of the symptoms of anorexia”</i>

Discussion of chiropractic practitioners-in-training evaluation of the anorexia nervosa awareness campaign

Although majority of chiropractic students find the poster appealing, memorable and informative, the CIs indicate that we cannot be confident this will apply to the general population of HCPs. Therefore, caution should be exercised when interpreting these results. It may be advisable to assume that the feedback on these three aspects are mixed.

The chiropractic students showed a clear preference to report that the poster was not detailed and quick to understand. This is a positive finding considering that the poster was intended to be simple. Interestingly, this result is then directly contradicted by the students' clear preference to report the campaign as complex and unclear. This is explained by the qualitative feedback where students advised that the message was not clear and that the sufferer statement needed to be explained. The students reported that the font was too small, the poster was too cluttered, and that the information was difficult to remember.

The chiropractic students indicated that they agreed that the ANAC made them question their prior knowledge of anorexia, and that it made them more confident to ask a colleague for more information. The students disagreed that the ANAC made them more confident to refer or signpost a patient who may have AN, or that it gave them more information about the disorder. Participants were undecided whether it made them more confident about accessing further information about AN. This is concerning given that the poster contained a web address to locate further information. This result may be explained by the qualitative feedback by students to make the web address easier to remember.

The response that students felt that the campaign was irrelevant may provide some explanation for the students' mixed results. If the students did not feel that the message was applicable to them, then they would not have perceived themselves as the intended receivers of the message. This resonates with social cognition models (HBM, TPB, and PMT) where perceived susceptibility is a determinant of behaviour. Furthermore, the chiropractic students may not have identified with the HCP in the posters. Cialdini's (1993) principles of persuasion state that the receiver is more likely to accept the message if they feel similar to the person sending the message. Despite blurring the image of the HCP in the poster, the inclusion of a blue uniform may have resulted in the chiropractic students assuming the posters were not for them (chiropractic students wear white whereas nurses wear blue). Therefore, an intervention for chiropractic students that is segmented particularly for their division of healthcare would be warranted.

The chiropractic students evaluated the content and layout of the ANAC. They suggested that the sufferer statement needed to be explained further as the message was unclear. They stated that the font should be bigger. Furthermore, they suggested that information about where to refer a patient who may have AN should be on the posters, such as telephone

number and address for referral. This supports the results from Phases 1 and 2 which indicate that the HCPs are uncertain about referral processes and would like to find out more.

Chiropractic students suggested that the image could be changed to the typical person with AN and this would add shock value to the poster. This contradicts the argument that fear appears should be moderate (Hale & Dillard, 1995; Stephenson & Witte, 2001) but does support evidence which reports that posters that are eye-catching tend to achieve greater acceptance of the message (Hirsch & Edelstein, 1992; Duchin & Sherwood, 1990).

Finally, the participants suggested that the poster should include some of the symptoms of AN as none were included. This confirms the earlier result where students did not think the ANAC gave them new information about AN. This result clearly supports the results from the previous phases where HCPs reported wanting detailed information regarding the disorder. It is well-known that AN is a complex disorder, and the poster was unsuitable to include all the desired information. Therefore, this indicates that an intervention that includes much more information regarding AN for HCPs is necessary, and that a poster may be too simplistic to change HCPs behaviour.

Amendment of the Anorexia Nervosa Awareness Campaign

The posters were amended using the results of the evaluation in Phase 4. Based solely on the feedback of the chiropractic students, the text was made bigger and the background of the poster was changed to white so that the text stood out. The words “*If you suspect your patient may have anorexia: Be SURE... STUDY, UNDERSTAND, REFER, EMPATHISE*” were removed as the HCPs reported that the posters had too much detail on them. Participants reported that the acronym and statement required further information for the message to be clear. As posters already had several items of text, the statement was removed.

On all posters, the web link information was made larger, positioned at the centre, and the wording changed to “For more information visit www.nhs.uk and search for ‘anorexia nervosa’”. This ‘cue to action’ was therefore more visible and the audience would be clear on where to look for more information. The web link was also shortened so that it was easier for participants to remember. The University of Glamorgan logo was changed as the University had revised their logo. The main statement “Could it be anorexia nervosa” was amended to “Could your patient have Anorexia?” as this made the question clearer, and

made HCPs think about their own patients. This would invoke a sense of responsibility in the HCP, which is determinant of whether the HCP will feel that the message applies to them and increased the perceived susceptibility of the message by HCPs (Jenner et al., 2007; HBM, TPB, PMT).

For Poster A (see figure 39 without comments and figure 40 with map of changes), the photo of the male was changed from the smiling man to the image of a concerned man as this reflected the way the person with anorexia may be feeling. The statement “I can’t be ill... I’m a man” was accompanied by an explanatory statement underneath “10% of anorexia cases are male” which would make the reason for the poster clearer, to highlight the gender stereotype of AN.

For Poster B (see figure 41 without comments and figure 42 with map of changes) the original image was retained. As recommended by the HCPs during feedback for this phase, the statement “I may not want your help... But I need it” was supported by an explanatory statement underneath “Sufferers may be resistant but prefer health professionals who help”. This statement originates from the data from Study 1 where participants suggested that although they sometimes resisted treatment at first, they still wanted a HCP who was willing to help. By using this approach, the viewer would be more likely to be persuaded by the message, as they would feel a social obligation to perform their role (Cialdini, 1993).

For Poster C (see figure 43 without comments and figure 44 with map of changes) the original image was retained. The phrase “Maybe if I was thinner, someone might notice?” was supported by the explanatory statement “Sufferers report needing to lose weight for health professionals to help”. This statement was chosen to reflect data collected in Study 1 where patients stated that they needed to lose weight for someone to offer help. In study 1, some participants also reported HCPs told them that they needed to lose weight in order to receive treatment. This type of message demands the audience attention as it is a shocking statement. Furthermore, the audience are more likely to assimilate information on the poster if they are interested or feel personal responsibility for the content (Ruiter et al., 2001).

For Poster C (see figure 45 without comments and figure 46 with map of changes) the original image was retained. The phrase “I’m too scared to ask you. Please ask me” was supported by the explanatory statement “Sufferers want to be asked by healthcare

professionals e.g. SCOFF questionnaire”. This statement was chosen to reflect data collected in Study 1 where patients stated that they would prefer for a healthcare professional to ask them if they had anorexia. The information is supported with a reference to the SCOFF screening tool, enabling the HCPs to look for this particular screening tool.

The four posters were amended to reflect the feedback given by HCPs during Study 2: Phase 4. Each poster is presented with and without comments to highlight the changes that were made.

“I can’t be ill, I’m a man...”

10% of anorexia cases are male

Could your patient have

Anorexia?



For more information visit
www.nhs.uk
and search for ‘anorexia nervosa’

UNIVERSITY OF PRIFYSGOL
Glamorgan
Morgannwg
CARDIFF • PONTYFRIDD • CALLEDYDD

Figure 39. Poster A (version 2): Challenging the female stereotype of anorexia nervosa

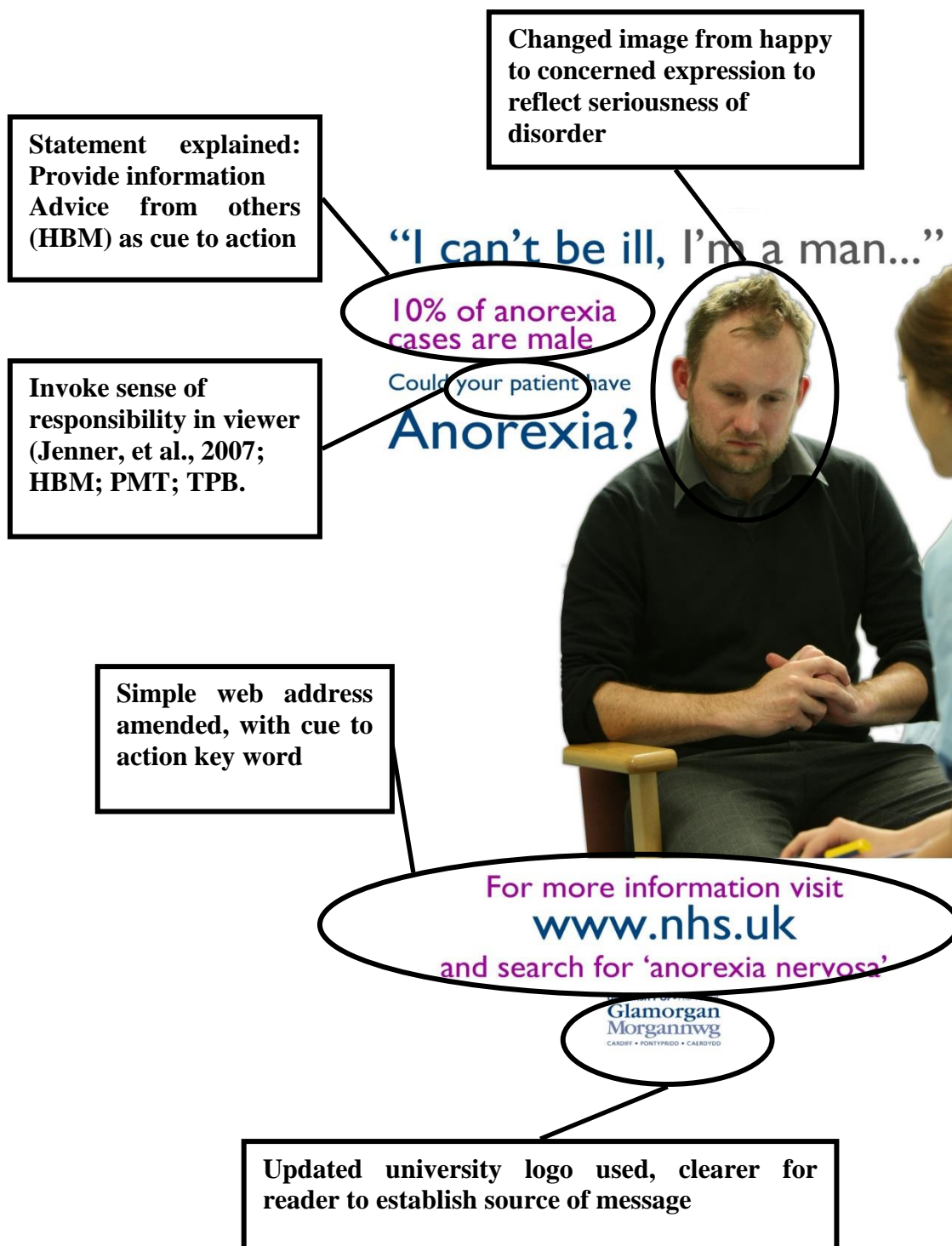


Figure 40. Poster A (version 2): Challenging the female stereotype of anorexia nervosa (with comments)

“I might not want
your help...
but I need it”

Sufferers may be
resistant but prefer
health professionals
who offer help

Could your patient have

Anorexia?



For more information visit
www.nhs.uk
and search for ‘anorexia nervosa’

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Figure 41. Poster B (version 2): Highlighting the service user resistant to professional help



Figure 42. Poster B (version 2): Highlighting the service user resistant to professional help (with comments)

Maybe if I was thinner,
someone might
notice?

Sufferers report
needing to lose weight
for health professionals
to help

Could your patient have
Anorexia?



For more information visit
www.nhs.uk
and search for 'anorexia nervosa'

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Figure 43. Poster C (version 2): Highlighting the need for diagnosis prior to severe weight loss



Figure 44. Poster C (version 2): Highlighting the need for diagnosis prior to severe weight loss (with comments)

“I’m too scared to ask you.
Please, ask me”

Sufferers want to be
asked by healthcare
professionals
(e.g. SCOFF
questionnaire)

Could your patient have
Anorexia?



For more information visit
www.nhs.uk
and search for ‘anorexia nervosa’

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Figure 45. Poster D (version 2): Challenging the stereotype of young female anorexia nervosa patient

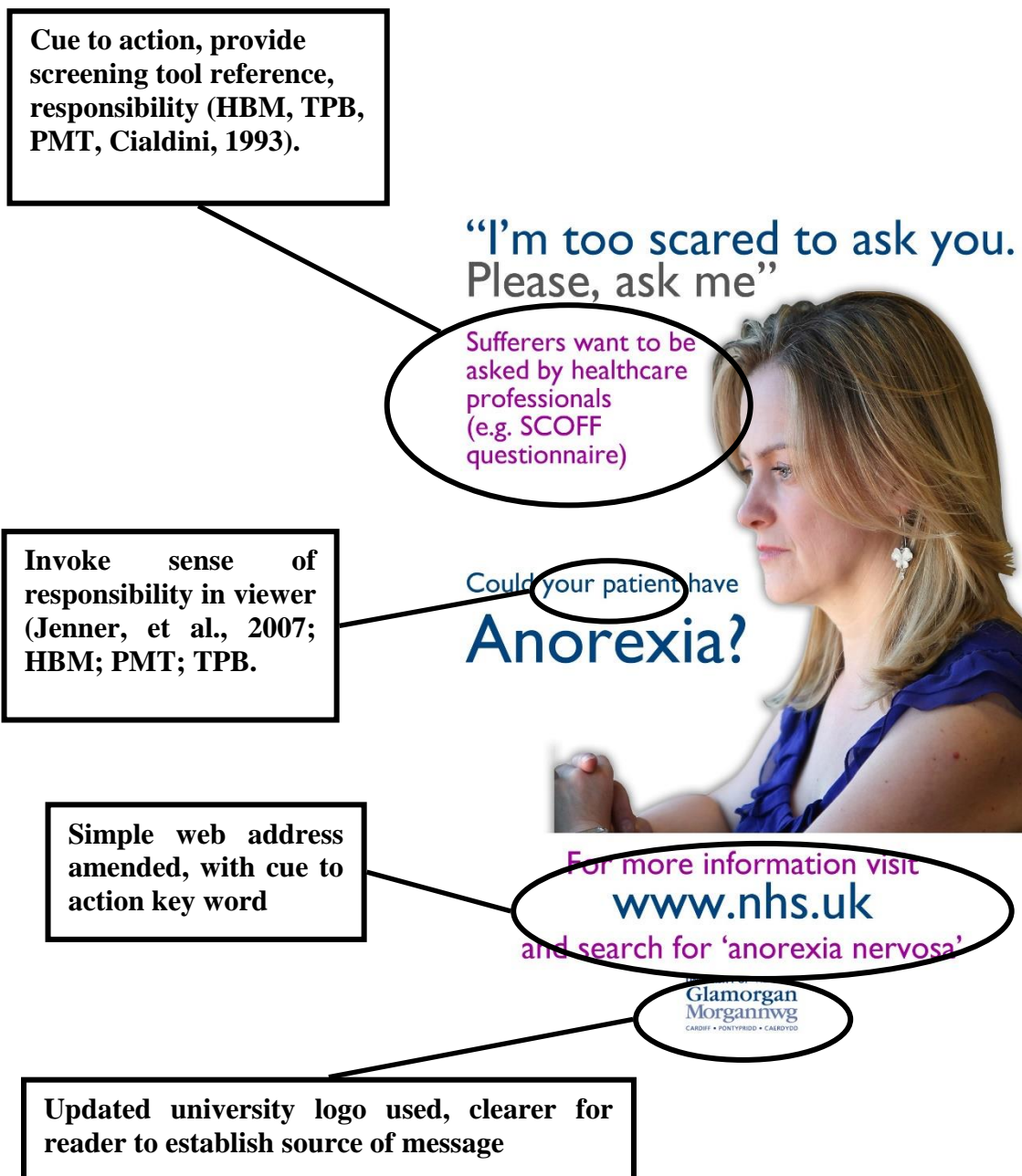


Figure 46. Poster D (version 2): Challenging the stereotype of young female anorexia nervosa patient (with comments)

Selection of final posters for the Anorexia Nervosa Awareness Campaign

Two posters were chosen to be the final posters included in the campaign. The use of two posters was suitable due to the small spaces and limited number of toilets at the GP surgeries. As some surgeries were small, there was a possibility that not all posters would be displayed should the intervention have four posters. The differences in the type of poster may cause differences in the responses given by HCPs when evaluating the campaign. Exploring differences between the posters was not the purpose of the study and therefore two posters were chosen so that the researchers could ensure the full campaign was displayed at each surgery.

The posters that were used in the final version of the campaign were chosen by the research team (Laura Rees-Davies, Dr. Bev John and Dr. Susan Faulkner). The research team held a meeting and considered a number of different factors when choosing which posters to retain, and which to remove. More specifically, they examined the factors that were unique to each poster i.e. image and headline. Several areas were discussed, for example, did the poster appear to reflect the purpose of the campaign i.e. to raise awareness of AN? Would the purpose of the poster be clear to HCPs? Would each element of the text capture the attention of the HCPs? Was the picture congruent with what a HCP would expect to see on a poster regarding AN? Or would any aspect of the poster cause confusion for the HCP?

Firstly, poster A focused upon the gender stereotype that is often held about AN. The team agreed that although it was important to challenge gender stereotypes, this was not the purpose of the current study. Furthermore, the poster did not relate to the results from Study 1. The team considered whether the HCPs might only see poster A and incorrectly assume that the campaign was designed to challenge stereotypes. Therefore, the decision to remove poster A from the campaign was made.

Posters B was considered by the research team, who agreed that the content of the poster related to Study 1. The research team agreed that the purpose of the poster appeared to be to raise awareness in HCPs that one of their patients may have the disorder. The message in the poster was clear, that patients may be resistant but it was still important to help. The image was a young female and so would not confuse HCPs regarding the disorder (as anorexia is a predominantly female disorder with onset in adolescence). Therefore, the decision to keep the poster as part of the intervention was made.

Poster C was considered by the research team, who agreed that the content of the poster related to Study 1 as it discussed the need to lose to weight to get attention from HCPs. The message was also a statement that might capture the attention of the HCP. The image in Poster C was the same person as poster B and so if HCPs saw both posters they would understand that they both belonged to the same campaign. Therefore, by seeing both posters and merging the information from both, the HCPs were more likely to think of AN when seeing patients in the future.

Poster D was removed from the campaign for similar reasons to Poster A. The research team felt that although it was important to challenge the stereotype regarding the age of the person with anorexia, it would not appear obvious that the campaign was to raise awareness of AN in general. Therefore, all members of the research team agreed that Poster B and C would be retained as the posters of the final campaign.

Phase 4: Outcome evaluation of the Anorexia Nervosa Awareness Campaign by Healthcare Professionals in General Practitioner surgeries

Method

Aim

The aim of Phase 4 was to ask HCPs to evaluate the ANAC using a brief questionnaire to establish whether they had seen the poster, and the extent to which they felt it raised their awareness of AN, made them look for more information about AN, made them consider a current patient could have AN, and to be mindful of AN when seeing future patients. The questions are underpinned by the TPB intention to carry out a behaviour and effectiveness in raising the HCPs perceived awareness of AN.

Design

A non-experimental campaign evaluation was used to collect data for Phase 4.

Participants

Participants were recruited using a purposive sampling method. Firstly, surgeries either close in proximity to the researcher, or surgeries with larger numbers of staff, were

contacted and invited to participate. Initial permission of the practice manager was sought for the whole surgery to participate in the study, and then individual HCPs were asked to participate. Participants were HCPs (HCPs; $N=29$) from 15 General Practitioner (GP) surgeries from 3 health board areas in South Wales. Participants included GPs ($n=15$) and nurses ($n=14$). The sample included 4 males, 24 females (one participant did not identify their gender), ages between 29 and 65 years, mean age 44 years ($SD = 9.54$ years).

Materials

Materials comprised of the two final ANAC posters (B & C) and a brief evaluation questionnaire (Appendix 19). The brief evaluation questionnaire contained less information regarding the study, and less questions. The questions were generated by the research team by considering the aim of the poster intervention.

The questionnaire was purposively designed to be quick to complete following the failed attempt to recruit HCPs using the longer questionnaire in Study 2 (Phase 3). The brief nature of the questionnaire facilitated recruitment because the researcher was able to assure the practice managers that the questions would take HCPs little time to answer. Cronbach's alpha was calculated for the evaluation questionnaire and was found to be of acceptable reliability (4 items; $\alpha = .71$) (George & Mallery, 2003). The questionnaire also was found acceptable by the research team (Laura Rees-Davies, Dr Bev John and Dr Susan Faulkner) who assessed for content and face validity. The questionnaire was also piloted on two qualified nurses and one nursing student and deemed acceptable for the purpose of the current study.

The evaluation questionnaire contained demographic questions regarding occupation, age and sex. The question "Have you seen the poster about anorexia nervosa at the surgery?" gave the option of a "yes" or "no" answer. This was followed by the question "Did you read the information on the poster?" to ensure that the message had been read, and also gave a yes/no response format. Four statements regarding the poster were included with a five point likert scale below: "The poster raised my awareness about anorexia nervosa"; "Since seeing the poster I have looked for more information about anorexia nervosa"; "The poster made me think that one of my current patients could have anorexia nervosa"; "In future I now intend to be mindful of anorexia nervosa when seeing patients"

Procedure

GP surgeries were visited and the study was discussed with the practice manager who was given copies of the posters and of the evaluation questionnaire. Consent was sought from the manager for the ANAC to be displayed in staff areas (only) especially on the back of toilet doors. A minimum of two weeks later, the evaluation questionnaires were disseminated to all participating surgeries for completion by the HCPs (who were made aware that data were anonymous and that they had the right to withdraw at any time). Completed evaluation questionnaires were collected by the researcher. Debrief sheets (Appendix 20) were posted to all surgeries that participated including details about the study and thanking the participants for taking part.

Phase 4 Results

Nineteen surgeries were contacted in total, and fifteen agreed to participate. Across the fifteen surgeries that agreed to participate, 82 members of staff were identified as potential participants. Forty of the potential participants completed the questionnaire, with a response rate of 48.78%.

Twenty-nine HCPs (72.5%) answered “Yes” to the question “Have you seen the poster about anorexia nervosa at the surgery?” Eleven HCPs (27.5%) answered “no” to the question “Have you seen the poster about anorexia nervosa at the surgery?” and therefore data from the “not-seen” group questionnaires were not included in the poster evaluation data analysis.

Evaluation statement responses for GPs and NSs

Frequency of responses and non-parametric tests of difference between preferred responses were calculated for each statement. Table 24 shows the frequency of responses on a 5 point Likert scale for the poster-effect evaluation statements “The poster raised my awareness about anorexia nervosa”; “Since seeing the poster I have looked for more information about anorexia nervosa”; “The poster made me think that one of my current patients could have anorexia nervosa”; and “In future I now intend to be mindful of anorexia nervosa when seeing patients”.

Table 24. Responses by HCPs to individual evaluation statements (frequency, percentage and CIs)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Poster raised awareness	1 3.45% (CI: -3.19, 10.09)	5 17.24% (CI: 3.49, 30.99)	5 17.24% (CI: 3.49, 30.99)	17 58.62% (CI: 40.69, 76.55)	1 3.45% (CI: -3.19, 10.09)
Looked for more information	5 17.24% (CI: 3.49, 30.99)	11 37.93 (CI: 20.27, 55.59)	8 27.59% (CI: 11.32, 43.86)	5 17.24% (CI: 3.49, 30.99)	0 0% (CI: 0, 0)
Consider current patients	1 3.45% (CI: -3.19, 10.09)	14 48.28% (CI: 30.09, 66.47)	10 34.48% (CI: 17.18, 51.78)	3 10.34% (CI: -0.74, 21.42)	1 3.45% (CI: -3.19, 10.09)
In future be mindful of AN	1 3.45% (CI: -3.19, 10.09)	4 13.79 (CI: 1.24, 26.34)	3 10.34% (CI: -0.74, 21.42)	17 58.62% (CI: 40.69, 76.55)	4 13.79% (CI: 1.24, 26.34)

[95% confidence intervals used]

Figure 47 shows the number, percentage and CIs for each response category for the statement “the poster raised my awareness of AN”. The majority of HCPs agreed ($n=17$, 58.62%) and the CIs indicate that there was a clear preference for this response. Nevertheless, some HCPs were either undecided ($n=5$, 17.24%) or disagreed ($n=5$, 17.24%) with this statement, indicating that the poster was not successful in raising awareness in some HCPs.

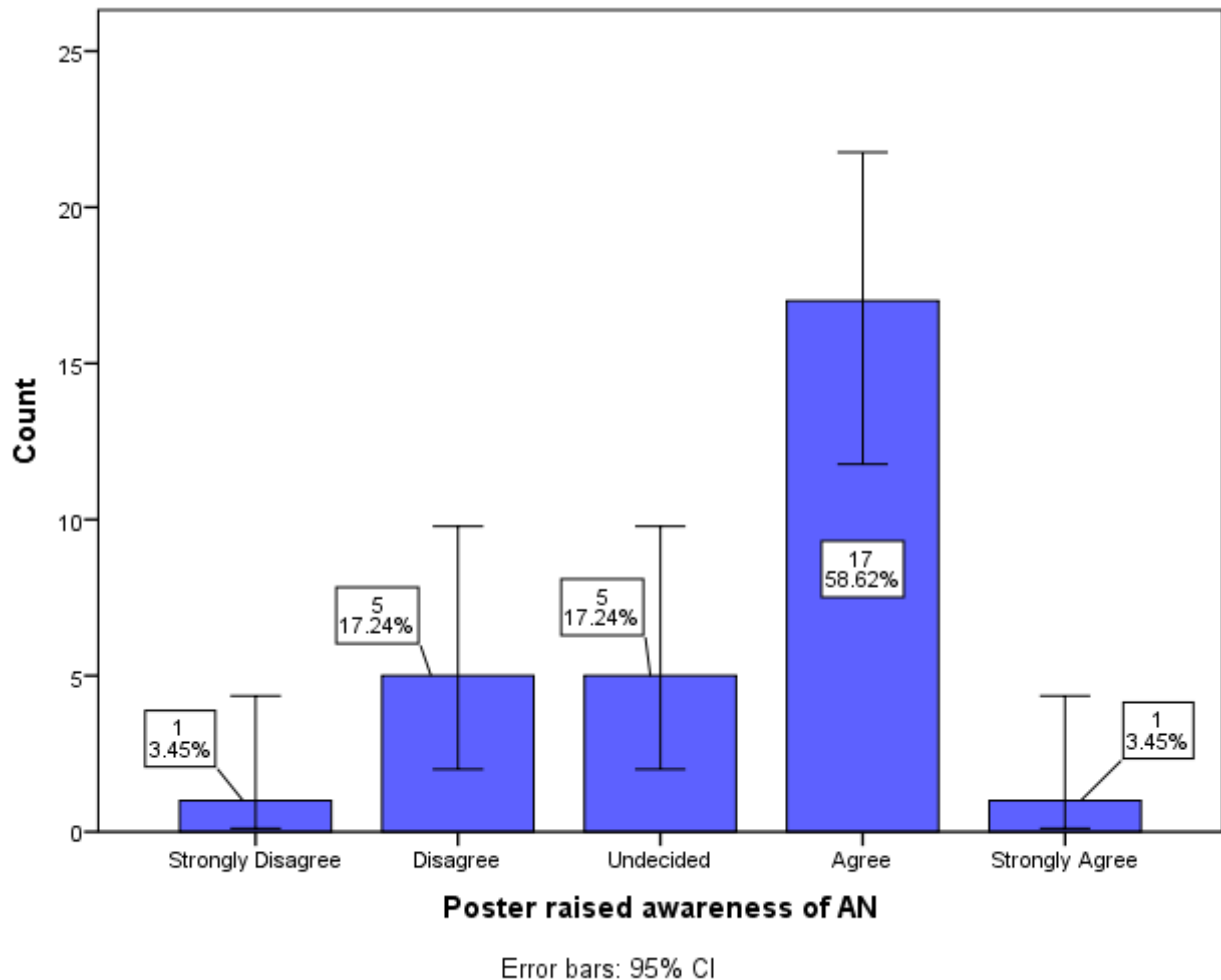


Figure 47. Bar graph of frequency, percentage and confidence intervals for each response category for the statement “The poster raised my awareness of AN”

Figure 48 shows the number, percentage and CIs for each response category for the statement “the poster has made me look for more information about AN”. The majority of HCPs disagreed ($n=11$, 37.93%), strongly disagreed ($n=5$, 17.24%), or were undecided ($n=8$, 27.59%) about whether the poster made them look for more information about AN. Only five HCPs agreed (17.24%) with this statement, and no HCPs strongly agreed. It is important to note the overlapping CIs for the responses, indicating that no firm conclusions may be made.

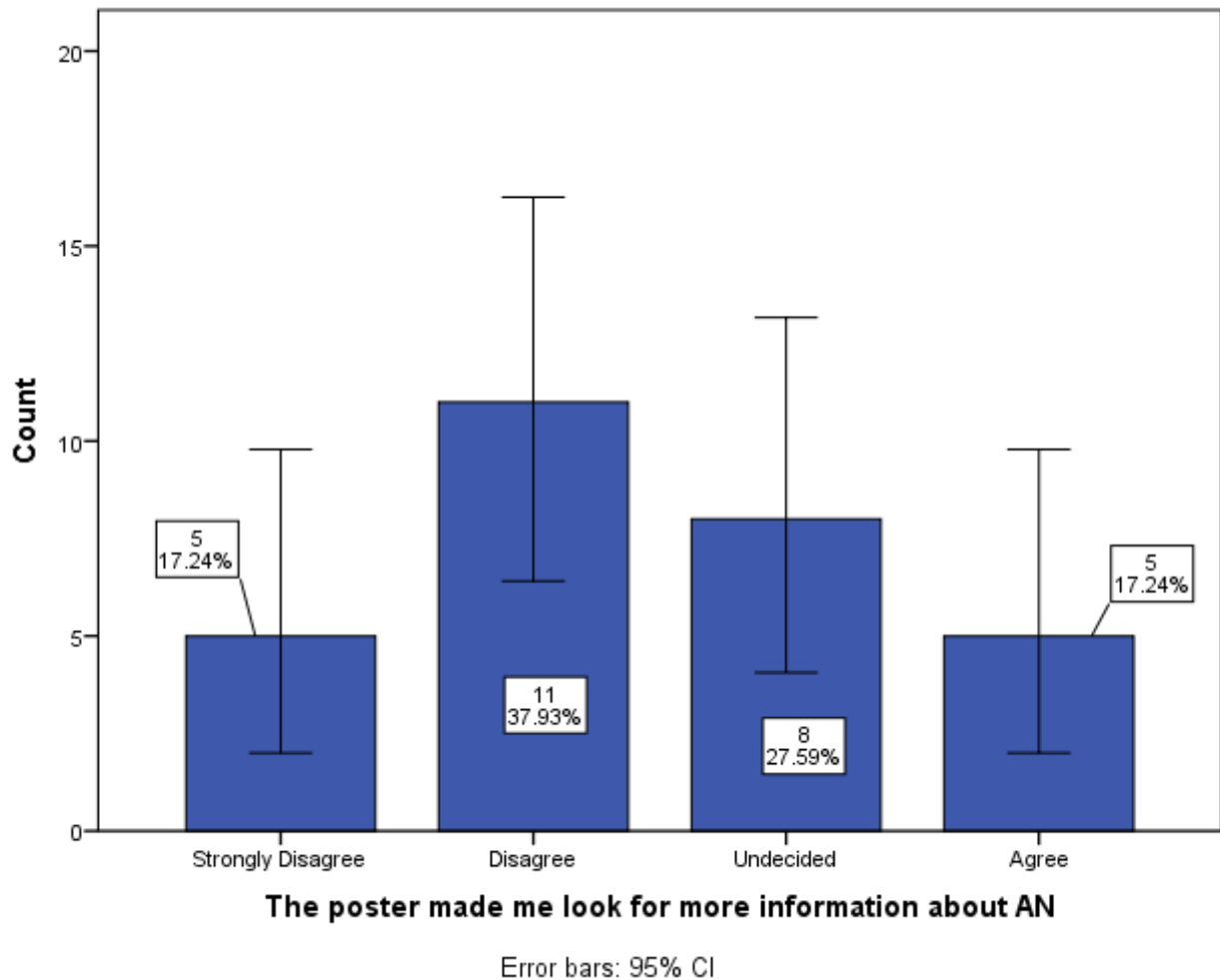


Figure 48. Bar graph of frequency, percentage and confidence intervals for each response category for the statement “The poster made me look for more information about AN”

Figure 49 shows the number, percentage and CIs for each response category for the statement “the poster has made me consider current patients may have AN”. The majority of HCPs disagreed (n=14, 48.28%), or were undecided (n=10, 34.48%) about whether the poster made them consider current patients. Only three HCPs agreed (0.34%) with this statement, and only one HCP strongly agreed (3.45%). Although there is a preference in this sample for the HCPs to disagree with the statement, the overlapping CIs indicate that no firm conclusions may be made.

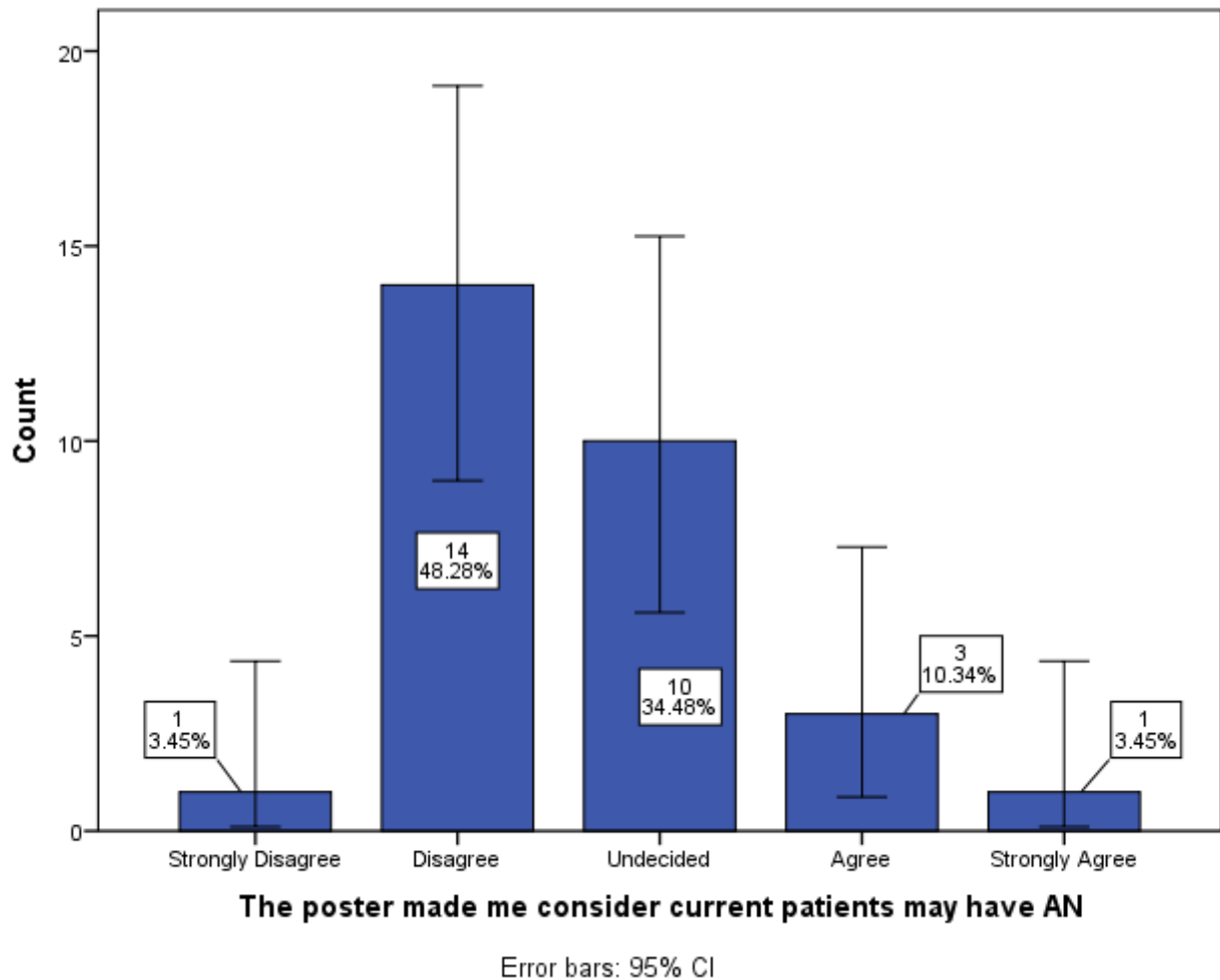


Figure 49. Bar graph of frequency, percentage and confidence intervals for each response category for the statement “The poster made me consider current patients may have AN”

Figure 50 shows the number, percentage and CIs for each response category for the statement “the poster has made me mindful of patients who may have AN in future”. The majority of HCPs agreed (n=17, 58.62%) with the statement and the CIs show that this response is clearly preferred.

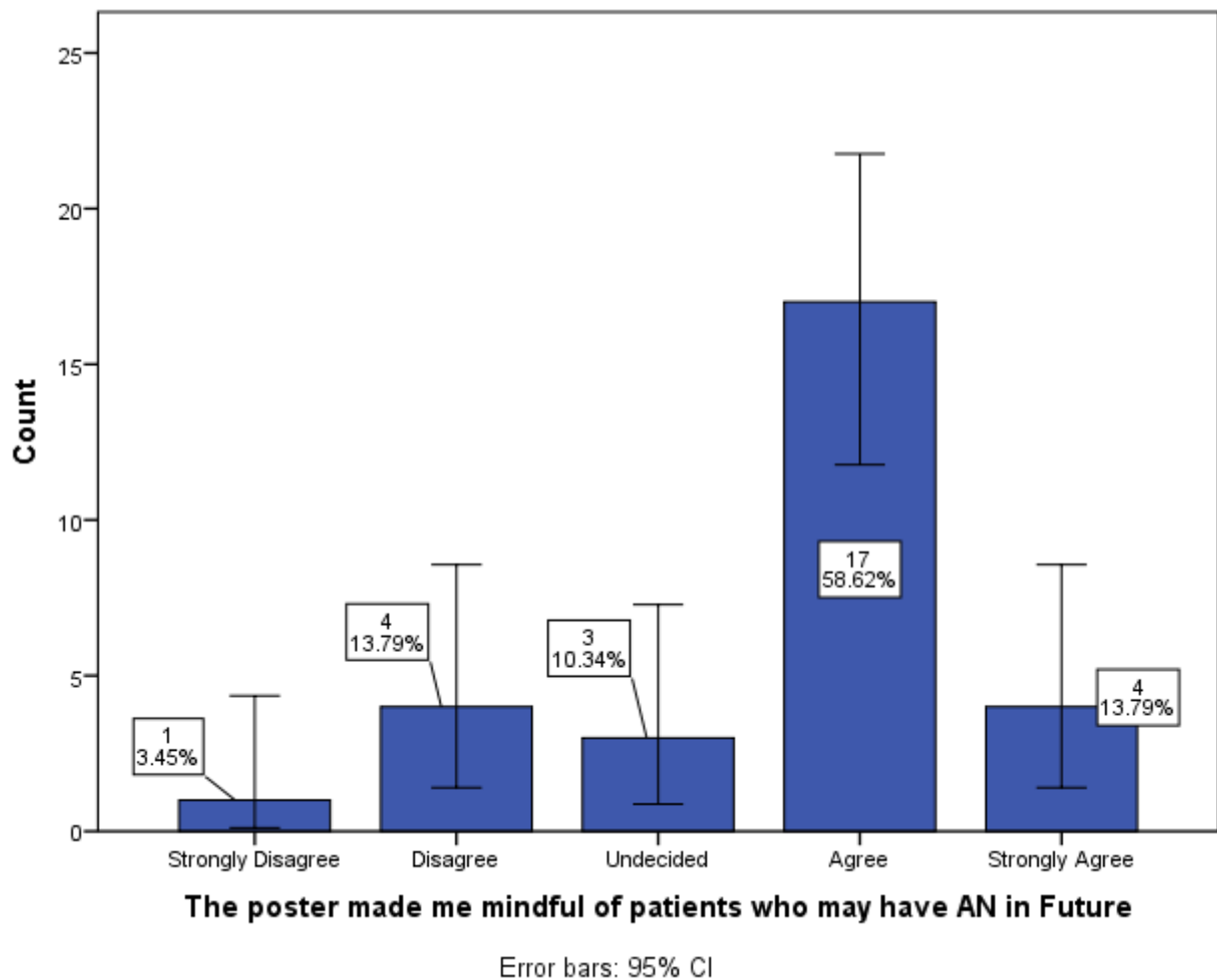


Figure 50. Bar graph of frequency, percentage and confidence intervals for each response category for the statement “The poster made me mindful of patients who may have AN in future”

Discussion of GPs and Nurses evaluation of the ANAC

GPs and NSs (HCPs) completed an evaluation questionnaire regarding the final version of the ANAC. HCPs agreed that the ANAC raised their awareness of anorexia, and that they intended to be mindful of AN in the future when seeing patients. According to the social cognition models (TRA: Ajzen & Fishbein; TPB: Ajzen, 1988; De Wit & Stroebe, 2004; Jenner et al., 2007) intention is the best predictor of behaviour. Components of the poster that directly related to the models of social cognition (HBM, SCT, TPB, and PMT) were included to increase self-efficacy, perceived vulnerability and response efficacy of the HCPs regarding future behaviour towards patients with AN. The current sample indicated that the poster increased their intention to perform the anticipated behaviour as a result of the

campaign. Nevertheless, it is important to remember that the intention-behaviour gap of the models is often criticised, meaning that the intention to behave in a certain way does not mean that the behaviour is inevitable. What can be predicted is that there is a higher likelihood that the HCPs will carry out the behaviours now that they have reported that they intend to do so. Future research will be needed to confirm this prediction. The results were mixed regarding whether the HCPs felt that the campaign made them look for more information about AN, and whether it made them consider one of their current patients may have AN.

There are a number of points to consider for this phase of data collection. Firstly, the issue of participant recruitment should be noted. The researcher failed to recruit surgeries to participate in Phase 2 of this study. The researcher emailed the surgeries, and also developed a questionnaire that included several sections, with heavy text across a number of pages. This may have made the HCPs reluctant to participate. For the current phase, the researcher rang the surgeries and arranged a meeting with the practice manager, and then attended the surgery to explain the study to the staff. The researcher redesigned the evaluation questionnaire to be short with only four items to encourage the HCPs to participate.

Although it was a smaller sample, the posters were seen by a much higher percentage of HCPs in this phase compared to the NSs in Phase 2. The posters were located in staff rooms and on the back of toilet doors (as advised by the HCPs in Phase 1). This confirms that careful consideration should be given to the location of the posters when developing a campaign. A considerable amount of effort is put towards developing an effective campaign, but this is futile if the campaign is not seen.

Summary of the Social Marketing Process of Campaign Development

The NSMC (2013) outlines eight criteria that maximise effectiveness in interventions/campaigns: behaviour; segmentation; consumer orientation; exchange; competition; theory; insight and methods mix. Table 25 provides a brief description of how the current study met the NSMC (2013) criteria.

Table 25. Brief description of social marketing criteria during development and evaluation of the ANAC

Social Marketing criteria	Description of how criteria has been met
Behaviour	The intervention was designed to raise awareness of AN in HCPs, increase their intention to look for further information regarding AN, and encourage HCPs to think of AN with future patients.
Segmentation	The audience was segmented to include HCPs who were employed in a caring role towards patients in a healthcare setting. Other types of viewers were also suggested during focus groups, such as teachers or gym staff, but these were excluded so that the message and design of the intervention could be tailored to a specific audience.
Consumer orientation	Focus groups and interviews were carried out with clinical psychologists, mental health NSs, Health Psychologists-in-training and undergraduate psychology students to gain an understanding of the context in which HCPs worked, their level of understanding regarding AN, what information they would like to see in a campaign regarding AN, the media, format and design of the campaign, and tailored messages for the target audience. An understanding of the current behaviour of HCPs was ascertained by establishing their current knowledge of AN. The intervention was pre-tested with NSs and Chiropractic students using qualitative and quantitative responses formats. Lack of training was identified as a barriers to HCP awareness of AN.
Exchange	The HCPs appeared to want to learn more regarding AN and felt that further training was necessary. Therefore the costs of not understanding AN were emphasised, such as lack of competence, and benefits in terms of being able to care for and communicate with a patient who may have AN was preferred.
Competition	HCPs are very busy and have limited time to pay attention to awareness campaigns. Other posters may also be placed regarding HCP adherence to best practice so the posters need to be attractive and get the attention of the viewer (McGuire, 1989; Petty & Cacioppo, 1986). Message credibility was enhanced by using a logo.
Theory	The HBM, TPB, PMT, SCT models of social cognition were to consider the determinants of behaviour in HCPs, whilst persuasion theory including the communication-behaviour model and ELM was used to design the poster to attract and persuade the viewer. For example, the poster was considered a 'cue to action' for HCPs in its own right. The poster was designed to be directed at all HCPs with direct questions that would invoke a feeling of responsibility (Jenner, et al., 2007), which related to perceived susceptibility in the HBM and PMT. Participants in Phase 4 indicated that they intended to be mindful of AN in future, relating specifically to the TPB. Control was placed with the viewer by asking a direct question and providing further information, which relates to the

Social Marketing criteria	Description of how criteria has been met
	TPB. Providing a link to find further information regarding AN would allow HCPs to feel confident in finding out more regarding the disorder, relating to self-efficacy in SCT, TPB, HBM, and PMT.
Insight	Similar to consumer orientation, insight using qualitative and quantitative data collection throughout all phases allowed the researcher to gain insight into HCPs behaviour, experiences, needs or desires that is relevant to the behaviour featured in the ANAC. For example, the desire to learn more about AN featured as a central theme throughout all phases by many of the HCPs.
Methods mix	Product, price, place, and promotion was assessed by asking the HCPs which medium they thought was most appropriate, and making a decision based on HCP and the financial limitations of the study. It was reasonable to explore whether a poster would be a suitable medium for the ANAC. Given that evidence regarding the efficacy of posters is mixed, and that often posters are used as part of a multimodal approach to behaviour change, it is important to consider whether posters alone would be sufficient in raising awareness of HCPs, increase their intention to look for further information regarding AN and to consider AN in the future when seeing patients. The results suggest that a poster alone is not sufficient, as HCPs still want to learn more about initial management of AN.

Discussion and limitations of Study 2

Study 1 utilised a qualitative methodology in order to explore SUs treatment experiences for AN in relation to expectations and satisfaction with treatment, and the relationship to therapeutic alliance, engaging in treatment and motivation to change. The results from Study 1 indicated that HCP awareness of AN was viewed by SUs as a crucial part of their expectations, experience of, and satisfaction with, treatment. More specifically, knowledge of AN was a positive expectation of treatment by patients, and improved their motivation to engage in treatment and recover. Knowledge of AN by HCPs also facilitated the therapeutic alliance, another facet to engaging in treatment as the SU felt more able to trust a HCP with increased awareness of the disorder. The participants from Study 1 noted that lack of HCP awareness of AN enabled the SU to manipulate the situation or maintain anorexic behaviours. Conversely, awareness of the disorder by HCPs reduced the likelihood that SUs would manipulate the treatment situation or maintain anorexic behaviours.

SUs expected to get early intervention and treatment, particularly from staff who were either specialist in eating disorders or at least trained regarding eating disorder characteristics.

Unfortunately, the SUs in Study 1 were not diagnosed when they first presented with the disorder. Knowledge of AN by HCPs was an expectation that was not met, and this was a barrier to the therapeutic alliance and SUs motivation to engage in treatment. Therefore, overall lack of knowledge of AN by HCPs had a negative effect on treatment outcome. Unsurprisingly, patient recommendations to improve the service included early intervention and better HCP awareness about AN. Finally, satisfaction with the health service is affected by whether SUs are seen by AN-knowledgeable HCPs. Globally the findings indicated that knowledge of AN by HCPs was very important to SUs experience of treatment in the Welsh Healthcare Service. An intervention to raise awareness of AN in HCPs was warranted.

Following recommendations from SUs in Study 1, the aim of Study 2 was to develop and evaluate a campaign to raise awareness of AN in HCPs. The campaign was developed and evaluated across four phases using the Social Marketing Framework. The formative stage saw development of the campaign using data from interviews and focus groups with HCPs in conjunction with principles from theories of social cognition (HBM, TPB, PMT, SCT) and theories of persuasion (Cialdini, 1993; McGuire, 1989; Petty & Cacioppo, 1986). Process evaluation included both quantitative and open-ended questions that were completed by student HCPs. The poster was modified based upon feedback, and the number of posters reduced from four to two. Finally, GPs and Nurses completed an evaluation questionnaire for the outcome evaluation phase.

The results from the formative research phase indicated that the HCPs felt that the ANAC was warranted, and that the purpose of the campaign should be to raise awareness of AN in HCPs. HCPs in this phase revealed that although different mediums of intervention would be appropriate, lack of time and cost of audio-visual interventions justified exploring whether a poster intervention could raise awareness of AN in HCPs. Nevertheless, even at the formative research stage, HCPs described wanting to find out substantial information regarding anorexia nervosa.

The process evaluation phase of research became problematic when only 12 NSs revealed that they had seen the poster. A number of possible reasons for this were identified. Firstly, the location of the poster may not have been appropriate. Exposure to posters is brief and non-interactive (Rhodes & Wolitski, 1992) and so the campaign should have been located in a unique position where they were more likely to be noticed, and competition for attention is low (Fearnow-Kenney & Wynick, 2005; Foss, Marchetti & Holladay, 2005; Linkerbach &

Perkins, 2005). Although the HCPs from Phase 1 suggested locating the posters on the back of toilet doors, the university would not permit this, and so the posters were placed on notice boards where other educational materials were present. Students may have been rushing between lectures, and the location of the posters amongst other education materials may have meant the NSs did not pay attention to them.

Another possible reason that the students did not see the poster could have been the choice of A3 poster size. Studies have confirmed that A1 and A2 poster sizes resulted in significant increase in stair use, whereas A3 size did not (Kerr et al., 2010). Furthermore, Campaigns to raise awareness of a subject often include other types of information sources as well as posters. Although other studies have reported that posters are effective in changing behaviour (e.g. Kerr et al., 2010), a multimodal approach to campaigns is often used (e.g. Pittet, 2000; Creedon, 2005; Foss et al., 2005). For example, the campaign by Foss et al. (2005) also included presentations, newspapers ads, TV ads, and a website as well as the posters. Although many of the students learned about the campaigns through the posters (63%), it is likely that the presence of other channels reinforced the message. Similarly, Creedon (2005) used a multifaceted approach to improve HCPs hand decontamination practices. The campaign included posters, educational handouts, feedback to HCPs and the provision of essential supplies such as alcohol gel. Linkerbach and Perkins (2010) used TV ads, radio, print-based media and theatre ads, as well as poster and promotional gifts.

Although the design of the study was intended to be a quasi-experimental design, the small number of participants meant that statistical analyses could not be carried out. Only descriptive data regarding NSs perceptions of their ability to assess, detect and refer patients with the disorder. Importantly, the NSs revealed that they felt they needed more training regarding AN. Qualitative responses to the question asking what further training would comprise confirmed earlier HCPs reports that in-depth training was desired.

Due to the failed viewing of the poster in Phase 2, Phase 3 was added. In this phase, chiropractic students were recruited to evaluate the campaign using a forced viewing approach. Chiropractic students reported mixed evaluations of the campaign. Although they reported that the posters were not detailed and quick to understand, they also reported that they were complex and unclear. The students elaborated by stating that the poster message was not clear and the sufferer statement needed to be explained further. The student reported that the poster font was too small, the poster was too cluttered and the information was

difficult to remember. This feedback meant that the poster design was not in accordance with literature which suggested that the slogan should be short and simple (Marx et al., 2008), the information should be comprehended quickly (McGuire, 1989). Crucial to the current study was that chiropractic students did not feel that the campaign was relevant to them. The HBM, TPB and PMT all include perceived susceptibility as a determinant of behaviour. Therefore, if the chiropractic students did not feel that they were the intended receivers, then they were likely to reject the message.

Following the feedback from Phase 3, the posters were modified and two posters were chosen to be displayed as the final version of the ANAC. The campaign was displayed at 15 surgeries where 29 GPs and Nurses were recruited to evaluate the campaign. The posters were purposely positioned in unique locations that were likely to increase attention, such as the back of toilet doors and staff room walls (Fearnow-Kenney & Wynick, 2005; Foss, Marchetti & Holladay, 2005; Linkerbach & Perkins, 2005). Outcome evaluation by HCPs (nurses and GPs) suggested that the poster raised awareness of anorexia and made them intend to be more mindful of anorexia in future. The results were mixed regarding whether the posters made the HCPs look for further information or consider that their current patients may have anorexia nervosa.

The failed attempt at data collection with HCPs in surgeries highlights two possible reasons for the lack of response to participation requests. Firstly, use of emails to recruit HCPs who are very busy was unlikely to yield a number of responses that would be suitable for a research study. Secondly, the length of the questionnaires was not fully considered. The questionnaires used for the nursing and Chiropractic students included large amounts of text and several sections of questions. This may have made HCPs reluctant to participate. Therefore, the researcher altered the approach to recruitment and data collection in Phase 4. The researcher telephoned surgeries and asked to speak to the practice manager. The researcher then arranged a convenient time to go and explain the study and disseminate materials to each practice. As a result, the response was much better in Phase 4, indicating that face-to-face recruitment and brief tools for intervention evaluation are more likely to yield higher response rates for participation.

There were important findings from Study 2 that provide justification for a further study. Prior to viewing the campaign, the majority of nurses agreed they would be able to identify a person who may have AN, but they felt they needed further training on the disorder. In

particular, the Nursing Students (NSs) stated that they wanted further information regarding knowledge and characteristics of the disorder, appropriate referral (how and where to refer), types of treatment available, and how to approach a SU with AN. The NSs disagreed that they would know how and where to refer SUs with AN, and they could not signpost services. They agreed that they could access further information regarding AN, and that they would seek advice from a colleague or supervisor if they suspected a SU had the disorder. Most importantly for Study 3, the majority of NSs agreed that they needed more training on AN.

Despite the benefits of HCP awareness of AN, the chiropractic students in Study 2 reported that they felt the campaign content was irrelevant to them. If that chiropractic students did not feel that it is their responsibility to be mindful of anorexia, then an awareness campaign would be of limited benefit, if any. Chiropractic students may require a preliminary awareness campaign to raise awareness of *why* they should be aware of the disorder, rather than giving them information about AN. This indicated that this type of HCP was not particularly suitable for the aim of the study: to raise awareness of AN. Although this finding warrants further investigation, it highlights that use of chiropractic students as participants during this study was unsuitable. Therefore, for Study 3, chiropractic students were excluded as potential participants.

The results from Studies 1 and 2 suggest that knowledge and awareness of AN by HCPs is beneficial, yet some HCPs knowledge regarding management of AN is insufficient and requires improvement. The aim of Study 2 was to develop an awareness campaign for HCPs regarding AN. Despite attempting to integrate current theory and evidence regarding appropriate design and evaluation of awareness campaigns and interventions, the results were contradictory and did not reflect the aim of the study. For example, the chiropractic students felt that the campaign was irrelevant to them, whereas the outcome evaluation by HCPs (nurses and GPs) suggested that the poster raised awareness of anorexia and made them intend to be more mindful of anorexia in future. Furthermore, the NSs in phase 2 did not see the poster at all even when located on their university notice boards. This indicates that the use of posters to raise awareness of HCPs is questionable, and another medium of intervention that could incorporate the level of information desired by HCPs should be developed.

The campaign that was developed and evaluated in Study 2 integrated a variety of constructs from multiple social cognition models to maximise effectiveness of the campaign to raise

awareness of anorexia. For example, cues to action from the HBM, perceived susceptibility from the HBM, TPB and PMT, “liking” from Cialdini’s (1993) principles of persuasion to encourage HCPs to seek further information regarding AN. Whilst it appeared beneficial to integrate several constructs, this created difficulty when considering how to evaluate the effectiveness of the campaign in raising awareness of AN.

Cronbach’s alpha was carried out to test the reliability of the evaluation test items. There are different reports about the acceptable values of alpha, ranging from .70 to .95 (Nunnally & Bernstein, 1994; Graham, 2006; Bland & Altman, 1997). An alpha value of .7 is acceptable (George & Mallery, 2003) and maximum alpha value of .90 has been recommended (Streiner, 2003). But Cronbach’s alpha does not provide reliability estimates for single items (George & Mallery, 2003), and this means that although the reliability estimate for the overall score is acceptable, it does not reflect the reliability of the items singularly. Furthermore, as the number of items increases, so does your alpha (Cronbach, 1951; Nunnally, 1978). Conversely, if the length of the test is too short, then the value of alpha is reduced (Nunnally & Bernstein, 1994; Streiner, 2003) and this will violate the assumption of Tau-equivalence and will underestimate reliability (Graham, 2006). Therefore, in order to increase alpha, more related items testing the same concept could be added to the test (Tavakol, Mohagheghi & Dennick, 2011).

Alpha is grounded in the Tau-equivalence model which assumes that each test item measures the same latent trait on the same scale. If multiple factors/traits underlie the items on a scale, as revealed by factor analysis, this assumption is violated and alpha underestimates the reliability of the test (Green & Thompson, 2005). Unfortunately, due to the small number of participants, factor analysis could not be carried out for the evaluation questionnaire. Furthermore, a low sample size may show a higher alpha, and a minimum of fifty participants is required (Javali, Gudaganavar & Raj, 2011).

Although reliability was tested using Cronbach’s alpha, and the questionnaires were assessed for face and content validity by the research team and qualified nurses, the data that was produced did not provide conclusive evidence regarding the effectiveness of the campaign to raise awareness of AN. Therefore, the variables should be defined more precisely so that a focused outcome measure can be designed or employed. There was no baseline to make comparisons regarding the effect of the intervention. The statements were carefully worded so that they included ‘since seeing the poster’ or similar and so HCPs should have reported

their about their evaluations since seeing the poster. Nevertheless, inclusion of a pre-test measure would mean that comparisons with post-test scores could be made, therefore providing appropriate evidence.

The Social Marketing Campaign model was used as a framework for development of the campaign in Study 2 but it did not outline specific guidance on *how* to integrate psychological theory into the intervention. Therefore, application of a more specific, psychological theory of intervention development for behavioural change was justified. A campaign design approach that selected one model, based upon more recent developments in behaviour change theory (e.g. the Transtheoretical Model: TTM), was preferable. In particular, the intervention should focus particularly on one construct from the chosen model. Specific measurement of change in one construct would then enable more explicit evaluation of the intervention. The TTM includes self-efficacy as a construct that can be measured in order to determine whether an intervention is effective. Furthermore, self-efficacy is a construct that is integrated into all of the models and theories of behaviour considered in Study 2 (HBM, SCT, TRA/TPB, PMT, and EPPM). This lends support to focussing on self-efficacy as the core construct of measurement in Study 3.

The use of posters in as the chosen media channel in Study 2 was not justified appropriately. A literature search was carried out regarding selection of the type of media channel. Posters were found to be an effective medium of intervention in several studies (e.g. Andersen, et al., 1998; Groth-Marnat, et al., 1996; Alstead, et al., 1999), but not in others (e.g. Jenner et al., 2005, Naikoba & Hayward, 2001; Jung et al., 2010). Given the financial limitation of the current study, posters were identified as cost-effective means of communicating intervention messages, and so this was reasonable 'first step' (Andersen et al., 2014) in exploring an appropriate intervention to raise awareness of AN. Unfortunately, a lack of literature regarding poster design (noted by Sugiyama et al., 2011; and Hubenthal, O'Brien, & Taber, 2011) resulted in the reliance on formative data from HCPs regarding poster design development. Furthermore, consideration regarding poster location (e.g. Fearnow-Kenney & Wynick, 2005; Foss, Marchetti & Holladay, 2005; Linkerbach & Perkins, 2005) and size (Kerr et al., 2010) was only considered following the failed viewing of NSs in Phase 2. To that end, a more thorough consideration of current literature regarding selection of campaign media channels was necessary. In particular, selection of the intervention media used in Study 3 should be based upon peer-reviewed studies that either included successful behaviour

change interventions, or that advocate the use of a particular media channel. In particular, the method should be relevant for the chosen sample, and should be sufficient to include the level of information that HCPs would like to learn regarding AN.

Finally, recruiting different types of HCPs caused difficulty in designing and evaluating the campaign in Study 2. Audience segmentation is conducted during campaign development in order to identify the specific population towards which the campaign should be directed. The ultimate purpose of segmentation is to create homogenous groups who message preferences are similar to one another so that campaign messages can be designed to be maximally effective with the target audience (Atkin, 2001; Slater, 1996). Further, a lack of segmentation and message targeting are thought to be major factors that contributed to failed campaigns of the past (e.g. Flay & Sobel, 1983; Myhre & Flora, 2000; Zimmerman, et al. 2007). Although the audience in Study 2 was segmented, the differences between HCPs became apparent. For example, NSs wanted much more information regarding anorexia, but chiropractic students did not feel the campaign was relevant to them. Furthermore, inclusion of the sample of undergraduate psychology student may not have been suitable given that they may not have worked in a health care setting before completing the focused task. A pilot of the focused task using a HCP sample may have been more appropriate.

Study 3

Development and Evaluation of a Transtheoretical Model Intervention to Increase Nursing Students' Self-Efficacy regarding Initial Management of Anorexia Nervosa

Foreword of Study 3

Study 1 utilised a qualitative methodology in order to explore patients' treatment experiences for AN in relation to expectations and satisfaction with treatment, and the relationship to therapeutic alliance, engaging in treatment and motivation to change. The results from Study 1 indicated that although patients expected early intervention and treatment, a lack of knowledge of AN by HCPs had a negative effect on treatment outcome. Patients recommended that early intervention and better HCP awareness about AN would improve their satisfaction with the service. Overall, the findings indicated that knowledge of AN by HCPs was very important to patients' experience of treatment in the Welsh Healthcare Service.

Following recommendations from patients in Study 1, development and evaluation of a campaign to raise awareness of AN in HCPs in Study 2 was warranted. The anorexia nervosa awareness campaign in Study 2 was developed and evaluated across four phases using the Social Marketing Framework. Prior to viewing the campaign, nurses agreed they would be able to identify a person who may have AN, but felt they needed further training on the disorder. In particular, Nursing Students (NSs) stated that they wanted further information regarding characteristics of the disorder, appropriate referral (how and where to refer), types of treatment available, and how to approach a patient with AN.

After they had seen the campaign in Study 2, NSs still disagreed that they would know how and where to refer patients with AN, and they could not signpost services. The results from Study 2 also indicated that the majority of NSs agreed they needed more training on AN. Evaluation of the campaign during Phase 4 by HCPs (nurses and GPs) suggested that the posters raised awareness of anorexia and made them intend to be more mindful of anorexia in future. This finding contradicted earlier evaluations by NSs who still desired further training after seeing the campaign. Therefore, this indicated that the campaign may not be sufficient in raising an appropriate level of AN awareness in HCPs, and of NSs in particular. This

provides justification for carrying out a further study, namely the development of a focussed intervention to increase knowledge and awareness of AN in NSs.

Learning from the Limitations of Study 2

The results from Studies 1 and 2 suggest that knowledge and awareness of AN by HCPs is beneficial, yet some HCP's knowledge regarding management of AN is insufficient. Three key limitations of study 2 were acknowledged and addressed in Study 3 in order to develop and evaluate effectiveness of a further AN awareness intervention: use of multiple constructs from different behaviour change models/theories, in particular the application of the Social Marketing Campaign; recruitment of unspecified/multiple types of HCPs; and the use of print media (posters) as the campaign channel.

Literature Review for Study 3

Early diagnosis and intervention are consistently associated with reduced duration of AN and improved treatment outcome (Treasure & Russell, 2011; Von Holle *et al.*, 2008; Herzog, Nussbaum & Marmor, 1996). A systematic review of treatment seeking has recently estimated the median delay from onset to treatment for AN is 15 years (Hart, Granillo, Jorm & Paxton, 2011). Half of the individuals with an ED are diagnosed by HCPs, yet worryingly a sizeable majority may go through life without any help for their ED (Surgenor & Maguire, 2013). Delay in appropriate treatment also has potentially adverse consequences for prognosis (Rees-Davies *et al.*, 2011; Bryant-Waugh, Lask, Shafran, & Fosson, 1992). Awareness of simple screening measures are important where HCPs need to identify the possibility that a disease might be present (Warner, 2004). Eating disorder screening tools, such as the SCOFF screening tool, are memorable, easy and quick to administer in a setting where an eating disorder may be suspected (Morgan, Reid, & Lacey, 2000; NICE, 2004; Allen, Fursland, Watson & Byrne, 2011). They are the first stage of the diagnostic sequence, prompting further assessment and evaluation of those considered high risk.

The SCOFF screening tool is a self-administered questionnaire comprising of five items, answers of which score 0+ for 'no' or 1 for 'yes'. The tool has been used internationally to detect eating disorders in all healthcare settings, such as primary care, community, family, outpatient and educational settings (e.g. Luck *et al.*, 2002; Hautala *et al.*, 2009; Hill, Reid, Morgan & Lacey, 2010; Cotton, Ball, & Robinson, 2003; Parker, Lyons & Bonner, 2002; Baudet, Mantastier, Mesthe, Oustric, Lepage, & Ritz, 2013), and has been validated for both

oral and written delivery (Perry *et al.*, 2002). Fursland and Watson (2013) recently explored use of the SCOFF tool within outpatient/community-based settings where mental health problems were already present but eating disorders were not diagnosed. From their sample of 260 patients, 48 scored ≥ 2 on the SCOFF, indicating eating problems. Of these, 19 individuals met criteria for an eating disorder. The evidence suggests that the SCOFF tool is a valuable asset for HCPs who suspect patients have symptoms of eating disorders but require valid confirmation for referral.

Increased knowledge of AN improves the ability of HCPs to detect and refer patients who have AN for appropriate care. Unfortunately, patients suggest that some HCPs have limited or incorrect knowledge about how to manage patients that present with symptoms of AN (Rees-Davies *et al.*, 2011). HCPs have confirmed this by reporting that they feel as though they lack competence and knowledge in eating disorders, and express a desire for further training (Linville, Benton, O'Neil, & Sturm, 2010; King & Turner, 2000). It is therefore imperative that in order to be able to screen for eating disorders, HCPs should first be educated regarding the characteristics of the disorders. Furthermore, Johnston, Fornai, Cabrini and Kendrik (2007) note that whilst screening tools are useful in identifying those at risk of eating disorders, HCPs are concerned with what action to take in response to positive results, and that positive results are not routinely recorded in medical notes. The evidence provides justification for education regarding referral procedures and importance of recording positive results when an individual has been identified as at risk of an eating disorder.

There are also further benefits associated with HCP awareness of eating disorders that extend past the patient's first point of contact with healthcare services. Increased knowledge of AN facilitates development of therapeutic alliance between the HCP and patient (Roots *et al.*, 2009; Zipfel *et al.*, 2000; Rees-Davies *et al.*, 2011; Pereira *et al.*, 2006), a factor which contributes to the success of the therapeutic process (Rees-Davies *et al.*, 2011; McCabe & Priebe, 2004; Pereira *et al.*, 2006). Therapeutic alliance accounts for improved patient outcomes in mental health care (Howgego, Yellowlees, Owen, Meldrum, & Dark 2003; Meissner, 2007; Wright, 2010). Furthermore, the results from Study 1 suggest that delays in intervention due to limited knowledge of AN by HCPs has a negative effect on both initial and subsequent therapeutic alliances. Therefore, overall the evidence suggests that patients prefer HCPs who are knowledgeable about AN, HCPs want to increase their knowledge of AN, and level of knowledge regarding AN affects development the therapeutic alliance.

Early detection of AN and a good therapeutic relationship are both associated with better treatment outcome, and simple screening tools are available for HCPs to identify those at risk of eating disorders. Unfortunately, HCPs report a lack of knowledge, desire for further education regarding eating disorders and concern with how to act upon positive screening results. Therefore, it is justified to develop an intervention to increase HCPs knowledge, particularly nursing students' in the current study, regarding initial management (detection, screening and referral) of AN.

Choosing a framework for development of an AN intervention

In order to think about how to raise awareness and increase knowledge of AN, it was important to look at current psychological theories that relate to behaviour, behaviour change and intervention development and evaluation. Use of theory as a guide to campaign development serves as a conceptual foundation for a campaign and can suggest important determinants upon which campaign messages might focus (e.g. Cappella, Fishbein, Hornik, Ahern, & Sayeed, 2001; Slater, 1999).

By exploring the constructs that relate to a person's behaviour, it was possible to develop an intervention that would potentially encourage the positive behaviours required in NSs who care for people who may have the disorder. There are a plethora of theories and models that have received empirical support in explaining, predicting and changing behaviour, particularly within the health literature. By examining the literature regarding the use of behavioural change in predicting and changing behaviour, it was thus possible to identify a common construct as a variable for the current study. Here, both cognitive/stage theories and models of behaviour were considered. Social Cognition theories include the Social Cognitive Theory (SCT: Bandura, 1977, 1986), the Theory of Reasoned Action (TRA: Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), the Theory of Planned Behaviour (TPB: Ajzen, 1985), and the Health Belief Model (HBM: Hochbaum, 1958). Information regarding development of behaviour change interventions can also be found from fear appeals such as the Protection Motivation Theory (PMT: Rogers, 1975) and the Extended Parallel Process Model (EPPM: Witte, 1992). More recently a stage approach to behaviour change called the Transtheoretical Model (TTM: aka Stages of Change: Prochaska & DiClemente, 1983) has been developed. One of the common constructs that has successfully been used to explain, predict and change behaviour was self-efficacy. Here, explanations of such theories and

models will be considered in order to provide justification for the use of self-efficacy and the TTM for development and evaluation of the current intervention.

Firstly, before the different explanations of change are visited, it should be noted that there is a distinction between models of behaviour and theories of change. *Models* of behaviour provide understanding regarding specific behaviours, and the underlying factors which influence them. *Theories* of behaviour explain how behaviours may change over time, and can be changed. The theories and models are complimentary, and an understanding of both is necessary during development of interventions that are designed to facilitate behaviour change.

Models of behaviour explain a person's actions at either an individual or a higher scale level. At an *individual level*, models that attempt to explain behaviour often draw upon standard economic theory or 'expected utility model': that individuals tend to behave rationally, with the aim to maximise benefit to themselves, including consideration of costs and benefits of behaviour. This explanation has been developed further by attempting to explain limitations in human decision-making and less rational behavioural choices (e.g. Dawnay & Shah, 2005). Models that explain behaviour from the *higher level scale*, also called 'societal models', include macro-level societal factors such as technology and the economy. As the current study did not attempt to change behaviour from a higher scale perspective, consideration of such models were not included during intervention development.

Key factors present in most social-psychological explanations of behaviour include *attitudes*, *norms* and *agency*. *Attitudes* are conceived as the product of our beliefs about a behaviour, combined with the value individuals attach to those beliefs. Within such models, the attitude formation process is presented as a deliberate calculation, following rational choice lines. *Norms* are defined as a person's perception that most people who are important to him think he should or should not perform the behaviour in question (Ajzen & Fishbein, 1980). Social norms therefore act as a guide to how we should behave, and how we expect others to behave. Finally, *agency* appears in most social-psychological models in a variety of different ways (most notable is 'self-efficacy': Bandura, 1977). It is broadly defined as the individual's sense that they can carry out an action successfully, and that the action will bring about the expected outcome.

Due to the plethora of models available, researchers often have difficulty in choosing one specific model for intervention development. Before selection of a model for change can take place, it is important to define the desired target behaviour that should be achieved by the intervention. Only then can a relevant model for the target behaviour, and the *factors* that influence that behaviour, be identified. Use of behavioural models during intervention design can benefit formation of hypotheses for testing and facilitate selection or design of an appropriate measurement tool. This can only be achieved if it is made clear which construct of the behaviour change model was selected and used for intervention development. The intervention in the current study aimed to increase knowledge of how to manage first contact with patients who may have AN; specifically, to encourage NSs to detect, screen and refer patients who have the disorder. Self-efficacy of NSs in their ability to manage AN was a construct that could be measured before and after presentation of an intervention, and therefore it was appropriate to select self-efficacy as the core construct of change.

Motivational Interviewing (MI: Miller & Rollnick, 1991), is a directive [goal-oriented], client-centred method for enhancing intrinsic motivation to change by exploring and resolving ambivalence (Miller & Rollnick, 2003). Miller & Rollnick (2002) described four principles of motivational interviewing which underpin its specific techniques and strategies: The expressions of empathy, the development of discrepancy, rolling with resistance, and support for self-efficacy. In motivational interviewing, there is an emphasis on the importance of the expression of empathy by a counsellor as the defining and fundamental feature of the method (Miller & Rollnick, 1991, 2002). Motivational interviewing is centred on the position that behaviour change is only possible when the client feels personally accepted and valued. The counsellor works with the client in order to talk about ambivalence and resistance. Furthermore, the sessions are designed to enhance the client's perception that they are able to carry out the behaviours. This aligns with the SDT (full review outlined in the literature review of Study 1: Ryan & Deci, 2000) which posits that in order to enhance intrinsic motivation to engage in the appropriate behaviours, a person's basic psychological needs, relatedness, autonomy and competence), should be met (Markland, Ryan, Tobin, & Rollnick, 2005). Thus, in the current context, motivational interviewing may enhance nursing student's motivation to engage in appropriate behaviours towards patients with anorexia nervosa.

This approach has been found to produce significant efficacy across a broad range of health risk behaviours including alcohol abuse, smoking, high-risk sexual behaviours, exercise, and diet (Burke, Arkowitz & Menchola, 2003; Hettema, Steel & Miller, 2005). MI-based health coaching has also been found to improve physical and mental health status in a worksite setting (Butterworth, Linden, McClay & Leo, 2006). During each session, the MI coach addresses risk factors(s) and employ client-centred techniques such as empathic listening, collaboration, evocation, and affirmation in order to establish rapport, reduce resistance, support self-efficacy, and elicit 'change talk' (one's own reasons and arguments for change) (Hettema et al., 2005; Miller & Rollnick, 2002). The intended outcome of MI sessions is for clients to resolve ambivalence (a central goal), move through the stages of change (TTM: Prochaska, 1979), and follow through on desirable lifestyle change.

Intrinsic motivation is the motivation to perform an activity for itself, in order to experience the pleasure and satisfaction inherent in the activity (Deci et al., 1989; Vallerand, 1997). Goal setting and feedback are widely believed to affect performance positively through enhancing the motivation necessary for work performance (Earley, Northcraft, Lee & Lituchy, 1990). According to the self-determination theory (SDT: Ryan & Deci, 2000), intrinsic motivation will increase if communication of organisational goals provides the rationale for behaviour at work. Feedback on work performance may also impact intrinsic motivation through increased experienced responsibility of outcomes and knowledge of the actual results of the work. Feedback may increase intrinsic motivation to the extent that it increases employees perceived competence (Deci & Ryan, 1985).

Intrinsic motivation as a predictor of performance is also supported by research in sports (e.g. Callahan, et al., 2003; Catley & Duda, 1997) and educational settings (e.g. Lin, McKeachie & Kim, 2003; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004; Wang & Guthrie, 2004). Several studies have reported negative and significant correlations between intrinsic motivation and turnover intentions (e.g. Houkes, Janssen, de Jong & Nijhuis, 2001; Richer, Blanchard & Vallerand, 2002), perhaps because employees with interesting, enjoyable and exciting jobs have less interest in quitting and because they are less likely to be attracted by extrinsic rewards offered by other organisations. Finally, experiencing pleasure and satisfaction inherent in job activities may not only enhance learning outcomes for intrinsically motivated employees, but also increase the probability that what they learn is used to improve performance (MacDuffie, 1995).

In the context of the current study, motivational interviewing would be appropriate as it aligns with both the Transtheoretical Model of behaviour change (TTM: Prochaska & Diclemente, 1983), and the Self-Determination Theory (SDT: Ryan & Deci, 2000). SDT posits that motivation can be enhanced in an individual by meeting their basic psychological needs, namely competence, autonomy and relatedness. The processes of change in the TTM are related to increasing self-efficacy regarding the behaviours associated with change. Motivational interviewing would foster an environment where the MI practitioner could develop empathy with the nursing students (relatedness), resolve discrepancy and ambivalence (autonomy), and support self-efficacy (competence). Nevertheless, there are important limitations to consider in the current context. MI is an individualised approach that is used with individuals or small groups and delivered by a fully qualified practitioner. Design of a MI-based intervention would require multiple face-to-face sessions, using an individualised approach for nursing students regarding change to appropriate behaviours towards patients with AN.

The approach often takes place over more than one session to allow for a relationship to build between practitioner and client. Implementation of MI in the current context also assumes that the nursing students are not sufficiently motivated to engage in behaviours associated with initial management of patients with AN. The results from Study 1 and 2 suggest that nursing students would like further information regarding the disorder, rather than a lack of motivation to engage in appropriate behaviours. Therefore, it appears more appropriate to focus upon the increase of self-efficacy regarding initial management of patients with AN. The TTM can be used to develop self-efficacy by including principles outlined in the processes of change. Furthermore, by focussing on self-efficacy, the current study aligns with the overarching framework of the SDT by developing the perception of competence in nursing students. In future, MI may be considered as a complex intervention for identified sub-groups of HCPs who lack motivation to engage in appropriate behaviours towards patients with AN.

Self-efficacy as a key construct in predicting and changing behaviour

Self-efficacy is a key construct in many social-psychological explanations of behaviour. Self-efficacy beliefs represent a person's estimate of his or ability to perform a specified task successfully. According to Bandura (1977), individuals with strong beliefs in their ability to perform a behaviour successfully are more likely to initiate the behaviours and persist

through difficulties, while those with poor self-efficacy will avoid the task or opt out when the situations have become difficult. Bandura (1977) states that there are four factors that affect the level of self-efficacy in an individual: Experience, modelling, social/verbal persuasion and physiological factors. Experience relates to the notion that mastery and success at a behaviour raises self-efficacy, whilst failure lowers it. Modelling or ‘vicarious learning’ is where we observe others carrying out the behaviour. If the individual is succeeding, then our self-efficacy increases, and conversely if we see them failing then our self-efficacy lowers. Social/verbal persuasion is when we feel others approve or disapprove of our behaviour. When an individual feels as though they are receiving direct encouragement, particularly from someone similar to them, they are more likely to have increased self-efficacy and vice-versa. Finally, physiological factors relate to an individual’s perception of the physiological stress response they may experience when carrying out a behaviour. If the perception of the response is negative, then they are less likely to have confidence in their ability to perform the behaviour. Bandura (1977) suggests that whilst emotional and physiological conditions need to be optimal for self-efficacy to increase, appropriate skills and adequate incentives can also affect an individual’s confidence. This is particularly pertinent to the current study, as it suggests that nursing students’ self-efficacy in initial management of anorexia will be increased if they are provided with the appropriate skills and incentives to carry out the behaviour.

Social Cognitive Models

In order to consider which theoretical approach to employ for the current campaign, it was important to consider each of the models of social cognition, and to provide a detailed description of the chosen model (The Transtheoretical Model) for the current study. Multiple theoretical models have been developed to characterise the factors that underlie health behaviours, leading to calls for research to identify which models, or constructs within models, best characterise specific behaviours (Noar & Zimmerman, 2005). Several social-psychological models highlight ‘self-efficacy’ as a core construct that affects whether a person carries out a particular behaviour. Examples of such models include the Health Belief Model (HBM), Social Cognitive Theory (SCT), and the Theories of Reasoned and Planned Behaviour (TRA, TPB). Self-efficacy has also been highlighted as a key factor when attempting to predict how individuals will react to fear-inducing stimuli. Fear-based explanations of behaviour that are used to development health communication campaigns

include the Protection Motivation Theory (PMT) and the more recent Extended Parallel Process Model (EPPM).

The majority of evidence for the models comes from the health literature, but more recently these models have been applied to the organisational setting. Considering that the sample chosen for the current study are employees that belong to an organisation (NHS/University), it is also particularly relevant to consider evidence that also supports self-efficacy as a determinant of employee behaviour. Indeed, a recent study by Michie *et al.*, (2005) found that self-efficacy is a construct that is particularly relevant to changing the behaviour of healthcare professionals. A description of the models and their strengths and weaknesses were discussed in Study 2. Therefore, here the focus will be on how self-efficacy is integrated into each model, and to provide supporting evidence for its use in the current study.

Social Cognitive Theory (SCT: Bandura, 1977) proposes that an individual's knowledge acquisition, and therefore their subsequent behaviour, is related to observing others within the context of social interactions, experiences and outside media influences (i.e. Media portrayals can alter perceived social sanctions by the way in which the consequences of different styles of conduct are portrayed: Bandura, 2001). The two primary constructs in SCT are self-efficacy and outcome expectations. According to Bandura, self-efficacy is the pivotal construct within SCT and is suggested to have a direct effect on behaviour as well as indirect effects through all of the other model's components. If a person does not have confidence in their ability to perform, then they are less likely to engage in the behaviour. Outcome expectations are the second SCT construct and represent one's judgements of the likely consequences that will occur as a result of performing, or not performing, a particular behaviour.

Central to SCT is the assumption that people will act in ways that they believe will lead to positive and valued outcomes, while avoiding behaviours that they expect to result in unfavourable outcomes. Bandura proposed the following three major classes of outcome expectations. Physical (i.e. bodily sensations and material gains or losses); social (i.e. anticipated approval or disapproval of others); and self-evaluative (i.e. how one expects that they will feel about themselves after performing a behaviour). Efficacy expectations are increased through four mechanisms: (1) performance accomplishments (learning by doing), (2) vicarious experiences (observing others or role models), (3) verbal persuasion from expert

sources, and (4) minimising emotional arousal (reducing anxiety) (Bandura, 1997). According to SCT (Bandura, 1997, 2001), employee behaviour (in the current study, NSs initial management of AN) is affected by self-efficacy as a personal resource.

Self-efficacy has been demonstrated to be an important factor in HCP role performance, including communication between health professionals and patients (Hyman, Maibach, Flora & Fortman, 1992; Main, Lutz, Barrett, Matthew & Miller, 1993; Bandura, 1992), assessment of depression in general practice (Main *et al.*, 1993) and in counselling patients about lifestyle related factors such as high cholesterol (Hyman *et al.*, 1992). It has also been measured to assess medical students' willingness to participate in psychiatric training (Margolies, Wachtel & Schmelkin, 1986).

The Health Belief Model (HBM) is an expectancy-value theory drawing on threat perception and behavioural evaluation. It was originally developed by Rosenstock (1966) to predict health-promoting behaviour and has since been used to inform the development of interventions to improve health behaviours (Jones, Smith and Llewellyn, 2013). The HBM suggests that *perceived severity* (beliefs about how serious the condition is and the related consequences of the condition), *perceived susceptibility* (the extent to which the individual feels at risk of being exposed/suffering from the condition), and *cues to action* all contribute to the individual's perception of threat. Cues to action can be internal (e.g. bodily state or symptom) or external (reminder about doctor's appointment). The individual's perception of a threat to a condition plus the perceived benefits (the effectiveness and availability of taking a particular course of action) and the perceived barriers (the negative aspects related to following the course of action) all add to the likelihood of the action being followed. Rosenstock, Strecher, and Becker (1988) added the concept of *self-efficacy* to the HBM in order to increase its explanatory power and make it more useful tool for the practitioner. The integration of self-efficacy into the HBM has since improved the predictive efficacy of the model (e.g. Norman & Brain, 2005; Rosenstock, et al, 1988; Buglar, White & Robinson, 2010; Wdowik, Kendall, Harris & Auld, 2001; Sullivan & Waugh; 2007; Webb & Sheeran, 2006). The HBM has been adapted and applied to the workplace, and self-efficacy has been found to be a significant predictor of employee behaviour (e.g. Ng, Kankanhalli, & Xu, 2009).

The Theory of Reasoned Action (TRA: Fishbein & Ajzen, 1975) and the Theory of Planned Behaviour (TPB: Ajzen, 1991) focus on theoretical constructs concerned with individual

motivational factors as determinants of the likelihood of performing a specific behaviour. TRA and TPB both assume the best predictor of a behaviour is behavioural intention, which in turn is determined by attitude toward the behaviour and social normative perceptions regarding it. TPB is an extension of the TRA and includes an additional construct: perceived control over performance of the behaviour. Personal agency, described by Bandura (2006) as bringing one's influence to bear on one's own functioning and environmental events, was proposed as a major factor influencing behavioural intention. Personal agency consists of two constructs: self-efficacy and perceived control. Perceived control is one's perceived amount of control over behavioural performance, determined by one's perception of the degree to which various environmental factors make it easy versus difficult to carry out the behaviour. In these models, self-efficacy is described as one's degree of confidence in the ability to perform the behaviour in the face of various obstacles or challenges. Many published intervention study reports show that changing TRA or TPB constructs leads to subsequent change in behaviours (e.g. Albarracin *et al.*, 2003, 2005; Jemmott, Jemmott, and Fong, 1992; Kamb *et al.*, 1998; Rhodes, Stein, Fishbein, Goldstein & Rotheram-Borus, 2007; Kalichman, 2007). As well as receiving support from studies exploring the TRA and TPB constructs in predicting health behaviours, findings have been used to develop many effective behaviour change interventions (Fishbein, 1990; Fisher, Fisher, and Rye, 1995; Gastil, 2000; Hardeman *et al.*, 2005; Jemmott, *et al.*, 1992; Jemmott and Jemmott, 2000). Example of recent studies that have found that self-efficacy is a significant predictor of behaviour (as part of the TRA/TPB) include: oral hygiene (Jonsson, Baker, Lindberg, Oscarson & Ohrn, 2012), dietary behaviour of women with Type 2 diabetes (Didarloo, Sholaeizadeh, Gharaaghaji, Niknami, & Khorami, 2014), and binge-drinking among university students (Ross & Jackson, 2013). The TRA and TPB have also been applied to the workplace in order to explain employee behaviour, and self-efficacy has been found to be a significant predictor of employee behaviour in recent studies (e.g. Tang, Chen, & Wu, 2010; Herath & Rao, 2009; Bulgurcu, Cavusoglu & Benbasat, 2010).

Protection motivation theory (PMT; Rogers, 1975, 1983) was partially based on the work of Lazarus (1966) and Leventhal (1970) and describes adaptive and maladaptive coping with a threat as a result of two appraisal processes. A process of threat appraisal and a process of coping appraisal, in which behavioural options to diminish the threat are evaluated (Boer & Seydel, 1996). The appraisal of the threat and the appraisal of the coping responses results in the intention to perform adaptive responses (protection motivation) or may lead to

maladaptive responses which place the individual at risk. Self-efficacy was added to a more recent version of the PMT (Rogers, 1983) and is described as one of four factors that influence a person's intention to protect oneself. The other factors are the perceived severity of a threatened event; the perceived probability of the occurrence or vulnerability; and the efficacy of the recommended preventive behaviour (the perceived response efficacy). According to the PMT, high levels of all four factors produce the highest protection motivation, and this will then result in the greatest amount of adaptive change in attitudes and behaviour. Among the 6 factors (vulnerability, severity, rewards, response efficacy, self-efficacy, and response costs), self-efficacy is the most correlated with protection motivation, according to meta-analysis studies (Floyd, Prentice-Dunn, & Rogers, 2000; Milne, Sheeran, & Orbell, 2000). Studies that have provided evidence for the use of the PMT in organisational settings show that self-efficacy has an impact upon employees' intention to perform a particular behaviour (e.g. Workman, Bommer & Straub, 2008; Ifinedo, 2012).

The Extended Parallel Process Model (EPPM) is partially based upon the PMT. It is a fear appeal theory that can be used to understand how people adapt to health messages or information deemed fearful or threatening (Witte & Allen, 2000). Self-efficacy for managing risks under EPPM denotes confidence in one's ability to follow behaviour recommendations (Witte, 1992). EPPM theory predicts that fear invoked by health messages received from various sources will cause a person to demonstrate either an adaptive response or a maladaptive response to the message. According to Witte, the basis of EPPM is that fear impedes healthy behaviour change, unless one knows how to protect oneself (Witte, Cameron, McKeon & Berkowitz, 1996). In the EPPM, perception of risk can be theorised in a similar way to other widely used behaviour theories (Theory of Planned Behaviour and Social Cognitive Theory). What EPPM adds is a better way of capturing the cognitive and emotional responses to perceived threats and a type of belief that is not explicitly addressed in the other models (i.e., response efficacy). Response efficacy describes the perception of whether a response to a threat is likely to achieve the desired protective result. Examples of research regarding the integration of self-efficacy into the EPPM has shown that self-efficacy is a significant predictor of intention to carry out health behaviours (e.g. Hajian, Shariati, Mirzaii Najmabadi, Yunesion, Ajami, 2015), and self-efficacy has been integrated into preventive educational programmes based upon the EPPM (e.g. Gharlipour *et al.*, 2015). The EPPM has also been applied to organisational settings, and self-efficacy has been shown to

be a moderator in predicting and changing employee behavior (e.g. Duong & Bradshaw, 2013; Barnett *et al.*, 2009).

Self-efficacy as fundamental to behaviour

Integration of self-efficacy as a central factor of each of the aforementioned theories and models suggest that one's confidence is vital to whether one does perform the desired behaviour. It is an assumption of social cognition theories that intention will lead to behaviour, yet a gap between intention and actual behaviour has been noted (Armitage & Conner, 2001; Sutton, 1998). Although the occurrence of the desired behaviour will not be studied at this time, the models suggests that NSs are more likely to carry out behaviours associated with correct management of AN if their confidence in doing so is increased. Consequently, in the current study, there is a wealth of evidence supporting development of an intervention to increase NSs' confidence in carrying out behaviours specific to the appropriate initial management of patients with AN.

Use of the TTM to Increase Self-Efficacy

Self-efficacy is a core construct or factor in many psychological theories or models that attempt to explain why a behaviour may occur and how it can be changed. As the aim of the current study was to increase confidence in NS's abilities to manage initial care of a patient with AN, it is necessary to look toward a model that can be used as a framework to increase self-efficacy. The TTM is a model that describes the processes of change that may be integrated into an intervention in order to increase confidence in specific behaviours. The Transtheoretical Model is an integrative, biopsychosocial model that includes constructs from other social cognition theories and models, and it attempts to conceptualise the process of intentional behaviour change. The model consists of stages of changes, processes of change, decisional balance, and importantly for the current study, self-efficacy.

The TTM recognises change as a process that unfolds over time, involving progression through a series of stages. While professions through the stages of change can occur in a linear fashion, a nonlinear progression is common. Often, individuals recycle through the stages or regress to earlier stages from later ones. The stages include: *Precontemplation*, where the person does not intend to take action in the foreseeable future; *Contemplation*, where the person intends to change within the next six months; *Preparation*, where the person intends to take action in the immediate future; *Action*, where the person is, or has

made in the last six months, overt modifications to their lifestyles; and *Maintenance*, where people have already made specific overt modifications to their lifestyles and are working to prevent relapse. Finally, *Termination* is the stage where an individual has complete self-efficacy that they can perform the desired behaviour.

Decisional balance was conceptualised by Janis and Mann (1977) as a decisional balance sheet of comparative potential gains and losses. Two components of decisional balance, the pros and the cons, have become critical constructs in the TTM. As individuals progress through the stages of change, decisional balance shifts in critical ways. When an individual is in the Precontemplation stage, the pros in favour of behaviour change are outweighed by the relative cons for change and in favour of maintaining the existing behaviour. In the contemplation stage, the pros and cons tend to carry equal weight, leaving the individual ambivalent to change. If the decisional balance is tipped over, such that the pros in favour of changing outweigh the cons for maintaining the unhealthy behaviour, many individuals move to the preparation or even action stage. As individuals enter maintenance, the pros in favour of maintaining the behaviour change should outweigh the cons of maintaining the change in order to decrease the risk of relapse.

The TTM integrates elements of Bandura's self-efficacy theory (Bandura, 1977, 1982). The model suggests that for individuals in the precontemplation and contemplation stages, temptation to engage with the problem behaviour is far greater than self-efficacy in the positive behaviour. As individuals move from preparation to action, the disparity between feelings of self-efficacy and temptation closes, and behaviour change is attained. Relapse of negative behaviours occur in situations where feelings of temptation are greater than an individual's sense of self-efficacy to maintain the desired behaviour change.

While the stages of change are useful in explaining when changes in cognitive, emotion and behaviour take place, *processes of change* help to explain how those changes occur. According to Prochaska, Prochaska and Levesque (2001), ten processes need to be implemented to successfully progress through the stages of change and attain the desired behaviour change. These processes can then be divided into two groups: cognitive and affective experiential processes, and behavioural processes:

Cognitive and Experiential Processes

Consciousness raising: becoming more aware of the problem and potential solutions;

Dramatic relief: Emotional arousal, such as fear about failures to change and inspiration for successful change. Interventions can provide fear arousing feedback on health risks of success stories to move people emotionally;

Environmental reevaluation: combines both affective and cognitive assessments of how the presence or absence of a personal habit affects one's social environment. It can also include the awareness that one can service as a positive or negative role model for others;

Self-reevaluation: creating a new self-image. This combines both cognitive and affective assessment of one's self-image with and without the behaviour. Values clarification, identifying healthy role models, and imagery are techniques which interventions can use to move people toward self-evaluation. For example, during interaction with a TTM intervention, the program might ask "Imagine you were free from smoking. How would you feel about yourself?";

Social liberation: Requires an increase in social opportunities or alternatives for people who may be deprived or oppressed. Empowerment procedures, advocacy and appropriate policies can produce increased opportunities for specific populations;

Behavioural Processes

Self-liberation: is the belief that one can change, and a commitment to act on that belief. A TTM program might say "telling others about your commitment to take action can strengthen your willpower. Who are you going to tell?";

Counter conditioning: requires learning healthy behaviours as substitutes for problem behaviours. For example, walking as a healthy alternative to snacking as a way of coping with stress;

Helping relationships: combine trust, caring, openness and acceptance with support for health behaviour change. Building a rapport and therapeutic alliance, supportive calls, and buddy systems can be sources of social support;

Reinforcement management: is an emphasis on rewards over punishment. This can be provided by others, but the individual can also self-reward throughout, particularly at milestones; and

Stimulus control: removes cues for unhealthy habits and prompts healthier alternatives. For example, removing high-fat foods from the house.

Certain processes of change work best at each stage to reduce resistance, facilitate progress and prevent relapse. Different strategies are most effective at different stages of change (Prochaska, Prochaska & Levesque, 2001: see Table 26). For example, counter conditioning and stimulus control can help people in the Action and Maintenance stages. But those processes are not helpful for someone who is not intending to take action, and so consciousness raising and dramatic relief would be more appropriate.

Interventions based on the TTM result in increased participation in the change process because they appeal to the wider population rather than the minority ready to take action. A recent meta-analysis by Noar, Benac & Harris (2007) of 57 studies, demonstrated greater effects of interventions that are tailored on each of the Transtheoretical Model constructs. The meta-analysis shows that interventions that utilise the central concepts from the TTM are more successful than those that do not. Specific to the current study are the findings that interventions which are tailored upon processes of change and measured self-efficacy as outcome, were more effective than those which were not.

TABLE 26

Stages of *individual* change in which particular processes of change are emphasised (Prochaska *et al.* 2001)

Precontemplation	Contemplation	Preparation	Action	Maintenance
<p>Consciousness Raising</p> <p>Dramatic Relief</p> <p>Environmental Reevaluation</p> <p>Social Liberation</p>	<p>Self-Reevaluation</p>	<p>Self-Liberation</p> <p>Helping relationships</p> <p>Counter-conditioning</p>	<p>Reinforcement management</p> <p>Stimulus control</p>	
		<p>Self-efficacy increases</p>		
		<p>Pros of change increase, cons of change decrease</p>		

The TTM for organisational change

Recently, the TTM for individual health behaviour change has been applied to organisations, including academic institutions that are going through the change process (Prochaska, 2000; Prochaska *et al.*, 2001). This is particularly useful for the current study. Although appropriate management of AN may result in positive outcomes for the patients that the NSs care for, ultimately the present intervention was designed to change the behaviour of NSs. NSs belong to two organisations: the university at which they are studying, and the National Health Service where their work experience take place. Consequently, evidence regarding the use of the TTM to guide organisational change lends further justification its use as a framework during development and evaluation of the current intervention.

Similar to individual health behaviour change research, the results from the organisational change studies suggest that the processes of change are particularly crucial in changing employee behaviour. Change leaders should employ the processes of change to facilitate change in a particular direction within an organisation. The processes may be targeted on individuals, groups or units at different points of their readiness to change. Importantly, Prochaska *et al.*, (2001) provide both an individual and organisational approach to change. Similar to the individual version of the TTM, several processes are particularly associated with specific stages of organisational change (Prochaska *et al.*, 2001: see Table 27). What differs in the organisational TTM approach are some of the *types* of processes of change, and the *relationships to each stage* of change (Prochaska, *et al.*, 2001). Consciousness raising, dramatic relief, self-reevaluation, helping relationships, counter conditioning, stimulus control and reinforcement management are present in both the individual and organisational TTM.

TABLE 27

Stages of *organisational* change in which particular processes of change are emphasised (Prochaska *et al.* 2001)

Precontemplation	Contemplation	Preparation	Action	Maintenance
Dramatic relief				
Self-reevaluation				
Thinking about commitment				
		Teams		
			Consciousness raising	
			Commitment	
			Counter-conditioning	
				Stimulus control
				Helping relationship
				Reinforcement management
		Self-efficacy increases		
		Pros of change increase, cons of change decrease		

The individual TTM includes environmental reevaluation, social liberation, and self-liberation, though in their article in 2001, Prochaska *et al.* removed these processes and replaced them with: Teams (e.g. working with other employees towards the change); Thinking about commitment (consideration of the contribution to change within the organisation); and Commitment (committing to the change initiative). A further difference between the two models is the stage at which the processes of change are used. For example, whereas consciousness raising is recommended for individuals at the Precontemplation stage, employees in organisations benefit from this process at the Action stage. The current study does not aim to explore the stage of change of NSs who participate. Nevertheless, it is important to recognise the differences in processes of change between the individual and organisational approach in order to design the current intervention appropriately.

Persuading the audience to receive the message

Whilst the TTM can be used as a framework for developing the intervention, it is also useful to visit a theoretical explanation of persuasion when thinking about how to ask nursing students to adopt or change a particular behaviour. Cialdini (1993) suggests that there are six important factors that affect whether a person will say 'yes' to the requests of others: Reciprocity, scarcity, authority, Commitment/consistency, liking and social proof. *Reciprocity* refers to the idea that people feel obliged to give back to others and feel a social obligation to those they owe. *Authority* suggests that people follow the lead of credible, knowledgeable experts. People feel a sense of duty or obligation to people in positions of authority. *Commitment (and consistency)* notes the deep desire that people have to be consistent. When an individual commits to something, they are more inclined to go through with it later. *Social proof* relies on people's sense of 'safety in numbers'. People are more susceptible to persuasion when they feel uncertain, and more likely to be influenced if the people they see carrying out a behaviour seem to be similar to them. *Liking* suggests that people are more likely to be influenced by people they like. Likeability comes in many forms, and again, people are more likely to be persuaded by people that are similar to them. Finally, *Scarcity* indicates that people are more likely to be influenced to want something if it is more difficult to get hold of, or the resources are scarce.

There are a number of ways that the principles of persuasion may be integrated into an intervention, and use of the principles contribute to some of the processes of change from the TTM. More specifically, the person or people who deliver the message in the intervention should be carefully considered. Cialdini (1993) suggests that the receiver of the intervention message is likely to be influenced by people who they like (liking), by credible, knowledgeable experts (authority), and by observing the consensus of others (social proof). For example, a university lecturer who is an expert regarding AN may feature as the person of authority, a nurse could be the person who is similar to the NSs, and the consensus of different characters within the intervention could provide social proof.

Presentation of an expert and/or someone similar to them will also contribute to social proof if the audience is unsure of appropriate behaviours: if the nurse/lecturer in the intervention is stating that the desired behaviour should be carried out and other HCPs will be engaging in this behaviour, then the receiver is more likely to be influenced by the message (Cialdini, 1993). As such, individuals who represent the principles of persuasion should feature throughout the intervention, and their inclusion relates to the TTM processes of change. More specifically, characters that represent authority, liking and social proof will contribute to dramatic relief (the receiver of the message may feel anxious if they do not follow the advice), self-reevaluation (the change is important to one's identity of belonging to the nursing professions) and helping relationships (social support from others to facilitate the change).

Summary of the theoretical underpinning for the current intervention

NSs awareness of the appropriate behaviours associated with initial management of AN would be beneficial given that it could contribute to early intervention, diagnosis, treatment outcome and therapeutic alliance in people with the disorder. Particularly the NSs awareness of the characteristics of the disorder, appropriate screening techniques and referral to specialist services. Furthermore, lack of awareness in NSs regarding these behaviours may have a negative outcome for patients who may have the disorder. Therefore, there is sufficient justification to develop an intervention regarding NSs' initial management of AN. In order to influence NSs initial management of AN in a positive way, it was important to consider explanations that implicate common constructs of behaviour.

Self-efficacy has been included in many social cognition models, including the SCT, HBM, TRA/TPB, PMT and EPPM, and a large body of evidence from both health and organisational literature suggests that self-efficacy is a core construct in explaining, predicting and changing behaviour. Self-efficacy is a person's belief of their ability to perform a particular behaviour, and those individuals with higher self-efficacy are more likely to carry out the behaviour in future. The TTM is a comprehensive theory of behaviour change that includes self-efficacy as a core construct. The TTM provides a useful framework for developing interventions, in particular, the ten processes of change to increase self-efficacy. The aim of the current study was to develop and evaluate an intervention using the TTM framework in order to increase NSs self-efficacy in initial management of AN.

Using an intervention to influence behaviour

Mass media campaigns and interventions have long been a tool for promoting public health (Noar, 2006). Rogers and Storey (1987) suggest that "a campaign intends to generate specific outcomes of effects (2) in a relatively large number of individuals, (3) usually within a specified period of time, and (4) through an organised set of communication activities" (p.821). In the last two decades, as more has been learned about campaigns, scholars have a new appreciation for how campaigns work, what makes them effective, and what their limits may be (Noar, 2006). The principles of campaign design have been formalised, and as campaign designers have increasingly attended to such principles of effective campaign design, increased health mass media successes have been witnessed (Noar, 2006). Therefore, there has been recognition of the contribution to knowledge regarding identification of effective design strategies for media campaigns.

Evidence for campaign success has been found on a broader scale through the use of meta-analyses. For example, Snyder and Hamilton (2002) conducted the first meta-analysis of the U.S. health mass media campaign literature. They meta-analysed a systematic sample of 48 health campaigns that were conducted in the United States and which appear in the published literature. They found that the average campaign changed the behaviour of about 8% of the population in the expected, positive direction. Whilst this number appears relatively low, it demonstrates that mass media campaigns are able to change behaviour in populations even whilst campaign development strategies are being formalised.

Message design and targeting is crucial when developing campaigns that are persuasive and will have maximal impact. A number of unique and creative message design strategies have been utilised, including use of tobacco marketing practices and cover-ups (Farrelly, Davis, Havilan, Messeri, & Heaton, 2005), sensation-seeking targeting approach towards high sensation-seekers (Palmgreen & Donohew, 2003), theory-based message design strategy focused on short-term consequences of drug use (Kelder, Maibach, Worden, Biglan, & Levitt 2000), entertainment education including radio soap operas (Vaughan, Rogers, Singhal, & Swalehe, 2000) and health related storylines in popular television shows (Glik *et al.*, 1998). Noar (2006) suggests that research can enable campaign planners to understand their target audience in terms of the problem behaviour, their message preferences, and the most appropriate channels through which they can be reached (Atkin & Freimuth, 2001; Valente, 2001).

Channel selection for the intervention: The benefit of audio-visual media versus print media

Channel selection is important as no matter how persuasive one's campaign message is, it cannot be effective without being placed in channels with great potential to reach the target audience (Salmon, & Atkin, 2003). Witte, Mayer & Martell (2001) describe three means of disseminating messages that have been used for mass communication, including print and audio-visual.

Print media has been utilised in mass media campaigns for health behaviours (Bauman, Bellew, Owen, & Vita, 2001; Hill, White, Marks, & Borland, 2002; Williams, Wells, & Reinfurt., 2002; Wray *et al.*, 2004). Print formats, including pamphlets, public services announcements in newspaper and magazines, books, posters, and billboards, have several advantages relative to other forms of communication. Print materials are relatively inexpensive to produce and distribute, and can be disseminated in a short period of time. Some print media, such as brochures, provide an opportunity to disseminate complex messages because individuals from the target audience can take time to read the information. They can reread the information if they desire, and they can be passed on to other individuals. Print media can also be distributed over a longer period of time, as long as the information included in the message is still valid.

Witte *et al.* (2001) note that most print media campaigns can only feature a limited amount of information. For example, on a poster or billboard, the message needs to be read and understood within a short time period. Considering the desire of NSs in Study 2 to receive extra training and information on a variety of different areas regarding AN, the only option from print media that would be suitable was a leaflet or booklet about AN. A further problem with print media is that it is limited in its ability to transmit emotional tone and quality, which is important to a campaign that follows a framework such as the TTM. Indeed, this was a difficulty that was faced when producing the posters in Study 2. The TTM proposes that processes of change, such as dramatic relief, should create anxiety in not changing, or not adopting the new behaviour. Counter-conditioning would then provide solutions in terms of the new behaviour and this would contribute to reducing anxiety. This may be difficult to achieve in a static image or text using print media. Consciousness raising such as use of patient narratives, would also benefit from tone of voice and facial impressions that are not static.

Audio-visual media has been a popular choice for campaign designers (Agha, 2003; Bauman *et al.*, 2001; Farrelly, Heaton, Davis, Messeri, Hersey & Havilland, 2002; Hill *et al.*, 2002; Kincaid *et al.*, 2002), as the format can be very effective when they are produced with scripts, graphics and or/music that is pertinent, relevant and carries the proper emotive tone for the target audience. Several different formats may be used to disseminate the message, including films, TV programmes, televised public service announcements, computer games and the internet. The audio-visual format allows the intervention developer to include elements that are fundamental to real life portrayal. For example, inclusion of narratives from Study 1 in an audio-visual format would be preferable compared to print media, as intonation and tone of voice could be used to influence the way the message was received and convey the correct tone of the message. Audio-visual channels can also encourage the individual to adopt the desired behaviour by demonstrating the way the individual should act, or by providing audio-visual representations of role models that advise the correct course of action. Similar to the advantage of print media, films can be accessed multiple times by an individual over an extended period of time, and therefore can be used as a point of reference whenever the information is required. Derzon and Lipsey (2002) conducted a meta-analysis of mass media communication studies, and found that campaigns utilising radio, video and television were found to have greater effects than those utilising print media.

Producing an audio-visual intervention is time-consuming and can be costly. Indeed, part of the justification for using print media in Study 2 came from the cost-effective nature of print media. Unfortunately, the campaign message was reported by some HCPs as unclear, and NSs particularly highlighted the need for further information and training regarding AN. Given the use of the TTM ten processes of change, and the importance of skills acquisition to increase self-efficacy, audio-visual media was considered advantageous over print media. Witte *et al.* (2001) suggest that the costs of producing a film intervention can be significantly reduced if a local production company is recruited or media departments from universities that seek to establish collaborative relationships with other faculties. Although the initial cost to produce the intervention would be high, re-production of the intervention could be minimal or even free. For example, the use of YouTube to disseminate films has no cost implications and can be disseminated quickly and easily to entire populations. Therefore, for the current study, audio-visual media has several important advantages.

It is also vital to note at this point that consideration should also be given to the media channels that are most appropriate for the audience (NSs) that selected for the current study. NSs belong to two organisations, the NHS and the university at which they study and therefore their education is delivered in two ways. Firstly, they attend university where they have lectures, workshops, seminars and tutorials. Secondly they attend an NHS placement where they gain practical nursing experience. Audio-visual media is often used within, and as an adjunct, to lecture, seminars and workshops at university. Nursing students' self-efficacy is not only dependent on using an appropriate framework for intervention design. As Bandura (1977) suggests, it is important that a person acquires the appropriate skills to perform a behaviour i.e. if the intervention is not educational, then new skills may not form and self-efficacy may not increase. This relates to the TTM framework for the current intervention, where counter-conditioning (learning new behaviours) and consciousness-raising (learning potential solutions to the problem) both depend upon new knowledge being presented to the individual to increase confidence in the new behaviour. Therefore, evidence for use of audio-visual films/videos as the current intervention channel not only comes from the health campaign design literature, but can also be found in literature exploring the benefits of using films within a learning environment.

Numerous studies from different disciplines have produced significant results favouring videos over other types of media. These include teacher education (Borko, Jacobs, Eiteljorg,

& Pittman, 2008; Brophy, 2004; LeFevre, 2003; Moreno & Valdez, 2007; Pryor & Bitter, 2008; Richardson & Kile, 1999; Seago, 2003; Sherin, 2003; Wang & Hartley, 2003), medical education, such as nursing (e.g. Higgins & Lantz, 1997) and psychiatry (Lewis, Jones & Haynes, 2000; Hyler & Bujold, 1994; Hyler, 1988; Gabbard & Gabbard, 1985; Fritz & Poe, 1979). Film has also been used as a channel for interventions that have improved general attitudes to serious mental illness and social distance (Kerby, Calton, Dimanbro, Flood & Glazebrook, 2008) and have been used as part of interventions to increase self-efficacy of breast self-examination in female university students (Moodi, Mood, Sharifirad & Sharifzadeh, 2011). Furthermore, film has been found to be a successful message channel for health interventions (e.g. Eakin, Lichenstein, Severson, Stevens, Vogt, & Hollis, 1998), and interventions in the workplace (Karsenti and Collins, 2011). For example, film was used successfully to enhance NSs' self-efficacy to communicate effectively with potentially difficult and delicate patient groups (McConville & Lane, 2006). Therefore, a corpus of studies has accumulated that investigate the effects of audio-visual or 'multi' media for mass media intervention design, and outcome evaluation in previous studies has been assessed in a variety of ways, including randomised controlled trials, post-only surveys, pre-test-post-test design. Due to the cost and time required for randomised controlled trials, pre-test-post-test designs have been noted as being cost effective, useful way of producing meaningful data (Noar, 2006).

Multimedia typically refers to the presentation of material in two forms: auditory/verbal and visual/pictorial (Mayer, 2001). There is evidence to support the idea that visual images may present an advantage over the spoken word with regard to learning reinforcement and knowledge retention (Wileman, 1993). The use of a video clip engages both the left and right hemisphere of the viewer's brain (Berk, 2009): The left side processes the dialogue, plot, rhythm, and lyrics; whilst the right side processes the visual images, relationships, sound effects, melodies, and harmonic relationships (Hebert & Peretz, 1997; Schlaug, Jancke, Haug, Staiger & Steinmetz, 1995). This is important as it highlights the advantage that video/film materials hold over other channels of message delivery such as print media.

Berk (2009) states that there are several values of using video clips in a learning environment. In particular video clips: grab attention, increase memory of content, increase understanding, foster deeper learning, inspire and motivate viewers, set an appropriate mood or tone, and decrease anxiety and tension on scary topics. Video can tell a story (narrative), provide access

to real events (original material), give background information (documentaries, interviews) and importantly, can convey emotion. Recently, the media carrying video recordings have evolved and the possibilities for using video have expanded dramatically. In the past, classroom use of films, television and videotape for the use of 'moving images' was restricted mainly to linear teacher-directed use, CD-ROMs and DVDs have opened the door to more interactive, on demand student-centred use of video. Today, video is 'streamed' via a network of computers (intranet and internet) and can be integrated with other sources. Today's generation have been branded 'digital natives' as they are 'native speakers' of the language of computers, video games and the internet. (Prensky, 2001, 2006). Therefore, a peripheral benefit of video use may be that students of the so-called Generation X or MTV generation are more familiar with this medium (Brown & Fritz, 2001).

The medium of film has been used in medicine and medical education since the late 1890s (Essex-Lopresti, 1997; Duffin, 2010). Many of the films used in the first few decades of the 20th Century focused on surgical procedures, health education and disease prevention. There are also reports of films being used early on in psychology and the allied sciences (Longland, MacKeith & Stanford, 1944). Recently, the use of film has been used for a variety of different purposes in medical education. For example, to enhance exposure to diagnostic assessment and psychopathology (Fox, 2003), and teach clinical skills, such as how (or how not to) behave at the bedside (Bonah & Laukotter, 2009). In the medical education literature, several pedagogical advantages of the use of video cases over texts have been described (De Leng, Dolmans, van de Wiel, Muijtjens & van de Vleuten, 2007). Usually written texts have often undergone some sort of preparation and use verbal labels that frequently reveal the output of an expert's pattern recognition process. With videos, it is not the expert but the students themselves who translate the images and sounds relating to the patient into a medically meaningful story (Albanese, 2005). This is advantageous to students because it enables them to develop their pattern recognition skills instead of learning to diagnose on the basis of verbal labels, a skill that will be of little use to them in practice (Bransford, Sherwood & Hasselbring, 1990). The structure and language of verbal cases tend to grant primacy to professionals' observations and interpretation of diagnostic tests, while playing down the patient's interpretation of reality (Kenny & Beagan, 2004). Video can also convey emotion, body language and other non-verbal cues directly and vividly. Because most text-based cases lack this possibility, their use may induce emotional detachment in students, thereby obstructing the development of a caring and empathic attitude. Video clips can be

used to communicate with the viewer at a deeper level of understanding by touching their emotions (Berk, 2009). This concept is supported by Salomon's theories on symbol systems (1994). He claims that visuals convey more dimensions of information (high repleteness) than passages of text and we assume that it is due to this high repleteness that video is a better medium than text for conveying multifaceted aspects of human behaviour which in turn makes it more effective in touching students' emotions. Salomon also noted that visuals in video fully resemble their referents in real life (high resemblance) while being non-notational (open to ambiguity) and transient.

Kozma (1991), elaborating on Salomon's work suggested that the high repleteness and resemblance of video might help students with little previous knowledge to connect mental representations to the real world in a way that they find hard to accomplish with text. Baggett (1989) inferred that the repleteness of video could present more pegs which could be used to associate new information already in long-term memory. This might explain why students say that video cases enhance the retention of case-material in long-term memory. This is particularly relevant to a population whereby awareness and knowledge of detection, initial screening methods and referral procedures regarding anorexia is low or lacking. Video can be used to create a more holistic picture of a patient problem. Medical students have explained the benefits of viewing videos as part of their professional development (De Leng, et al., 2007). The students stated that videos helped them to create and memorise realistic mental pictures of disorders. In addition, they stated that video cases give an integrated picture of the patient as a person appealing to multiple sense of the students and motivated them to work seriously on elaborating cases.

Media comparison studies worth mentioning are those by Kamin, O'Sullivan, Deterding & Younger (2003) and Balsley, de Grave, Muijtjens & Scherpbier (2005) who compared the use of video cases with the use of text-based cases in medical problem-based learning (PBL). These studies demonstrated that film actually enhanced cognitive activities in PBL groups. In a study by Welsh (2003) more than 90% of the 89 respondents believed that the films clips helped them to recognise intoxication and withdrawal syndromes and appreciate their potential severity. All students believed that the movie clips would help them remember the syndromes, with greater than 90% reporting that it would help very much. In light of the current study, it therefore appears advantageous to use films in order to increase skills and therefore confidence in NSs.

In summary, both print and audiovisual media channels that were considered for the current study, and evidence for their efficacy in intervention development and evaluation exists for both. Consideration was given to the purpose of the current campaign, target audience to which the message was aimed, and the resources that were available. Firstly, the purpose of the campaign was to raise NSs self-efficacy in initial management of AN. Results from Study 2 suggested that NSs required more information regarding AN, particularly how to manage a patient who may present with the disorder. Effective initial management of AN would include NSs noticing that a patient may have an eating disorder, approach them, ask screening questions from the SCOFF questionnaire and refer if necessary. This level of information could only be conveyed through a substantial print media guide such as a leaflet or booklet, but the intervention would still lack the emotional component would contribute to the TTM processes of change. Audio-visual media holds benefits for the target audience (NSs) because they are already familiar with the use of film in problem-based learning exercises or case studies. Film has been cited as beneficial in the learning environment as it contributes to retention, understanding and development of empathy towards patients. The final consideration for the current study was the cost implications of developing a film for the intervention. The media department at the university were invited to collaborate, and agreed to film and produce the audio-visual material for the current intervention.

Summary of the Literature for Study 3

HCP knowledge of initial management of AN is beneficial to patient experience of treatment, development of therapeutic alliance and patient treatment outcome. Unfortunately, patients and HCPs report that their level of knowledge regarding detection, initial screening and referral of patients who may have AN remains low. NSs' perceptions of their level of self-efficacy could either augment or interfere with their ability to manage AN. The current study therefore sought to increase NSs' self-efficacy regarding initial management of AN using a psychological intervention. There are several models of behaviour and behaviour change. The applicability of the TTM to intervention design, the integration of self-efficacy as a central concept, and the application of the model to both health and organisations provides strong justification of its use in the current study. The TTM processes of change and their relationships to self-efficacy provide a useful framework for intervention development. Films have been identified as a successful media channel to change behaviour, increase self-efficacy and enhance the learning environment. Films are also used in the medical education and so this type of media as an education tool will be familiar to NSs.

Aims of Study 3

The aim of the current study was to develop an intervention to increase NSs' confidence regarding initial management of AN by integrating the TTM processes of change. It was predicted that use of a TTM intervention (film) would increase NSs' self-efficacy regarding initial management of patients with AN.

Method

Ethical Considerations

The study was designed to meet the current British Psychological Society ethical guidelines. Participants were provided with an information sheet five days prior to data collection to allow sufficient time for them to read the information and make an informed choice regarding participation. The information sheet contained detailed information regarding why they were chosen, what they could expect to happen to them during data collection, and their right to withdraw. The hypothesis of the study was not fully disclosed to participants. Awareness of the purpose of the intervention to increase their self-confidence in initial management of anorexia nervosa may have affected the way that they completed the outcome measure pre and post-test. Participants were made aware that no identifiable data would be collected and all data was anonymised. The research team had access to the data which was stored on a password-protected computer in electronic format, and paper copies of the original completed questionnaires kept in a locked cabinet until they were destroyed.

Participants were made aware that by completing the questionnaire, they implied consent. They were also informed that they had up until the point that their last questionnaire was handed in to withdraw from the study, as it would be impossible to identify individual questionnaire as they were fully anonymised. Contact details for the research team, the ethics committee representative should the participants require further information or wish to make a complaint. Due to the sensitive nature of the subject matter within the intervention, details organisations relating to eating disorders were provided should participants be concerned or require further information. On the day of data collection, participants were made aware that they had the right to refuse to participate in data collection but could stay to watch the film, or they may leave should they so wish. Following data collection, participants were provided with a debrief sheet outlining the full purpose of the study. Approval was granted by the

University of South Wales Faculty of Life Sciences and Education ethics committee, and the study was covered by university indemnity arrangements.

Design

The study used a repeated measures, quasi-experimental, pre post-test design. The independent variable was pre-exposure and post-exposure to a transtheoretical model (TTM) based intervention. The dependent variable was the nursing student (NS) self-efficacy rating regarding initial management (in particular the detection, initial screening and referral) of AN.

Participants

Participants were second and final year NSs from one UK University (n=88) and were recruited during a lecture, using opportunistic sampling. Participants were notified of the study five days before the lecture using a notice (with the study information sheet attached to the notice) on their virtual learning space.

Materials

Materials included a TTM educational intervention film (Appendix 21: web address, link provided), the Nursing Student Self-Efficacy of Initial Management of Anorexia Nervosa Instrument (NSSEIMANI) (Appendix 22), a study information sheet (Appendix 23), and debrief sheet (Appendix 24). Description of the development of the TTM educational film intervention and NSSEIMANI are outlined below:

Development and Evaluation of the Intervention

The education intervention film was developed using the processes of change for organisations from the TTM (Levesque *et al.*, 2001; Prochaska, 2000; Prochaska *et al.*, 2001). Following the intervention development outline for organisations used by Levesque *et al.* (1999), seven steps were applied in order to create and evaluate the TTM intervention for the NHS/University organisation:

1. Identification and definition of the target construct that needed to be changed;
2. Development of the instrument that measured NSs efficacy to manage AN at pre- and post-TTM intervention;

3. Development of the TTM intervention using the ten processes of change;
4. Administration of the TTM measure: Distribution of the NSSEIMANI (efficacy instrument) to the NSs who were asked to participate in the study;
5. Delivery of the TTM intervention to NSs;
6. Administration of the NSSEIMANI again to collect post test results, and match pairs for pre-post-test comparisons;
7. Data analysis and conclusions: On the basis of the data, conclusion of whether NSs confidence of being able to detect, assess and refer patients who may have AN, was increased following the TTM intervention.

Step 1: Identification and Definition of the Target Variable of Change

Research evidence, patient stories and current government policies state that a lack of knowledge by HCPs regarding eating disorders is concerning. Low knowledge levels regarding the disorder have been associated with poor treatment outcome for patients, acts as a barrier to developing a therapeutic alliance and ultimately lowers patient satisfaction with NHS services. Nurses play an important role in the initial care and management of patients who have AN (Department of Health and NHS Commissioning Board, 2012). Consequently, NSs should be educated about how to appropriately manage patients who may have AN. The TTM suggests that if the NS has a higher self-efficacy in being able to manage patients with AN, then he/she will be more likely to carry out appropriate behaviours associated with the patient's care. Furthermore, the SDT suggests that if a person's basic psychological needs are met, then their motivation to engage in particular behaviours will be internalised. In the current context, according to the SDT, an intervention will increase feelings of competence and autonomy in initial management of AN by NSs, internalising motivation to engage in the behaviours in future.

The first step in applying the TTM to increase NSs' confidence in initial management of patients who may have AN was to identify and define the concrete behavioural target for change. Drawing from the ICD10 (WHO, 1992), the DSM-5 (American Psychiatric Association, 2013) and Eating Disorders: A Framework for Wales (WAG, 2009), a multi-faceted change target and definition was developed. In order to be able to care for patients who have AN, NSs should be able to:

Detect: NSs should be confident in being able to detect a patient who may have AN. This includes confidence with regard to the characteristics of the disorder as specified by current guidelines (ICD10; DSM-5).

Assess: NSs should be confident in being able to assess a patient who may have AN. The NS should be confident in being able to approach and speak to a patient who may have AN. The NS should also be confident in asking the patient screening questions (SCOFF screening tool: Morgan, *et al.*, 2000).

Refer: NSs should be confident in being able to refer a patient who may have AN. This includes being aware of when, how and where the patient should be referred. For example, if the patient scores 2 or more on the SCOFF screening tool (Morgan *et al.*, 2000), then the NS should speak to the nurse-in-charge or a senior staff member that is available. All concerns and screening results should be fully documented by the NS within the patient's notes.

Identification and definition of the behaviour change targets in such concrete terms helps to clarify the goals of the change initiative. The goal of the current study was to increase NSs confidence in initial management of patients with AN. Only then can the change initiatives be communicated to the members of the organisation, in this case, the NSs at the University/NHS.

Step 2: Development of the Instrument to Measure NSs Efficacy in Initial Management of Patients with AN

The aim of Study 3 was to determine whether self-efficacy ratings of NSs increased as a result of a TTM intervention. At the time of the study, there was no instrument available to measure the self-confidence of NSs in their ability to assess, detect and refer patients with AN. Self-efficacy expectations are highly context specific, and so a measurement tool must be developed with respect to a specific task or situation for each population (Bandura, 2006). Therefore, the NSSEIMANI was developed specifically for this study.

Instructions for the NSSEIMANI

Bandura (2006) states that efficacy items should reflect the construct. As self-efficacy is concerned with perceived capability, the items should be phrased in terms of *can do* rather than *will do*: *Can* is a judgement of capability; *will* is a statement of intention. Perceived self-efficacy is a major determinant of intention, but the two constructs are conceptually and

empirically separable. Preliminary instructions should also establish the appropriate mind-set that participants should have when rating the strength of belief in their personal capability. People should be asked to judge their operative capabilities as of now, not their potential abilities or their expected future abilities. Bandura (2006) notes that it is easy for people to imagine themselves to be fully efficacious in the theoretical future.

Bandura (2006) suggests that scales that use only a few steps should be avoided because they are less sensitive and less reliable. He elaborates on this point by explaining that participants usually avoid the extreme positions when reporting their confidence. A scale with only a few steps may actually collapse to one or two points, and therefore lose differentiating information. Hence an efficacy scale with the 0-100 response format would be a stronger and more sensitive predictor of performance than one with a 5-interval scale (Bandura, 2006; Pajares, Hartley, & Valiante, 2001). Bandura (2006) also states that efficacy scales should be unipolar, ranging from 0 to a maximum strength. They should not include negative numbers because a judgment of complete inability (0) has no lower gradations, and therefore use of negative gradations would not be appropriate.

Items for the NSSEIMANI were written according to Bandura's (2006) guidance, and the practice question that Bandura was included following instructions to participants (2006). Figure 51 shows the instructions used in this study which were replicated from Bandura's (2006, p. 320) example question:

This questionnaire is designed to assess your confidence in being able to detect, assess and refer patients who may have anorexia nervosa.

Practice Rating

To familiarize yourself with the rating form, please complete this practice item first.

If you were asked to lift objects of different weights **right now**, how certain are you that you can lift each of the weights described below?

Rate your degree of confidence by recording a number from 0 to 100 using the scale given below:

0	10	20	30	40	50	60	70	80	90	100
Cannot					Moderately				Highly certain	
do at all					can do				can do	

**Physical Strength
Confidence
(0-100)**

Lift a 10 pound object				_____
" 20 "	"	"		_____
" 50 "	"	"		_____
" 80 "	"	"		_____
" 100 "	"	"		_____
" 150 "	"	"		_____
" 200 "	"	"		_____
" 300 "	"	"		_____

Figure 51. Example question for NSSEIMANI instructions (Bandura, 2006. p.320)

Bandura (2006) states that there is no all-purpose measure of self-efficacy and that a ‘one measure fits all’ approach usually has limited explanatory and predictive value, because most of the items in an all-purpose test may have little or no relevance to the domain of functioning. Therefore, the scale of NS perceived self-efficacy was tailored to the particular

domain of functioning (initial management of AN by NSs) as this was the object of interest. Items that were included in the instrument were written by adapting information from the ICD10 (WHO, 1992), the SCOFF screening tool (Morgan *et al.*, 2000), the DSM-5 (American Psychiatric Association, 2013), the NICE guidelines (2004) and the Eating Disorders Framework for Wales (2009). This is the same as the identification of the target variable in stage 1.

Domain of functioning

Bandura (2006) states that construction of comprehensive efficacy scales relies on a good conceptual analysis of the relevant domain of functioning. The domain of functioning for this study was operationalised during Step 1 by outlining initial management of AN by NSs. Knowledge of the activity domain stipulates the aspects of personal efficacy that are measured. This is crucial, as self-efficacy scales that target factors that have little or no impact on the domain of functioning would not yield a predictive relation. Negative findings would reflect defective theory rather than limitations of self-efficacy beliefs and so efficacy scales must be linked to factors that determine quality of functioning in the domain of interest. It was important that the items on the questionnaire were written so that they clearly related to nurses' perceived efficacy regarding management of AN. Specifically, the ability to detect, assess and to refer cases if necessary.

Consultation with current guidance documents that relate specifically to these behaviours were used in order to develop the items for the efficacy instrument (NICE, 2004; WAG, 2009; Department of Health and NHS Commissioning Board, 2012; ICD10, 1992; American Psychiatric Association, 2013; Morgan *et al.*, 2000). The results from Study 1 and 2 regarding management of AN by nurses was also consulted in order to develop items that reflected potential barriers to carrying out the behaviours associated with management of AN. This included effective communication with patients, knowledge of symptoms of AN, use of appropriate screening measures to use with patients, and how/where to refer patients who have the disorder.

Gradations of challenge

Bandura (2006) notes that self-efficacy should be measured against levels of demands or constraints to successful performance. Self-efficacy appraisals represent the level of difficulty that individuals *believe* they can overcome. If there are no obstacles to overcome,

the activity is easily performable and everyone is highly efficacious. Therefore, constructing scales to assess self-regulatory efficacy requires preliminary work to identify the forms the challenges and impediments take. HCPs were asked in focus groups and interviews for Study 2 about what should be included in an intervention regarding patients who have AN. The results outlined some of the challenges that made it hard for them to engage in management of AN, and those identified challenges or impediments were built into the efficacy items.

Minimizing Response Biases

The standard procedure for measuring beliefs of personal efficacy includes a number of safeguards to minimize any potential motivational effects of self-assessment (Bandura, 2006). A number of safeguards were built in to the current instrument. Self-efficacy judgments were recorded privately without personal identification to reduce social evaluative concerns, and each scale was identified by code number rather than by name of participant. Participants were informed that their responses would remain confidential. Finally, a nondescript instrument title of ‘Adult Nursing Confidence Questionnaire’ was used, rather than ‘Self-efficacy Scale’.

The NSSEIMANI was pilot tested and approved for content and face validity with four university level nurse educators, one qualified nurse, and one current NS prior to data collection. The instrument was also checked for face and content validity by the research team. Those who provided feedback were asked to consider whether the items reflected self-efficacy in management of anorexia nervosa, specifically detection, initial screening and referral of patients with AN. Feedback included that a further question relating to overall ability to identify anorexia nervosa should be added. As suggested by Bandura (2006), throughout the piloting process, wherever wording of items was considered ambiguous, the problematic item was rewritten and checked again. The process was repeated until a consensus was met that the NSSEIMANI had face and content validity to measure NSs confidence regarding initial management of AN.

Final version of the NSSEIMANI

The final version of the NSSEIMANI contained 16 items and a standard, summative scale, ranging from 0 (not confident at all) to 100 (very confident). The instrument measured participants’ degree of confidence in initial management of patients with AN, specifically detection, initial screening, and referral procedures. As each of the 16 items specified a

particular aspect of initial management of AN for NSs, the level of specificity was congruent with Bandura's (2006) guidance. Item content of the scale represented participants' personal beliefs about their abilities to produce specified levels of performance rather than other characteristics. Figure 52 shows the statements that were included in the final efficacy instrument.

Step 3: Development of the TTM Intervention using the Ten Processes of Change

The TTM intervention was designed by developing an educational film for NSs regarding initial management of AN that integrated the TTM processes of change. Firstly, the researcher made notes regarding the content of the intervention. Information was gathered from the ICD10 (WHO, 1992); the DSM-5 (American Psychiatric Association, 2013); Eating Disorders: A framework for Wales (WAG, 2009); and patient narratives from Study 1. The ten processes of change from the TTM were incorporated into the intervention in order to increase NSs confidence to manage AN. All *processes* of change were used during the intervention in order to reach NSs at all *stages* of change:

Participants in Precontemplation/Contemplation

Dramatic relief: the purpose is to generate inspiration for the change. For example, sharing patient stories about failings of the service for eating disorders from Study 1. This would give the participants an account of negative experiences that patients had encountered with HCPs previously. The aim was to create anxiety about the present circumstances and inspire participants to want to change. Inspiration for the change would include: development of the service they provide; better treatment outcome for the patients; to belong to a better or more efficient workforce; and overall to care for patients appropriately.

The intervention should suggest that if the NS continued to work with a lack of knowledge regarding AN, there would be a number of negative outcomes. If they did not detect, assess and refer patients with AN themselves, then the patients would not have early intervention and their symptoms might become worse. The patients may be in treatment longer and the cost to NHS will be more than if they adopted the change behaviour. On a personal level, the NS would not be helping people, and therefore potentially failing at their nursing duties. Potential negligence may contribute to deaths and therefore ignorance is not an excuse. Non-maleficence and non-beneficence means it is the nurse's duty to recognise the disorder and notice when something is wrong with a patient and to take action. Finally, NSs knowledge of appropriate communication with patients who may have AN is very important.

Self-re-evaluation: This process of change would help NSs clarify and modify their values and long term goals with respect to management of AN. The intervention was designed to clarify values: do no harm, help patients, and understand illnesses. The intervention also asks the NS to modify values: to not assume that because they know about the disorder from lay-

person knowledge or that this limited knowledge will be sufficient. NSs need to understand the disorder from a clinical perspective, and that a lack of knowledge regarding AN might have a negative impact upon the patient. For example, the NS saying something negative or detrimental to the patient without realising the outcome. Professional conduct was highlighted in the intervention. For example, the NS should not talk to someone about something that might make the patient condition worse, such as off-loading onto the patient about their own problems.

Thinking about commitment: The intervention would encourage NSs to be more knowledgeable about AN, to think about making a commitment to ask more screening questions, and refer patients if they display symptoms of AN.

Participants in the Preparation stage

Teams: The intervention included information about working collaboratively with other HCPs in order to be able to detect, assess and refer patients who may have AN. This included how and where to refer cases if necessary.

Participants in the Action stage

Consciousness-raising: the intervention was designed to communicate information about the strategies, benefits and goals of increasing detection, initial screening and referral of AN. The benefits to the NSs were highlighted: they would know they would be carrying out their role appropriately by caring for the patient and contributing to recovery.

NSs are taught that they must adopt six core values (The 6Cs: Department of Health and NHS Commissioning Board, 2012. p. 13). The 6Cs are a summary of the enduring values and beliefs that NSs are expected to hold throughout their education and then during professional development. It underpins practice for the NSs, and makes the NSs accountable for the care and services that they provide. The 6Cs were included in the current intervention so that NSs could make the link between appropriate management of AN and the enduring values that they should adopt as part of their practice. Inclusion of the 6Cs would increase feelings of competence and autonomy in the NSs, thus aligning with the overarching framework of SDT (Ryan & Deci, 2000).

The current definitions of the 6Cs are:

‘Care is our core business and that of our organisations, and the care we deliver helps the individual person and improves the health of the whole community. Caring defines us and our work. People receiving care expect it to be right for them, consistently, throughout every stage of their life.

Compassion is how care is given through relationships based on empathy, respect and dignity - it can also be described as intelligent kindness, and is central to how people perceive their care.

Competence means all those in caring roles must have the ability to understand an individual’s health and social needs and the expertise, clinical and technical knowledge to deliver effective care and treatments based on research and evidence.

Communication is central to successful caring relationships and to effective team working. Listening is as important as what we say and do and essential for "no decision about me without me". Communication is the key to a good workplace with benefits for those in our care and staff alike.

Courage enables us to do the right thing for the people we care for, to speak up when we have concerns and to have the personal strength and vision to innovate and to embrace new ways of working.

A **Commitment** to our patients and populations is a cornerstone of what we do. We need to build on our commitment to improve the care and experience of our patients, to take action to make this vision and strategy a reality for all and meet the health, care and support challenges ahead.

Inclusion of the 6Cs in the current intervention suggests to NSs that they would be working from evidence based practice by increasing their knowledge of initial management of patients with AN. The intervention would highlight that NS would also be doing what patients have said they expect from treatment (Study 1). The benefits to patients would be discussed during the intervention. For example, development of a better therapeutic alliance, early

invention, better treatment outcome, better treatment experience, and increased satisfaction with treatment.

The intervention would feature patients' narratives regarding their experiences of treatment for AN. Within the larger context of introducing humanistic approaches to patient care, as part of medical training, many institutions have incorporated narratives into the curriculum (Branch, et al., 2001; Charon, 2001; Newell & Hanes, 2003; Kumagai, White & Schigelone, 2005; Wear, 2002, 2003). The goal of these efforts was to introduce the patients' perspective in order to help NSs to adopt more 'patient-centred' or 'relationship-centred' approaches to delivery of care.

Counter-conditioning: provides education to encourage the transition to new work behaviours and roles. The intervention was developed to give information and knowledge about detection, initial screening and referral of patients with AN. This would also contribute specifically to fulfilment of the basic psychological needs of autonomy and competence in NSs (SDT: Ryan & Deci, 2000).

Making a commitment: The intervention encouraged NSs to make a commitment to be able to detect, assess and refer patients who may have AN in the future.

Participants in the Maintenance stage

Reinforcement management: The intervention should align incentives and disincentives for change. Incentives included being better at their role and feeling more confident. Disincentives included not moving forward with the rest of their colleagues, poor patient outcome, and getting left behind on practice whilst other HCPs gained knowledge.

Helping relationships: The intervention included information regarding the support and assistance available to NSs when caring for patients who have AN. The intervention suggests that NSs and other HCPs should support one another in making changes and look to current guidelines and other senior HCPs for assistance and advice.

Stimulus control: The TTM intervention should allude to organisational structures (scheduling, space, and equipment/resources) that have been provided to support the change. Information regarding the current framework for eating disorders (WAG, 2009) and the extra

funding provided for eating disorder treatment was included so that the NSs were aware of the recent commitment to improve services for eating disorders in Wales.

Development of the Script for the TTM Film

Following development of the structure and content of the TTM film, an audio visual script was written by the researcher in conjunction with an expert in audio-visual media (Appendix 25). The script included eight main subsections: Introduction and patient stories; What's important to know; How will this benefit the patient; How will this benefit you; What is anorexia nervosa; SCOFF questions for screening of eating disorders; how do you refer someone with AN; and Summary. It is important to note that the processes of change were not distinct: processes intertwined and overlapped throughout sections of the intervention. Examples of the content and the process of change of each section are described below:

Introduction and patient stories: this subsection included the title of the educational film, and information regarding the film. The information informed viewers that the patients, HCPs and family members were played by actors, but the stories were real quotations from patients who had received treatment from the Welsh Healthcare Service for eating disorders in Wales. The educational film content began with patient stories regarding experiences of treatment from the Welsh Healthcare Service. This information was written to create *dramatic relief*, *self-reevaluation* and to encourage the NS to start *thinking about commitment*.

What's important to know? This subsection included information regarding the 6Cs of nursing and how it related to patients who have AN. The inclusion of this information would make the NS think about belonging and contributing to the *Team* of HCPs of the organisation. It would continue to make the NS feel *dramatic relief*, *self-reevaluation* and *think about commitment* by making them think about their duties as a nurse.

The information demonstrates the NSs need for *commitment* to becoming more able to detect, assess and refer patients with AN. *Stimulus control* was met by making the NSs aware that the Welsh Assembly Government have provided a framework for eating disorders in Wales (2009). *Consciousness raising* was central to this subsection, as it would make the NS aware about what should be known about the disorder.

How will this benefit the patient? This subsection provided *dramatic relief* and *consciousness raising* as it stated the benefits to the patient of the HCP gaining more knowledge regarding AN.

How will this benefit you? This subsection made the NS aware that there is a benefit to them by learning the information regarding AN. As well as continuing to provide *dramatic relief*, it also *counter-conditions* the NS by giving alternative actions for them during practice.

What is anorexia nervosa? This subsection continues *consciousness raising* by providing specific information regarding AN symptoms, types of AN, and co-morbid disorders.

SCOFF question list: This subsection includes the five SCOFF screening (Morgan *et al.*, 2000) questions for eating disorders, and therefore continued *consciousness-raising* regarding screening for the disorder. The other processes of change are also supported by this information.

How do you refer someone with anorexia nervosa? This subsection continues the previous processes of change, but also highlights the *helping relationship* that could be achieved by the NS referring information to other HCPs and making appropriate notes in the patient files.

Summary: This section includes a summary of the essential information regarding AN and the importance of detection, initial screening and referral of patients who may have the disorder. This helps retention of information by the NS.

In line with Cialdini's (1993) principles of persuasion, the script included scenes with a psychologist (the researcher) and a qualified nurse. Scenes also included actors who represented patients, doctors, nurses, healthcare assistants and NSs. Before filming commenced, the script was checked and approved by the other two members of the research team.

An expert in media was recruited to record the audio-visual clips for the intervention. During filming, both the researcher and the expert in media directed the film. It was important to recruit an expert in media so that the intervention was high quality, but to ensure that the purpose of the intervention was retained, the researcher also co-directed. The intervention was filmed across five months at a variety of locations in South Wales. Locations included the University of South Wales (outside the main buildings and use of the simulation ward),

two cities and one town. Film clips featured the Welsh Assembly Government building, a simulation ward, inside houses and outside in residential streets and shopping areas. A variety of methods were utilised in order to make the film as realistic as possible, such as creation of a set to represent an office or use of the simulation ward as a background for the qualified nurse and patient. Audio recording was carried out in a sound-proofed room so that sound quality was optimal. Production of the film was conducted by the expert in audio visual media who had constant access to the script and purpose of the intervention. Editing of the film was then carried out by the researcher and expert in audio-visual media. The final version of the film was uploaded to YouTube and set to private so that only the research team had access. The intervention film was checked for validity by the research team and the qualified nurse. The research team were asked to review the content of the film to ensure that the TTM was sufficiently incorporated, and the nurse was consulted to ensure that the film could be understood by other nurses, particularly nursing students. The final version of the film was approved by all reviewers.

Step 4: Administration of the TTM Measure: Distribution of the TTM Efficacy Instrument to NSs

An announcement regarding the study (including date and time) was placed on the virtual learning environment of the second and final year NSs five days prior to data collection. The study information sheet was attached, so that they were able to make an informed choice of whether to participate or not prior to the day of data collection.

On the day of data collection, both second and final year NSs were greeted by the researcher. The researcher gave a brief overview of the study: they would be required to complete a self-efficacy measure regarding AN, watch a film regarding AN, and then complete another self-efficacy measure. It was important that participants were naïve to the full aim of the study: that the intervention was provided in order to raise their confidence in the detection, initial screening and referral of AN. Had participants been made aware of the aim prior to data collection, they may have completed the measure differently and potentially affected the results.

The researcher gave out the first self-efficacy instrument and the study information sheet. Participants were asked to read the information sheet if they had not done so on the announcement on their virtual learning space. Participants were told that they did not have to

take part, and were able to withdraw from the study at any time. As Bandura (2006) suggested, the researcher explained the importance of the participants' contributions in order to encourage honest answers. They were informed the results could increase understanding regarding management of AN as it would help to guide development of programs designed to help HCPs management of patients with AN in future. Finally, participants were made aware that should they decide they did not want to take part, they were able to either leave at that point, or stay and watch the film but not complete the self-efficacy measure. Completed questionnaires were collected back and labelled as pre-test instruments.

Step 5: Delivery of the TTM Intervention to NSs

The TTM-based educational film was accessed from YouTube and presented to NSs on the projector screen at the university.

Step 6: Administration of the TTM efficacy Instruments Post-Intervention and Match

Pairs for Pre-Post-Test Comparisons

Following presentation of the intervention, the researcher asked the participants to complete the second self-efficacy instrument. After completion, the instruments were collected and labelled as post-test. Participants were thanked for their time and made aware that should they have any questions, they were able to contact the researcher via email. The debrief sheet was presented to NSs on their virtual learning space following data collection.

Data from pre and post-test instruments were matched so that pre and post-test ratings for each participant could be compared. This would determine whether there was a statistically significant difference between NSs confidence ratings before and after the TTM intervention.

Step 7: Results: Data Analysis and Feedback

Determining internal consistency of the NSSEIMANI

It was important to consider whether the NSSEIMANI is a reliable measure to determine the NSs confidence regarding initial management of AN. Therefore, a Cronbach's Alpha test of internal consistency was conducted on the pre-intervention data in order to determine whether the scale was reliable. The NSSEIMANI was found to be highly reliable (16 items; $\alpha = .90$). Scales should have a correlation of at least .7 (Nunnally & Bernstein, 1994), but for those scales where important decisions are being made as a result of the data, then a correlation of .9 should be expected and is considered 'excellent' (George & Mallery, 2003;

Lance, Butts & Michels, 2006). Further inspection of the corrected item-total correlation provided support to retain all 16 items, as all correlations were between the recommended levels of .3 and .7 (Ferketich, 1991). Similarly, observation of the 'Cronbach's Alpha if item deleted' did not provide evidence to delete any of the items. For further support, the Cronbach's Alpha was repeated on the post-intervention data. The correlation of items on the post-intervention data suggests that the NSSEIMANI was highly reliable (16 items; $\alpha = .93$), confirming pre-intervention results. Therefore, all items were retained and the NSSEIMANI was considered a reliable measure for the current study.

Analysis of confidence ratings on the NSSEIMANI

The minimum and maximum possible ratings for each item were 0 to 100, with 0 being not confident at all, and 100 being completely confident in being able to perform each task relating to initial management of AN. Table 28 shows the means and standard deviations for pre and post-intervention, and mean difference between confidence ratings (including direction of difference i.e. +/-) for each aspect of NSs' initial management of AN. Descriptive statistics showed that mean pre-intervention confidence ratings by NSs for individual items ranged from 58.62 to 98.18, and mean post-intervention ratings ranged from 79.31 to 98.18. This indicated that NSs were more confident in some aspects of initial management of anorexia than others.

NSs pre-intervention self-efficacy ratings of individual aspects of initial management of anorexia nervosa

Observation of the means of individual items indicated that on average, NSs rated their confidence as highest in being able to weigh a patient (98.18), speak to a colleague regarding a patient whom they suspected may have anorexia nervosa (90.34), identify a patient who may be underweight (89.76), ask a patient how often they exercise (89.20), and notify a colleague of a patient they suspect may have anorexia nervosa (86.93).

NSs confidence ratings were lower in being able to discuss with a patient whether they regularly use laxatives (M= 81.82), ask a patient if they feel they have lost control over how much they eat (M=76.81), ask a patient if they currently have any mental health conditions (M=78.40), ask a patient if they feel that food dominates their life (M=72.53), refer a patient who they suspect may have anorexia nervosa to specialist services (M=72.27), and ask a patient screening questions that may indicate a diagnosis of anorexia nervosa (M=71.82).

NSs rated least confidence in being able to: ask a patient if they had engaged in self-induced vomiting (M=58.62), broach the subject of eating disorders with a patient who displays symptoms of anorexia nervosa (M=63.56), identify a patient who may have undiagnosed anorexia nervosa (64.14), and ask a patient if they feel fat even when others may say they are thin (M=67.70).

Post-intervention self-efficacy ratings of NSs regarding individual aspects of initial management of anorexia nervosa

The minimum mean self-efficacy rating was 79.31 post-intervention, and the maximum rating (M=98.18) remained constant. This suggests that post-intervention, NSs' confidence in initial management of anorexia had improved for some of the behaviours. Mean self-efficacy ratings across all aspects of initial management of anorexia increased, except for being able to weigh a patient, which remained constant at 98.18. For example, NSs were now highly confident in being ask a patient how often they exercise (M=95.00), speak to a colleague regarding a patient who they suspect may have anorexia (M=94.43), ask a patient if they have lost more than a stone in a three-month period (M=93.91), and identify a patient who may be underweight (M=93.64). Despite NSs' high pre-intervention confidence ratings for these five items, post-intervention increases were observed in all but one (weigh a patient). It is not surprising that NSs' confidence in being able to weigh a patient had not increased post-intervention, considering the very high rating pre-intervention.

NS's confidence ratings regarding more specific management of AN also increased to a higher level at post-intervention. For example, being able to notify a colleague of a patient that they suspect has anorexia (M=92.95), discuss with a patient about whether they regularly use laxatives (M=87.50), refer a patient whom they suspect may have anorexia nervosa (M=87.39), ask a patient if they currently have any mental health conditions (M=87.05), ask a patient screening questions that may indicate a diagnosis of anorexia nervosa (M=86.70), ask a patient if they feel that food dominates their life (M=85.86), ask a patient if they feel they have lost control over how much they eat (M=85.23), identify a patient who may have undiagnosed anorexia nervosa (M=82.70), broach the subject of eating disorders with a patient who displays the symptoms of anorexia nervosa (M=82.64), ask a patient if they feel that they are fat even though others may say they are thin (M=82.30), and ask a patient if they engage in self-induced vomiting when they feel uncomfortably full (M=79.31).

Particularly large increases were observed in NSs confidence to: identify a patient who may have undiagnosed anorexia nervosa (+18.56), ask a patient screening questions that may indicate a diagnosis of anorexia nervosa (+14.88), to refer a patient whom they suspect may have anorexia nervosa to specialist services (+15.12), broach the subject of eating disorders with a patient who displays symptoms of anorexia nervosa (+19.08), ask a patient if they engage in self-induced vomiting when they feel uncomfortably full (+20.69), ask a patient if they feel that food dominates their life (+13.33), and ask a patient if they feel that they are fat even others may say they are thin (+14.6). This suggests that the intervention particularly increased NSs confidence in being able to identify a patient who may have AN, and then to ask the patient screening questions from the SCOFF questionnaire.

Table 28. Pre/post-test means, standard deviations, t values and significance levels for each item of the self-efficacy measure for NSs

Item	Pre-intervention		Post-intervention		Difference
	Mean	SD	Mean	SD	
1. Identify a patient who may be underweight	89.76	15.52	93.64	10.74	+3.88
2. Ask a patient if they feel they have lost control over how much they eat	76.81	21.14	85.23	16.47	+8.42
3. Discuss with a patient about whether they regularly use laxatives	81.82	21.36	87.50	16.63	+5.68
4. Ask a patient how often they exercise	89.20	16.28	95.00	8.44	+5.8
5. Ask a patient screening questions that may indicate a diagnosis of anorexia nervosa	71.82	24.94	86.70	13.96	+14.88
6. Speak to a colleague regarding a patient whom you suspect may have anorexia nervosa	90.34	15.50	94.43	8.82	+4.08
7. Notify a colleague of a patient you suspect may have anorexia nervosa	86.93	18.34	92.95	11.76	+6.02
8. Weigh a patient	98.18	5.15	98.18	5.15	0
9. Ask a patient if they currently have any mental health conditions	78.40	22.74	87.05	16.48	+8.65
10. Refer a patient whom you suspect may have anorexia nervosa to specialist services	72.27	25.94	87.39	15.65	+15.12
11. Broach the subject of eating disorders with a patient who displays symptoms of anorexia nervosa	63.56	23.02	82.64	16.67	+19.08
12. Ask a patient if they engage in self-induced vomiting when they feel uncomfortably full	58.62	25.34	79.31	20.10	+20.69
13. Ask a patient if they have recently lost more than a stone in a three month period	90.80	14.16	93.91	9.57	+3.11
14. Ask a patient if they feel that food dominates their life	72.53	21.14	85.86	16.03	+13.33
15. Ask a patient if they feel that they are fat even others may say they are thin	67.70	25.09	82.30	18.53	+14.6
16. Identify a patient who may have undiagnosed anorexia nervosa	64.14	21.43	82.70	14.78	+18.56

Inferential Statistics

Data were normally distributed and so a paired samples t-test was an appropriate method of analysis to determine whether there were significant differences between NSs' pre and post-intervention self-efficacy ratings on individual items on the NSSEIMANI. Table 29 shows the results of the paired t-tests (t values and significance levels) for NSs' self-efficacy ratings regarding each aspect of initial management of anorexia nervosa. Significant differences were found between pre and post-test overall self-efficacy ratings for all items except item 8 'weigh a patient' ($t = .000$, $p = 0.50$). The pre-test mean confidence rating for this item was very high at 98.18. This suggests that NSs were already highly confident in being able to perform that particular aspect of initial management of AN prior to the intervention.

Table 29. t values and significance levels for NSs' self-efficacy ratings regarding each aspect of initial management of anorexia nervosa

Item	t	Sig. (1-tailed)	df
1. Identify a patient who may be underweight	-2.804	p= .003	87
2. Ask a patient if they feel they have lost control over how much they eat	-4.250	p= .000	87
3. Discuss with a patient about whether they regularly use laxatives	-2.314	p= .0115	87
4. Ask a patient how often they exercise	-3.291	p= .0005	87
5. Ask a patient screening questions that may indicate a diagnosis of anorexia nervosa	-5.945	p= .000	87
6. Speak to a colleague regarding a patient whom you suspect may have anorexia nervosa	-2.910	p= .0025	87
7. Notify a colleague of a patient you suspect may have anorexia nervosa	-3.017	p= .0015	87
8. Weigh a patient	.000	p= .50*	87
9. Ask a patient if they currently have any mental health conditions	-3.660	p= .000	87
10. Refer a patient whom you suspect may have anorexia nervosa to specialist services	-5.463	p= .000	87
11. Broach the subject of eating disorders with a patient who displays symptoms of anorexia nervosa	-7.603	p= .000	86
12. Ask a patient if they engage in self-induced vomiting when they feel uncomfortably full	-7.321	p= .000	86
13. Ask a patient if they have recently lost more than a stone in a three month period	-1.914	p= .0295	86
14. Ask a patient if they feel that food dominates their life	-5.141	p= .000	86
15. Ask a patient if they feel that they are fat even others may say they are thin	-5.539	p= .000	86
16. Identify a patient who may have undiagnosed anorexia nervosa	-8.320	p= .000	86

Analysis of the Total Self-Efficacy Rating of NSs regarding Initial Management of Anorexia Nervosa at Pre- and Post-Intervention

Pre and post-test self-efficacy totals were calculated for each participant by adding each of the numerical values for the 16 self-efficacy items together to produce an overall (total) self-efficacy of initial management of AN rating. The minimum and maximum *possible* total of ratings were 0 and 1600 respectively.

Descriptive statistics

The mean overall self-efficacy rating prior to intervention was 1253.44 (SD= 207.73). The mean overall self-efficacy rating after the intervention was shown was 1416.38 (SD= 161.88). The overall mean ratings of nursing students' confidence in initial management of AN increased by 162.94.

Inferential statistics

Data were normally distributed, and therefore a one-tailed, paired-samples t-test was appropriate to determine whether the difference between NS's pre and post-intervention total confidence ratings regarding initial management of AN was statistically significant. Analysis revealed there was a significant difference in NSs' overall self-efficacy ratings of initial management of AN between pre intervention (M = 1253.44; SE = 22.27) and post-intervention (M = 1416.38; SE = 17.36) conditions; $t(86) = -7.991$, $p=0.00$. On average, NSs had higher overall self-efficacy regarding initial management of AN *after* presentation of the TTM intervention in comparison to the self-efficacy ratings *before* presentation of the intervention.

Discussion of Study 3

Summary

The aim of the current study was to develop and evaluate an intervention to increase NSs' confidence regarding initial management of patients with AN. Therefore, it was predicted that there would be a significant increase in NSs self-efficacy regarding initial management of AN. The TTM was used as the framework to develop the intervention, in particular, integration of the 10 processes of change for organisations as a method to increase self-

efficacy (Levesque et al., 2001). The SDT (Ryan & Deci, 2000) posits that if the intervention contributes to fulfilment of basic psychological needs of NSs, then they will be more likely to internalise motivation to engage in initial management of AN in future.

Evidence supported use of an educational film as the intervention media channel. Cialdini's principles of persuasion (1984, 1993) were utilised whilst writing the script for the intervention by selecting a Qualified Nurse, Lecturer in Psychology, patients with AN and other HCPs senders of the intervention message. A self-efficacy scale was developed using Bandura's (2006) guide in order to measure the confidence rating of NSs regarding initial management of AN before and after the intervention.

The TTM processes of change for organisations (Levesque et al. 2001) was a useful framework when developing the intervention. Each process of change enabled the research team to include a variety of different elements within the intervention. For example, 'consciousness raising' was integrated into the intervention by including narratives from the participants in Study 1, the purpose being to raise awareness in NSs regarding the need to increase knowledge regarding initial management of anorexia nervosa. 'Dramatic relief' was achieved by alluding to the negative impact of a lack of knowledge regarding anorexia through the patient narratives. A rationale for nursing students to learn about anorexia nervosa was suggested by including the 6Cs of nursing. Clear guidance regarding detection, initial screening, and referral procedures derived from recent publications was included in order to provide the NSs with the ability to manage a patient who presents with the characteristics of AN. Cialdini's (1993) principles of persuasion, particularly 'authority', 'liking', and 'social proof' were incorporated into the current study. This enabled the researcher to choose a Lecturer in Psychology as the authority figure to deliver the overall message. The Qualified Nurse was chosen as the person who the NSs could identify with and 'like', but was also authority by informing the students about their nursing responsibilities. Social proof was achieved by consensus of all characters within the film that knowledge of AN is extremely important.

The Nursing Student Self-Efficacy of Initial Management of Anorexia Nervosa Instrument (NSSEIMANI) was developed using Bandura's (2006) guide to developing a self-efficacy scale. Close observation of this guide was integral to the success of the Study. Establishing reliability and validity of the scale was important in its ability to measure nursing students' confidence in initial management of people who present with symptoms of anorexia nervosa.

A 16 item scale was developed and was found to be a reliable and valid measure of nursing students' confidence in their ability to perform tasks regarding the initial management of AN.

Nursing Students' Confidence in Initial Management of Anorexia Prior to Intervention

It is important to discuss early on that NSs confidence in the initial management of AN was generally high pre-intervention, with all responses being between moderately confident to highly confident. Firstly, observation of average responses to individual items indicated which areas nursing students had greatest confidence. Nursing students rated their confidence in general aspects of care i.e. behaviours that are likely to be applied to patients other than those with anorexia, as very high. NSs may indicate high confidence in being able to carry out behaviours related to initial management of AN as some of the items on the scale may reflect activities that they have already performed. At pre-intervention, NSs were already highly confident in being able to identify a patient who is underweight, weigh a patient, ask a patient how often they exercise, speak to and/or notify colleague regarding a patient whom they suspect may have AN. Bandura (1977) suggests that *experience* of performing a behaviour is related to increased confidence in being able to perform the behaviour. Successful performances result in increased self-efficacy, and are the most powerful sources of efficacy expectations (Lewis & Zahlis, 1997). Therefore, it is not surprising that NSs have high confidence in this area, considering that they may have performed these activities on a regular basis prior to data collection. The finding also provides support that the NSSEIMANI has integrated an appropriate gradations of challenge within the items which is necessary when developing a self-efficacy measurement tool (Bandura, 2006). Furthermore, it is a welcomed finding that NSs feel confident to be able to carry out these behaviours considering that it is likely to be integral to early identification and screening of AN.

At pre-intervention, NSs confidence was then slightly lower in more specific behaviours relating to initial management of AN than behaviours relating to care of patients in general. For example, their confidence was lower in their ability to ask a patient if they had any pre-existing mental health conditions, broach the subject of an eating disorder with a patient and to identify a patient who may undiagnosed anorexia. The items relating to the SCOFF screening questions had slightly lower confidence ratings than general patient care. Despite this, the NSs still reported being moderately to highly confident in performing the behaviours. These results are particularly interesting considering that patients report that

HCPs have limited or incorrect knowledge about how to manage patients that present with symptoms of AN (Rees-Davies *et al.*, 2011), and HCPs report feeling as though they lack competence and knowledge in eating disorders, and require further training (Linville *et al.*, 2010; King & Turner, 2000). The NSs in the current study reported moderate to high confidence in being able to broach the subject of eating disorders with a patient, and then ask screening questions. NSs reported confidence in being able to refer a patient with AN to specialist services, a finding which supports the qualitative results from Study 2. This contradicts the results by Johnston *et al.* (2007) who found that HCPs experience difficulty in how to proceed with positive screening results from the SCOFF questionnaire.

A simple explanation could be that NSs are receiving current, evidence-based advice regarding patient care, and therefore they feel more confident in the initial management of AN. More concerning is the possibility that NSs are over-confident in initial management of AN *due* to a lack of knowledge regarding anorexia nervosa. They may not be aware of the complexities of caring for a patient with the disorder, and therefore over-estimate their confidence. The NSSEIMANI was designed to clearly measure confidence ratings regarding initial management of AN. Whilst it could be argued that the measure contained items regarding behaviours that were easy to perform, more likely is the possibility that there may be an intention-behaviour gap for this sample. Although NSs feel confident in being able to carry out the behaviours, it is not clear whether they would actually perform the behaviours in future. Therefore, careful interpretation of the pre-intervention results is advised.

Nursing Students' Levels of Confidence in Initial Management of Anorexia Nervosa Post-Intervention

The results from study 3 suggest that the TTM intervention was successful in raising NSs confidence in initial management of anorexia nervosa. There was a significant increase in overall self-efficacy rating of NSs regarding initial management of AN following presentation of the intervention. Closer inspection of the post-intervention results enabled the researcher to identify the effect of the intervention on NSs confidence for specific aspects of care. While it is not advisable to rely solely on individual tests of difference for each item, observation of the areas where the intervention increased self-efficacy most can lend more specific support to the areas of success within the current intervention. It also provides focus for further research, and should be considered during future intervention design.

There were significant increases in NSs' confidence for all behaviours on the NSSEIMANI except 'weigh a patient'. This is unsurprising considering that on average at pre-intervention, the students already rated their confidence in being able to weigh a patient as very high. A particularly large increase in NSs confidence were observed in eight of the 16 behaviours. Their confidence increased in being able to identify a patient who may have undiagnosed anorexia and broach the subject of AN with a patient who displays AN symptoms. Confidence ratings also increased in asking the screening questions from the SCOFF screening tool for eating disorders, specifically in being confident to ask a patient if they engage in self-induced vomiting when they feel uncomfortably full, if they feel that food dominates their life, and if they feel they are fat even when others say they are thin. NSs improved confidence in being able to ask the specific screening questions suggests that inclusion the SCOFF screening tool for eating disorders in the intervention film was appropriate. NSs confidence in being able to refer a patient to specialist AN services also increased significantly. Overall, related to the wider theoretical framework of SDT (Ryan & Deci, 2000) the results suggest that the intervention increased NSs feelings of competence and autonomy in behaviours associated with initial management of patients with AN.

Use of the TTM as a Framework for Organisational Intervention Development

The results from the current study suggest that the TTM is an appropriate framework for intervention development for an organisational-educational setting. The framework provided specific guidance for intervention design via the 10 processes of change for organisations, and suggested that self-efficacy would increase if the processes of change were implemented. The intervention also relates to the wider theoretical framework of SDT (Ryan & Deci, 2000) by increasing self-efficacy. Although it should be confirmed with appropriate research in future, the intervention is likely to have increased feelings of competence and autonomy, thus internalising motivation to engage in appropriate behaviours towards patients in future. Furthermore, by focussing on self-efficacy from the TTM, the researcher was able to develop a reliable outcome measure (NSSEIMANI), to determine if the intervention was successful. Further audience segmentation allowed for the content of the intervention to be tailored to NSs. This narrowing of the sample for the current study allowed selection of a media channel that had received support not only in the behavioural change literature, but from medical educational literature in particular.

Limitations of Study 3

No firm conclusions can be drawn from the analysis of NSs responses to individual items on the NSSEIMANI. Bandura (2006) suggests that using single items to measure self-efficacy is inappropriate. Nevertheless, observation of increases in particular items provides insight into how the intervention affected NSs confidence regarding aspects of initial management of AN. Overall, the TTM intervention was successful in increasing NSs self-efficacy of initial management of AN.

A limitation of the current study was the pre/post-test design with no control. It is often desirable to employ a control group, preferably using blind or double blind random allocation. In the current study, it is argued that it was important to use a pre/post-test design, prior to carrying out randomised controlled trials, so that the efficacy of the current intervention could be determined. Future research should now be carried out in order to determine if the TTM film was more successful than traditional information regarding AN in raising NSs' confidence in the initial management of patients with AN. For example, a comparison could be made by delivery of the TTM-based film to the experimental group, and delivery of traditional information sheets, pamphlets, study materials or posters as the control group. Future studies may be designed to explore differences between groups or test the intervention across a longer time period, but at present, the design of the current study provides sufficient preliminary support for the use of the TTM intervention to increase self-efficacy in NSs regarding initial management of AN.

The results suggest that the intervention was successful in increasing NSs' confidence in initial management of AN. The aim of the current study was to develop an intervention only for this specific audience, and so it may be concluded that the intervention is a valuable tool that could be disseminated to all NSs during their undergraduate training. It can also be argued that the information presented in the film was designed for NSs who would eventually become qualified. Therefore, the intervention would also be useful for qualified nurses, and further research would support this expectation.

The current study took place in a lecture theatre with NSs, with a lecturer in psychology administering the intervention. There is a possibility that the presence of the lecturer, the instructions used, and the lecture theatre surroundings, may have contributed to the success of the intervention (e.g. presence of authority for persuasion: Cialdini, 1993). Therefore, future

research should also be carried out in order to determine whether the intervention will be successful via other dissemination methods. For example, the TTM film could be presented online, with pre/post-test questionnaires to determine online efficacy. Further research is required to confirm effectiveness of the intervention in other settings. Nevertheless, the results from the current study are a positive indication that the TTM film alone may be used as a brief intervention to increase NSs confidence of initial management of patients with AN. In the case of comparison between groups (e.g. lecture theatre versus hospital ward staff room), it is important to ensure that the instructions given to all participants are the same. The person delivering the questionnaires and intervention may affect the results by discussing the intervention. During the current study, the lecturer in psychology ensured that the participants were told the procedure for the purposes of informed consent rather than the purpose of the intervention. Therefore, the film may be presented using a manual to ensure intervention fidelity and reduce the likelihood of confounding variables.

The current intervention was designed to be delivered to all participants in order to increase self-efficacy using the TTM framework. Although it appears that this is contradictory to the nature of a TTM intervention – to tailor interventions to an individuals' specific stage of change – it is important to remember that the intervention included processes of change that relate to all stages. Therefore, it is argued that NSs would be able to benefit from the subsection that included all processes of change. It is interesting to note that the moderate to high self-efficacy ratings prior to intervention indicate that the NSs were in the preparation, action and maintenance stages. Further research exploring the use of the intervention at various stages of change is advised, but at present, the results provide encouraging preliminary support that the intervention is successful at increasing self-efficacy.

Conclusion of Study 3

Use of the TTM, in particular use of the 10 processes of change to increase self-efficacy, provided a comprehensive framework for development of the intervention. The use of the SDT (Ryan & Deci, 2000) (fulfilment of basic psychological needs to internalise motivation) as justification to increase self-efficacy was appropriate. Selection of a media channel that was appropriate for NSs, and integration of the principles of persuasion were also important factors during design of the intervention. At present, it is encouraging to note that the intervention was successful in increasing self-efficacy of NSs in initial management of AN. Interventions designed using the TTM framework that are successful at increasing NSs' self-

efficacy, which can be accessed easily and quickly, are a valuable asset to encourage behaviours relating to appropriate initial management of AN.

Conclusion of the thesis

Thesis overview of research aims

The thesis was set out to explore patient experience of treatment for anorexia nervosa in Wales, and to develop psychological, theory-based interventions to increase knowledge and awareness of the disorder in HCPs. The thesis was set out across three studies.

Study 1 used a qualitative approach to ask patients about their experience of treatment for anorexia nervosa in Wales. The principle research question in this exploratory study asked what was the patient experience of treatment for AN in the Welsh Healthcare service. In particular, the aims of the study were to focus on patients' motivation, perceptions of treatment including expectations and satisfaction, and the interaction of TA using the overarching framework from Self-Determination Theory (SDT: Ryan & Deci, 2000). From a health service development perspective, participants were also asked how the healthcare service could be improved. A qualitative approach was utilised to provide an in-depth exploration of the patient experience of the Welsh healthcare service, including how the concepts interact with one another.

Study 2 set out to develop and evaluate a pilot AN awareness campaign (ANAC) for HCPs. More specifically, to determine the effectiveness of a campaign to raise awareness of AN, prompt HCPs to seek further information regarding AN, and to raise HCP intention to consider AN when diagnosing patients in the future.

Study 3 set out to develop an audio-visual intervention to increase NSs' confidence regarding initial management of AN by integrating the TTM processes of change. It was predicted that use of a TTM intervention (film) would increase NSs' self-efficacy regarding initial management of patients with AN.

Study 1: Introduction and Results

Prior to data collection, the ED service in Wales was criticised. The service had no clear treatment strategy or care pathway for EDs and funding was inadequate (Keel, et al., 2003; Which, 1998). Therefore, the All Wales Eating Disorder Special Interest Group commissioned the University of South Wales and Cardiff Metropolitan University to carry out a study exploring patients' experience of treatment so that user feedback could inform development of future services. The literature relating to anorexia nervosa reveals that not

only is there limited efficacy for current treatment for the disorder (Bulik, Berkman, Brownley, Sedway & Lohr, 2007; Kass, Kolko & Wilfley, 2013; Herpertz-Dahlmann, van Elburg, Castro-Fornieles & Schmidt, 2015; Berkman et al. 2006), but the nature of the disorder itself may impact upon outcome. This can make anorexia nervosa a difficult disorder to treat (Dejong, Broadbent & Schmidt, 2012). More specifically, the literature suggested that the Welsh ED service could not be evaluated using definitions that state simply that when treatment expectations are met, the patient would be satisfied. The diagnostic criteria of the disorder clearly state that the person will have an intense fear of gaining weight or becoming fat (DSM-5: APA, 2013). The person with anorexia nervosa may not want treatment (Treasure & Schmidt, 2001; Eivors, et al., 2003; Robinson, 2000), as their treatment expectations may be negative (e.g. they will make me gain weight) as well as positive (e.g. it will make me better) (Coyle & Williams, 1999).

The patient's motivation to recover can have an impact on treatment outcome (Clausen, Lubeck, & Jones, 2013; Espindola & Blay, 2009; Federici & Kaplan, 2008; Geller, 2002; Keski-Rahkonen & Tozzi, 2005; Tierney, 2008; Fairburn et al., 1998). When applied to EDs (Vansteenkiste et al., 2005), the Self-Determination Theory (Ryan & Deci, 2000) proposes that the type of motivation to engage in treatment and recover can vary, i.e. it may be intrinsic or extrinsic. For example, the person may not want to seek help but attend healthcare services to appease a concerned family member (i.e. they are extrinsically motivated to enter treatment). In this case, the quality of the motivation would be poor, and likely result in lower engagement in treatment. Therefore, if the person did not fully understand the personal value of engaging in treatment and recovering from the disorder, then they would be less likely to have a positive outcome.

The SDT (Ryan & Deci, 2000) also proposes that people have basic psychological needs that need to be fulfilled in order to improve the quality of the motivation: relatedness, autonomy and competence. This related specifically to the treatment of anorexia nervosa. For example, development of a positive therapeutic alliance has been associated with improved recovery and treatment satisfaction (Escobar-Koch et al., 2010; Constantino, Castonguay, & Schut, 2002; Horvath & Bedi, 2002; Loeb et al., 2005; Comerici & Gerydanus, 1997; Kaplan & Garfinkel, 1999; Garrett, 1997; Noordenbos, Jacobs, & Hertzberger, 1998; Rosenvinge & Kluismeier, 2000; Tozzi, Sullivan, Fear, McKenzie & Bulik 2003; Federici & Kaplan, 2008). Furthermore, the characteristics of the disorder mean that the patients prefer to be in control,

but they also often feel that the disorder controls them. Finally, according to the SDT, the treatment should make the patient feel competent to recover.

Satisfaction questionnaires and quantitative approaches to data collection did not lend itself to exploration of complex interactions between expectations, satisfaction, therapeutic alliance and motivation to engage during treatment for anorexia nervosa (Rosenvinge and Klusmeier, 2000; Williams, 1994; Williams, Coyle & Healy., 1998; Crawford & Kessel, 1999). Therefore, a qualitative approach was utilised.

Study 1 was a qualitative study exploring patient perception of their experience of treatment in relation to their expectations, motivation, therapeutic alliance and satisfaction. Calls for the patient voice to be heard regarding treatment experience were met by carrying out interviews with seven adult female patients who were receiving secondary care for anorexia nervosa aged between 20-31 years (one participant did not reveal her age). Start of treatment was delayed in all cases, with some delays being much longer than others. The age of onset of anorexia was during adolescence. Triggers for onset were food control, body shape and not wanting to eat in front of others. Patients did not usually attend the GP of their own volition or in relation to anorexia, as they were either there due to another illness or because they were taken there by family/friends. The women were often not diagnosed with anorexia when they went to a healthcare setting to seek help, despite experiencing symptoms of the disorder. Treatment through primary and secondary care was experienced by the women, including specialist inpatient treatment in England and acute mental health wards in Wales. Care from a variety of HCPs was received, including psychologists, psychiatrists, GPs, occupational therapists, dieticians, nurses, and auxiliary nurses. Participants often felt they would not receive treatment because they did not deserve it, and this was compounded when they were placed on waiting lists or treatment was withdrawn after it had started. Participants discussed being acutely aware of the lack of funding and described having to fight to receive treatment. As a result, some participants chose to fund their own treatment privately.

Patients described their disorders in both functional and dysfunctional terms, including descriptions where the disorder was an inner voice that was manipulative. This supports previous research which has suggested that patients often appreciate some of their anorexia symptoms (Nordbo et al., 2012; Nordbo et al., 2006, 2008; Serpell et al. 1999; Vitousek et al., 1998; Williams & Reid, 2009; Cockell et al., 2002; Geller & Drab, 1999; Rieger et al., 2000).

Participants stated that there were barriers to engaging in treatment that were either personal or due to the health service. For example, participants described their disorder as functional and one that made them manipulative, and that their anorexic-self caused them to do things they would not normally do. They discussed experiencing a conflict between the anorexic-self and the well-self which caused problems during treatment. These descriptions facilitate understanding of the reasons why some participants experience ambivalence towards treatment.

When the women described their expectations of treatment, they reported both positive and negative expectations. When the participant entered the healthcare service, they had both negative and positive expectations of treatment. These expectations were either met, or not met, during treatment. In the case of positive expectations, the relationship was clear: if expectations were met, then they were satisfied. If the expectations were not met, then they were not satisfied. If the negative expectations were not met, then the participant was usually satisfied. But if the negative expectations were met, then the patient explained their indifference/anger/avoidance of treatment. Importantly, the model showed that the relationship between expectations and satisfaction with treatment for those with AN was not linear. It was a cyclical process by which the prior experiences of the patient affected the expectations of future treatment experiences.

Participants suggested several key areas that could be improved in the healthcare service, including early intervention, better communication, twenty-four-hour contact and knowledgeable staff in local specialist units that included flexibility in the type and delivery of treatment. Better information should be made available regarding the disorder and the treatment available. This could further help manage expectations and satisfaction with treatment by providing explicit, realistic guidance. This provided support for the literature that has questioned the use of simple definitions of treatment satisfaction (e.g. Coyle & Williams, 1999). The women reported that they had difficulty saying if they were satisfied or dissatisfied, and preferred to describe the parts that they found useful and those which could be improved. Importantly, they described that their treatment experiences continually altered their expectations of treatment in the future. They described the impact of this on their motivation to engage in treatment.

Trust, the persona and awareness of anorexia by the HCP was important. If these elements were not present, then the alliance was not developed or maintained (Zipfel et al., 2000;

Pereira et al., 2006). Further barriers to the development and maintenance of therapeutic alliance included the characteristics of anorexia, threats used and lack of professionalism by the HCP during treatment.

Patients particularly focused on lack of awareness of the disorder by HCPs, and the negative impact this had upon their treatment. Firstly, the HCPs often failed to diagnose the patients or refer them for treatment. This left the women with a sense that they weren't cared for and that they should either not seek treatment, or to lose weight purposely to receive care, echoing Reid and colleagues (2008) findings that patients sometimes lose weight to receive treatment. Lack of knowledge by the HCP affected the therapeutic alliance, as the patients would have difficulty trusting a HCP who lacked knowledge, or would find it easier to lie about their behaviours to maintain their anorexia. This provides supports for Irwin (1993) and McQueen (2000) who suggest that trust is crucial to development and maintenance of the TA. Furthermore, the uncertainty of receiving treatment by a HCP who lacked knowledge left the women feeling as though they were not competent to recover. During treatment, the women were often faced with HCPs who were unwilling to compromise over treatment. The women expressed how difficult this was considering their need for control as a result of the disorder. They spoke favourably about receiving treatment from HCPs who were willing to negotiate over aspects of treatment, and explained that they were much more likely to engage and be satisfied with treatment when the HCP worked collaboratively with them. Therefore, the results suggest that application of the SDT (Ryan & Deci, 2000; Vansteenkiste et al., 2005) to treatment of anorexia is appropriate.

Overall, the results of the current contribute to current literature and provide support the application of the Self-Determination Theory to treatment for EDs (Ryan & Deci, 2000; Vansteenkiste et al., 2005). The women described positive and negative expectations of treatment that related to their basic psychological needs. That is, they expected to be cared for (relatedness), to be able to negotiate (autonomy), and to be able to recover (competence). The women also described the impact of meeting either positive or negative expectations on their motivation to engage in treatment. For example, they expected to be treated by someone who was knowledgeable about the disorder, but this positive expectation was not met and therefore they were less motivated to engage in treatment in the future. Furthermore, a negative experience made the women more likely to have negative expectations of future treatment.

Study 1: Impact of the findings on development of the Welsh Healthcare Service for

Eating Disorders

The results of the studies have already been used to inform the service improvement prior to publication of the thesis. Shortly after writing the results for the current study, the service for EDs in Wales was in the process of being reformed. Two reports were written by the author of the thesis to deliver to the Welsh Assembly Government, and the All Wales Eating Disorder Special Interest Group, outlining the results of Study 1. The first regarding patient experience of treatment for AN in primary care, and the other relating to secondary care. The findings were used to inform the development of the new service (Rees-Davies & Limbert, 2011a, 2011b) by outlining what patients felt should be improved. The Welsh Assembly Government (WAG) allocated £500,000 for additional staff and extra training, and a further annual sum of £1 million for maintenance and development of services. The new service was designed to make access to treatment more simplistic, by introducing a single point of entry, and standardised criteria for referral to specialist services.

Following changes to the NHS in Wales, the care pathway document was reviewed and formally published by the Welsh Assembly Government (2009). The document outlined the new pathway for Wales, and represented expectations for the Welsh NHS ED service. The Welsh Assembly Government invested funding into new specialist teams to improve diagnosis, care and support for people with EDs in Wales (Welsh Assembly Government, 2009). New teams have been created in both North and South Wales, and teams consist of specialist HCPs that work collaboratively with other health services such as GPs surgeries, social services, child and adolescent mental health services (CAMHS) and community mental health teams (CMHT). This movement towards collaboration will mean improved communication between departments which was a recommendation made to improve the Welsh healthcare service by participants in this study.

The service includes collaborations between staff/services to create individual support plans for those living with EDs, including access to a variety of evidence based treatments for individuals or families. Results from Study 1 suggest that patients want individualised care and the opportunity to negotiate treatment. The need for better training of HCPs regarding recognition and referral of EDs has been recognised and was included in the plans for improvement. Funds have also been allocated for the development of an electronic course on EDs for primary care workers which should contribute to improving HCP knowledge of EDs.

Study 1: Theoretical Implications

Use of the Self-Determination Theory during Treatment for Eating Disorders

The results from the present study confirm that treatment for AN would benefit from establishing the type of motivation that the patient has prior to, and during, treatment. Furthermore, ascertaining the patients' positive and negative expectations of treatment will allow the HCP to explore any specific basic psychological needs that the patient has. The patient should have their basic psychological needs met in order to internalise or internally regulate their motivation to engage and recover. Development of a TA will foster the correct environment where a collaborative approach to treatment can be achieved. Education and negotiation are central factors and should encourage the patient to realise the personal importance of engaging and treatment and recovery. Provision of a range of treatments for the patient in a timely manner from HCPs who are knowledgeable and understanding will make the patient feel more competent to recover. This will lead to satisfaction, increased motivation and engagement in treatment. The importance of motivation to engagement has been noted, so therefore a better outcome can be expected if the patients' basic needs are fulfilled.

The Basic Needs Expectancy Model of Motivation during AN Treatment can be used to predict Motivation, Satisfaction and Outcome in Patients with AN

The basic needs expectancy model of motivation should be used by HCPs and researchers to conceptualise the complex relationship between positive/negative expectations, patients' basic needs fulfilment, motivation to engage and recover, satisfaction, engagement with treatment and outcome. Patients' expectations of treatment should be ascertained by HCPs, i.e. both positive and negative expectations should be identified. The type of motivation to enter treatment should be noted i.e. is motivation internal or external? Patients who have already received treatment for EDs should be asked about their experiences, so that impact of meeting their (positive/negative) expectations on future expectations can be taken into account during treatment planning. This will provide HCPs with data that allows an individualised approach to care. The relationships identified within the current study may provide HCPs with a useful indicator of future outcome.

Application of the Current Study to Bulimia Nervosa and Binge Eating Disorder

The results from the present study support studies that explore AN, BN and BED patients' motivation to change, basic needs, perception of treatment, expectations and satisfaction with services, and TA. Therefore, the conclusions from the present study may be tentatively applied to treatment with patients with BN and BED. For example, the concept of ambivalence has been found to play a role in all ED patients' perspectives of treatment (Colton & Pistrang, 2004) and whether or not it is a problem that needs to be treated (Colton & Pistrang, 2004; Malson, Finn, Treasure, Clarke, & Anderson, 2004). Literature which reported that patients expressed ambivalence about control and its role in treatment including BN patients as well as those with AN (Reid, et al., 2008). Motivation to improve has also been reported to be a difficulty in treatment for BN and BED (Carter & Kelly, 2015). Indeed, Vansteenkiste and colleagues (2005) intended the application of SDT to be to BN and BED as well as AN. Control is a factor in all EDs rather than just AN (Malson, 1998). Unfortunately, ED treatment can diminish perceived control and exacerbate symptoms (Bell, 2003; Eivors, et al., 2003).

Delays and waiting lists have been found to be a problem for patients with BN and BED (de la Rie, et al. 2006; Escobar-Koch, et al., 2010; Reid et al., 2008), and awareness of funding issues resonates across all EDs rather than just anorexia (Escobar-Koch et al., 2010; Koskina et al., 2012; Reid et al., 2008). Furthermore, concern over the withdrawal of services is present in BN and BED (Reid et al., 2008). Studies exploring the TA and satisfaction with services have highlighted that lack of knowledge, empathy, understanding or delay of referral as important causes of dissatisfaction in patients with EDs in general (de la Rie, et al., 2006). The study by Escobar-Koch and colleagues (2010) explored the views of patients with AN, BN and BED and found concern about HCPs' lack of knowledge about EDs, failure to perform timely diagnoses, and delays in referring patients to specialist services. Patients with BN prefer a practical and caring approach during outpatient treatment (Williams, et al., 2008) indicating that the TA during treatment for BN also depends on the HCP meeting the basic needs of patients.

Patients with BN and BED also reported that interventions that addressed psychological issues and developed a psychological understanding of EDs were preferred over more medicalized treatments focused on food, weight and eating. In BN and BED this includes the feeling of loss of control, disgust, body dissatisfaction and negative affect (Lose et al., 2014;

Bell, 2003; Cockell et al., 2004; Le Grange & Gelman, 1998). Patients who received treatment for AN, BN or BED are all often less satisfied with approaches aimed at restoration of physical health (Swain-Campbell et al. 2001; de la Rie et al., 2006; Noordenbos et al. 1998).

Study 1: Methodological implications

Use of quantitative satisfaction questionnaires is not appropriate to ED evaluate services at present

The use of quantitative satisfaction questionnaires as a measure of quality in ED service is not appropriate. This is because quantitative questionnaires often rely upon the simplistic model that when patients' expectations are met, they will be satisfied. The participants in the current study clearly state that they have both positive and negative expectations of treatment. This is anticipated due to the complex nature of the disorder, such as not wanting to accept treatment or wanting to keep some symptoms of the disorder and not others.

The patients reported negative expectations such as being tube fed, and these expectations were often met. The previous assumption was that when the patients' expectations were met, they would be satisfied. In the current sample this did not always occur. When positive expectations were met, or negative expectations were not met, then patients were satisfied with those particular aspects of care. When negative expectations were met, or positive expectations were not met, patients often retaliated by not engaging or by withdrawing from treatment and losing weight on purpose. The patients' also reported sometimes being satisfied when treatment didn't work and their anorexic symptoms remained, confirming that patients appreciate some of the symptoms of the disorder. Therefore, basic treatment evaluation questionnaires that rely upon the simple model of "expectations met leads to satisfaction" should not be used.

Furthermore, satisfaction questionnaires are likely to produce results that do not adequately reflect the way a patient feels, as the women in this study revealed that they felt unable to say if they were satisfied overall. Therefore, it may be more appropriate to think of satisfaction in a similar way to a decisional balance. The patient may be satisfied with some aspects of care but not with others. Therefore, although using a qualitative approach to evaluating ED services may be time consuming and difficult, but they may yield more valuable feedback regarding patients' recommendations for service development. Considering the criticism that

the NHS has received regarding lack of provision for high quality services for EDs, it would be advisable to involve stakeholders of treatment using a qualitative approach rather than relying upon quantitative satisfaction figures. Involvement of stakeholders at this level would allow constructive feedback and foster a collaborative approach to service improvement.

Study 1: Practical implications

The Eating Disorder Service in the UK Requires Improvement

The contrast between patients' perceptions of treatment and the current practice guidelines suggest that significant improvements to the ED service in the UK, particularly Wales, is required. Patient will benefit from timely intervention by HCPs who understand EDs rather than simply focusing on BMI. When treatment takes place, patients prefer a flexible approach that fulfils their basic psychological needs. A patient who experiences relatedness, autonomy and competence during treatment is more likely to be motivated to engage, therefore improving outcome. Development of a TA will foster a feeling in patients of being cared for. This will provide a suitable relationship where negotiation of individualised care is possible. Furthermore, specialist treatment that is close to home by knowledgeable HCPs will allow the patient to feel competent to recover.

Healthcare professional knowledge about AN should be increased

One of the key findings from Study 1 was the impact of knowledge of the disorder on the TA, motivation and outcome during treatment. The patients stated that they expected the HCPs to be knowledgeable about their disorder, yet they often found that HCPs lacked knowledge and that had an adverse effect across all areas of their treatment journey. For example, lack of knowledge by the HCP meant that timely diagnosis was not achieved. The TA would be adversely affected as the patient felt they could not trust HCPs who weren't aware of the disorder. The patient would also be less motivated to engage in treatment as they would not feel as though they were cared for (relatedness), would not feel able to recover (competence), and not feel in control of their treatment recovery if the HCP would not diagnose them (autonomy). Furthermore, the lack of knowledge by HCPs would allow patients to feel as though they could engage in manipulative behaviours in order to maintain their disorder. Lack of meeting the patient's positive expectations of treatment (i.e. HCP would have knowledge of the disorder) would also mean that the patients would have negative

expectations of treatment in future (i.e. the HCP won't know about my disorder or how to treat me).

The findings have important implications, not only for specialist ED services but for the health service in general. Although it would be unreasonable to ask every single HCP to develop highly specialist knowledge regarding anorexia nervosa, the negative effect of the lack of knowledge warrants serious consideration for inclusion of information regarding the initial management of AN to be integrated into more generic courses. Awareness of the characteristics of the disorder, simple screening tools and referral procedures would enable HCPs to feel confident to approach patients with the disorder, and would have potentially positive benefits in terms of timely diagnosis and treatment as well as developing the TA and motivation to change.

Patients' Positive and Negative Expectations should be ascertained before and during AN

Treatment

When the patient entered the healthcare service, they had both negative and positive expectations, and the expectations were either met, or not met, during treatment. In the case of positive expectations, the relationship was clear: if expectations were met, then they were satisfied and vice versa. Conversely, if the negative expectations were not met, then they were usually satisfied. But if the negative expectations were met, then they explained their indifference/anger/avoidance towards the HCPs and treatment. Furthermore, the meeting of expectations then affected the way that patients envisaged future treatment. For example, if patients did not have their positive expectations met, then they expected their experience of treatment to be negative in future.

By paying particular attention to the patient's expectations before and during treatment, the HCP can work in a collaborative way with patients. This will give the HCP the opportunity to address any negative expectations of treatment. The patient may also have positive expectations of treatment whereby they believe treatment will cure them of their disorder. This will give the HCP the opportunity to discuss the importance of the patient's part in the treatment process, as well as provide details of the types of treatment that are available. This may enhance the TA and give the patient the feeling of control and competence over their own treatment. Overall, this may enhance the patient's motivation to engage in treatment and recover.

Study 2: Introduction and results

Study 1 confirms that HCP knowledge of AN impacts upon diagnosis, TA, motivation to engage in treatment and therefore outcome. This confirms the current literature which suggests that HCPs should be made more aware of the disorder so that timely treatment is provided with knowledgeable HCPs. An intervention to increase HCP awareness of AN was therefore justified.

The Social Marketing Framework has been used frequently to guide developers through the intervention design process. The approach uses marketing principles and applies them to behaviour change, paying particular attention to tailoring the intervention for a segmented audience. Therefore, members of the target audience are recruited during intervention development and evaluation. Furthermore, the approach emphasises the importance of using theory to design the intervention.

A four phase approach to intervention development and evaluation was used for Study 2. During Phase 1, a variety of HCPs (clinical psychologists, mental health nursing students, chiropractic students, health psychologists-in-training and undergraduate psychology students) were asked that they thought about the intervention, including the medium, design, message and content. The results were combined with theory to develop the intervention. Explanations of behaviour were used, namely the TPB, HBM, PMT and SCT, as well as persuasion theory such as the behaviour-communication model (McGuire, 1989), the ELM (Petty & Cacioppo, 1986) and Cialdini's (1993) principles of persuasion. The medium of poster was chosen based on feedback from the HCPs (e.g. would be quick and simple for HCPs to access), but was also determined partly by the financial limitations of the study as posters are less expensive than audio-visual interventions. Four posters were developed.

Phase 2 was intended to use a sample of HCPs at medical surgeries. Unfortunately, the HCPs were not willing to participate. Therefore, the nursing students at the University of South Wales were recruited. The study used a quasi-experimental study to evaluate the poster in the nursing student sample. Unfortunately, only twelve students out of the large sample ($n=216$) saw the poster. The nursing students therefore did not evaluate the campaign.

The nursing students reported that they felt that they could identify a patient who had the disorder and could access further information. They reported that they would seek advice from their colleagues. They also felt unable to signpost services to patients, and didn't know

how or where to refer the patients if necessary. Many of the nursing students said they would like extensive further training on the disorder, particularly relating to detection, assessment, referral and treatment.

Phase 3 was not anticipated and included as a result of the failed viewings of the poster during Phase 2. Chiropractic students were recruited and asked to evaluate the posters following forced viewing. The results were mixed, as the students reported that they thought the posters were quick to understand and not detailed, yet they reported that they were complex and clear. The students reported that they felt the campaign was irrelevant, indicating that they lacked perceived susceptibility to the message. The poster only appeared to make the students more confident to ask a colleague about AN, and clearly disagreed that the poster gave them new information about the disorder. Qualitative feedback was also gathered from the students and they advised that the poster should be made clearer with more explanation regarding the headlines. They also stated that the information was not easier to remember, and that no symptoms of AN were included. The feedback was used to modify the posters and two were chosen by the research team as the final campaign.

Phase 4 set out to evaluate the ANAC by recruiting GPs and Nurses to evaluate the campaign. Following the failed recruitment HCPs from surgeries in Phase 2, the research redesigned the evaluation questionnaire to be brief, and visited the surgeries in person during recruitment. The posters were displayed on toilet doors and walls in staffrooms for at least two weeks. Twenty-nine HCPs completed the evaluation questionnaire. The majority of HCPs reported that the posters made them intend to look for further information regarding the disorder, and to consider AN in patients they see in future.

Study 2: Theoretical and Methodological Implications

The outcome of the poster intervention was evaluated and a number of limitations for Study 2 were acknowledged. Firstly, the audience were not segmented appropriately. Although the sample comprised of HCPs, the differences between HCPs meant that feedback was mixed. In particular, the chiropractic students reported that the campaign was irrelevant to them, indicating that they required a different intervention. The medium of poster for the ANAC was not deemed suitable for a number of reasons. Firstly, the HCPs all reported wanting extensive information regarding detection, assessment, referral and treatment of AN. Secondly, the posters were only seen by 12 nursing students during Phase 2. Third, use of

multiple constructs from different models meant that deciding how to measure outcome was difficult. The interview schedules and questionnaires were modified as per the Social Marketing Framework to intervention development, but this meant that determining outcome became difficult. Furthermore, the design of the study and lack of viewers of the poster during Phase 2 meant there was no pre-test or control group data to make comparisons. Overall, the results suggest that the posters were not sufficient in raising awareness of AN in HCPs, and so a further Study was carried out.

The results of the current study question the use of posters as a medium of intervention to raise awareness of eating disorders in HCPs. Previous literature has provided mixed evidence regarding the efficacy of posters in changing health behaviour and changing employee behaviour in relation to adherence to practice guidelines. The evidence provides support for the importance of audience segmentation, and demonstrates the problem associated with collecting data from different groups to evaluate one campaign. Furthermore, the use of the Social Marketing approach for development of interventions requires clarity. Although the guidance to the approach is prescriptive, at times the way that theory is applied within the intervention is elusive. Furthermore, the literature regarding intervention design is scant, and often focuses upon the type of intervention and whether it worked, rather than exploring individual elements of poster design and comparisons between inclusions of the various cognitive models. The results suggest that a return to basic comparisons of intervention designs to provide evidence and guidance for intervention developers in future.

Study 3: Introduction and Results

The results from Study 1 indicated that raising HCP knowledge of AN was warranted, yet the results of Study 2 suggest that a poster as a medium of intervention is not appropriate given that HCPs desire high levels of information regarding the disorder. In order to address the limitations of Study 2, the purpose of the intervention was considered carefully. In the TPB, HBM, PMT and SCT, self-efficacy is considered a determinant of behaviour. Therefore, the purpose of the intervention was to increase self-efficacy with regard to initial management of AN, in particular the ability to detect, assess and refer patients with the disorder. The audience was segmented to nursing students only, and the intervention medium of film was chosen based upon the sample and purpose of the study.

The Transtheoretical Model (TTM: Prochaska & DeClemente, 2001) has been used to develop interventions not only for health behaviours, but also within organisational settings. As the nursing students were often on placement, the application of the TTM was appropriate. The model proposes that if processes of change are included within interventions, then the person's self-efficacy will increase, making it more likely that they will engage in the desired behaviour. Furthermore, the principles of persuasion by Cialdini (1993) were incorporated into the intervention in order to persuade the nursing student to accept the message.

The medium of film was chosen as it would be suitable for the large volume of information desired by the nursing students. Film has been used successfully in other interventions, such as McConville & Lane (2006) who successfully increased nursing students' self-efficacy in communicating effectively with difficult and delicate patient groups. Furthermore, the approach lends itself to the TTM framework and principles of persuasion. That is, that the intervention could be designed to convey emotion (Beck, 2009) in order to raise consciousness of AN and counter-condition a more favourable response to patients with the disorder. Furthermore, the use of audio and visual material would facilitate knowledge retention and engage the audience in an interactive way (Berk, 2009). The medium of film is often used in medicine and medical education, such as how or how not to behave at the bedside (Bonah & Laukotter, 2009), and medical students have stated that videos helped them to create and memorise realistic mental pictures of disorders (De Leng, et al., 2007).

The intervention was developed and evaluated using seven steps proposed by Levesque et al (1999). At first, the target construct to be changed was identified (self-efficacy of initial management of AN). An instrument was developed to measure the nursing students' self-efficacy at pre- and post-test, using extensive guidance from (Bandura, 2006) regarding self-efficacy instrument design. The intervention film was then developed based upon the ten processes of changes from the TTM, and incorporated the principles of persuasion by Cialdini (1993). The intervention content was developed using current diagnostic criteria (ICD10: WHO, 1992; DSM-5: APA, 2013), care pathways for Wales and (WAG, 2009); and patient narratives from Study 1. During data collection, the efficacy instrument was given to nursing students to assess their pre-test self-efficacy of initial management of AN. The intervention was then shown to students and the efficacy instrument was given to students again. Following data collection, the results were analysed.

The research question was answered when the results of the study revealed that a TTM-based film intervention significantly increased nursing students' self-efficacy regarding initial management of patients with AN. Interestingly, the nursing students' confidence was already high prior to intervention. Although this was a welcomed finding, it also suggests that the high confidence may be due to lack of knowledge regarding the complexities of treatment for the disorder.

Study 3: Theoretical and Methodological Implications

The current study supports the use of film interventions based upon the SDT (Ryan & Deci, 2000) and TTM (Prochaska & DiClemente, 2001) to raise confidence of nursing students to assess, detect and refer patients who may have the disorder. More specifically, the results provide support use of the transtheoretical approach to intervention development within an organisational and educational setting. The current study provided a unique opportunity to develop an intervention to increase adherence to practice guidelines. Furthermore, in future, this may have indirect benefits on health of the patients with AN, although this aspect requires further research to confirm impact of the intervention on actual behaviour. Furthermore, the current study provides particular support for the use of film as the medium of intervention to increase confidence in nursing students. Overall, the current study contributes to the literature regarding usefulness of the TTM to create organisational and educational interventions.

Overview and summary of reflexive chapter

Often the focus of the thesis relates to theoretical, methodological and practical implications of the research study process and outcome, yet often fails to acknowledge that the research is a learning process for the researcher. Therefore, it is important to acknowledge the limitations of the researcher in order to highlight the learning process and make recommendations for future practice.

Firstly, the researcher recognised the value of the reflective process. Reflection provided opportunities to consider the strengths and weakness of the approaches that were used, and allowed justification for chosen methods. This is not to say that the research process was without fault, more that the researcher was able to learn from mistakes and use it to inform future approaches to research. Hence, the researcher's learning took places across a number of different areas.

Firstly, the researcher recognised the value of data recruitment collection skills, including the importance of developing interviewing skills during Study 1, and the design of tools across each study (e.g. interview schedules and evaluation questionnaires). Designing tools for data collection can be difficult. The researcher learned that careful attention to previous literature should always be made, and establishing reliability and validity is crucial to making conclusions about the results of the studies. Without a reliable and valid tool, the results cannot sufficiently answer the research question.

The researcher also noted that specific skills regarding intervention design were required including how to bridge the gap between literature and practice. The use of different approaches to intervention design provides some guidance for intervention development, but this is in no way a fool proof guide. Therefore, the researcher recognised the importance of justifying decisions with evidence from the literature wherever possible, or admitting when the literature is scant.

The researcher recognised that collaborating with others during the research process can sometimes be difficult. Although the collaborators can provide suggestions, the researcher should feel confident to recognise their own strengths and weaknesses. In particular, researcher should be confident to admit when they are not able to answer proposed research questions but feel capable of justifying decisions when opinions diverge.

The researcher also reflected upon the writing of the thesis, the viva examination and the ability to assimilate recommendations in future. The research concluded that writing the thesis and preparing for the viva examination should receive considerable attention. The researcher recognised that the learning process did not finish when the results were analysed. Furthermore, the researcher explicitly notes the importance of record keeping so that all decisions may be justified. Moreover, the logs will provide evidence which the researcher may revisit them later to write. If this is not carried out, then important decisions may lack justification and the write-up may sell the research short. Furthermore, such justification will enable the researcher to be confident during the viva examination. The researcher concludes the reflexive chapter by exploring whether they have developed throughout the PhD process, including areas that may be developed in future.

Future research considerations

The thesis has results in a number of methodological, theoretical and practical questions that may be answered by future research. Firstly, the basic needs expectancy model described in Study 1 should receive particular attention. Future research should concentrate on testing predictions, hypotheses and assumptions that the model makes. For example, the model proposed that if a person has a positive expectation of treatment, and this is not met, then they are less likely to have motivation to engage in treatment and recover. Furthermore, research should clarify whether there are any constructs missing from the model and update the model if appropriate. This has been a typical approach to model design. Further research would service to establish efficacy for the model to be applied to care of patients with AN, in particular whether the model would be useful in developing efficacious treatments for the disorder. There is a considerable amount of effort required before that conclusion may be made, nevertheless further research is recommended.

Future research should also consider the effect of meeting patients' basic needs during treatment. Rather than testing the components of the model, this research may explore instances where the needs have, or have not been met. Study 1 was approached from an atheoretical stance, whereas future research could be based firmly within the SDT literature. For example, patients could be asked directly whether they felt cared for, had control during treatment and felt competent to recover. This could then be related to their motivation to engage in treatment and recover. This would lend further support to the conclusions of Study 1, and contribute useful evidence to the current SDT literature specifically for EDs.

The results from Study 2 suggest that the use of posters as a medium of intervention is questionable. The limitations of the study were acknowledged as there were a number of difficulties that the researcher faced during intervention development. Firstly, the literature regarding poster *design* is scant. Although there are many studies that use posters both on their own and within multimodal approaches to behaviour change, the actual development of the poster is rarely described. More often it is simply stated that the intervention was based upon a particular model (e.g. TTM or HBM) or developed using a framework (e.g. Social Marketing), but the way in which the theories and models were integrated remains elusive. Furthermore, literature regarding the effectiveness of specific design elements are often missing from the behaviour change intervention literature. Therefore, future research should concentrate on determining the impact of different design elements of posters so that more

specific evidence for campaign developers may be made accessible. A further consideration should be exploration of the positioning of posters. Often literature reports the position of posters, but makes no comparison with alternative positions.

At pre-intervention, NSs, on average, rated their confidence to perform *all* activities on the NSSEIMANI, and therefore overall confidence in initial management of AN, as being between moderately to highly confident. Then, following the intervention, their confidence increased significantly to very high. Although there were no predictions regarding the baseline confidence ratings on the NSSEIMANI, the results raise some important questions. Firstly, is the moderate to high confidence rating at pre-intervention justified? Further research is crucial in order to establish whether NSs are actually able to perform the behaviours in reality. The intention-behaviour gap in behaviour change models has been questioned in previous literature, and therefore a further study to explore confidence ratings and their relationship to actual behaviour is pertinent, especially when developing interventions using models of behaviour change for NSs.

There is a dearth of research regarding nursing students' and newly qualified nurses' interactions with patients who have eating disorders at first point of contact. Research has generally focussed upon the contributing factors to successful therapeutic relationships where nurses are specialists in mental health, or where the patient has already received a diagnosis (e.g. Ramjan, 2004; Kind & Turner, 2000). Given the importance of the patient-practitioner interaction for development of therapeutic alliance at first point of contact, and the importance of early intervention for improved prognosis, there is sufficient justification to explore this area as a matter of priority.

Thomson-Brenner, Satir, Franko and Herzog (2012) carried out a review of 20 studies published between 1984 and 2010 and reported HCPs' reactions to patients with eating disorders. The review found that negative reactions experienced by HCPs towards patients included feeling frustrated, helpless, incompetent and worried. The results from the current study contradict their findings, as NSs are confident in being able to manage care during initial contact with patients who display symptoms of the disorder. Further research that specifically explores relationships between NSs reactions to eating disordered patients and their confidence ratings is recommended.

According to the TTM, NSs already possessed high levels of confidence prior to the intervention. The model suggests that NSs who had moderate to high self-efficacy may be in the preparation, action and maintenance stages of change. This has possible implications for the way that the TTM intervention was received by NSs. If the students were already at least moderately confident in performing the behaviours on the NSSEIMANI, then according to the TTM, the processes of change associated with the preparation, action and maintenance stages may have increased self-efficacy in the NSs. For example, Teams for NSs at the preparations stage, consciousness-raising, commitment and counter conditioning for NSs at the action stage, and stimulus control, helping relationships and reinforcement management for the maintenance stage. Further research to confirm NSs pre-intervention stage of change, and the relationship to their level of confidence, is required. Furthermore, clarification how the intervention performs with NSs at different stages of change would be an interesting area to explore further.

Further evidence should be gathered in order to confirm the reliability and validity of the NSSEIMANI both within the current sample and its applicability to other samples. It may be possible that the NNSEIMANI would be suitable for use with other HCPs, but this cannot be assumed. Further reliability and validity testing should be carried out, for example, concurrent validity by comparing the current measure to the Generalised Self-Efficacy Scale. Test-retest of the NNSEIMANI would also add to the evidence from the current study, and establish the scale as a measure of self-efficacy that could be utilised in future related studies.

Finally, it would be feasible to explore whether the intervention can be used in continuing professional development for qualified nurses. The film may be accessed online and used for distance learning, negating the need to attend the workplace. As qualified nurses often have study days, it would be interesting to determine whether the intervention can increase self-efficacy in initial management of AN via distance learning with a qualified sample.

Conclusions

The application of the Self-Determination Theory to the treatment of anorexia is appropriate. Figure 53 outlines the key components of SDT across each of the studies.

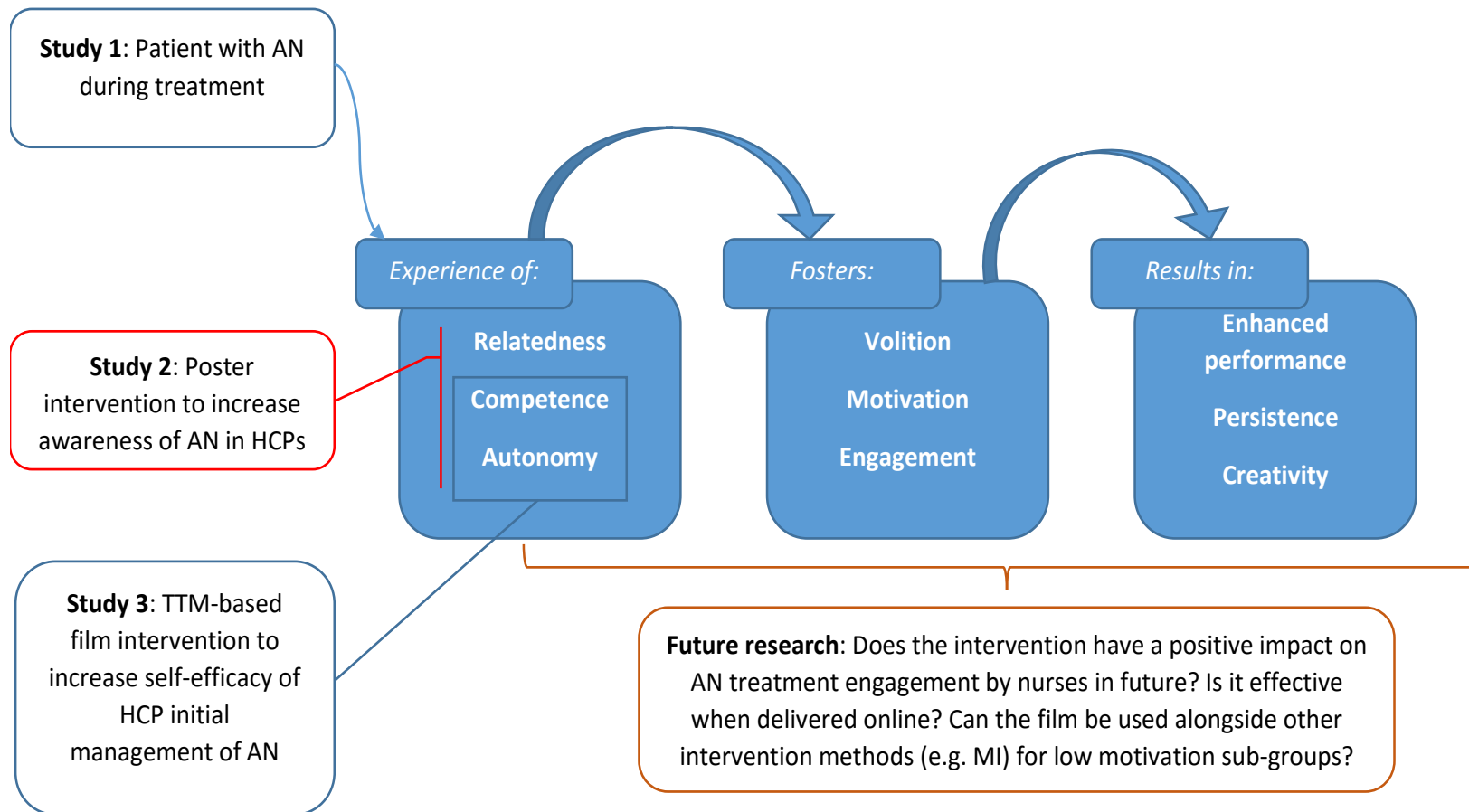


Figure 53. Application of the Self-Determination Theory to Treatment for Anorexia Nervosa

More specifically, the results from Study 1 reveal that HCP knowledge of anorexia is a positive expectation of treatment, yet many HCPs lack knowledge of the disorder. Failure to provide for the basic needs of the patient has a negative impact upon the therapeutic alliance, and results in poor motivation to engage in treatment and negative future expectations of treatment.

According to the basic expectancy model of motivation developed from the results in Study 1, establishing the patients' basic psychological need expectancies will result better TA, higher motivation and satisfaction during treatment. Future expectancies of treatment are more likely to be positive, therefore ultimately increasing the chance of positive engagement in treatment and outcome in patients with anorexia nervosa. Whilst it is advisable to carry out further research to explore the usefulness of the basic expectancies model, the principles may be used by patients and HCPs to determine a mutually acceptable approach to treatment.

Finally, the HCP report the desire to learn more about the disorder, indicating that they want to feel competent at their role. The use of posters as a medium to raise awareness of anorexia in HCPs in meeting the basic psychological needs (autonomy, relatedness, competence) of HCPs is questionable. Use of a TTM-based film intervention was successful in increasing nursing students' confidence to manage initial presentation of AN. Overall, implementation of the intervention will not only benefit patients, but will also benefit HCPs by making them feel more competent and in control in the management of care towards people with the disorder.

From Student to Researcher: A Reflexive Account of my PhD Journey

Considering Reflection, Reflective Practice and Reflexivity

When I first began to think about how I would construct my reflective chapter, I have to admit that I thought it would be very easy. My initial reaction was to think that it would be simple to think over what I had done, and how I had learned from the experiences throughout my journey as a PhD student. When I began to explore how I would even begin to construct my reflexive chapter, the problems and confusions began. Firstly, I consulted simple guidance documents available at the university regarding reflective writing. The advice seemed clear: to reflect on my learning and experiences, including my mistakes, in order to identify what went wrong, and what worked well. As I consulted more guidance, the terminology became more and more unclear to me. Firstly, I observed that there are several different definitions of reflection. Then there were different terms used in the academic journals, such as reflective practice, critical reflection and reflexivity. I also noticed that there was a considerable difference in approaching reflection-in-action and reflection-on-action. Before I was able to begin the process of reflective writing, I also needed to choose a method of reflection that was suitable for my research area, and more importantly, to demonstrate my journey from PhD student to researcher. It was also important for me to reflect over my reflection confusion, think about how I could overcome it, and learn from the experience.

Boud, Keough & Walker (1985) suggest that reflection is “a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to a new understanding and appreciation” (p. 19). Here, I began to understand reflection terms of my pre-existing knowledge, my experiences, and feelings related to that experience, and how this facilitated achievement of deeper meaning and understanding.

I began to think about how I had already carried out reflection throughout my journey. I had kept personal reflective journals throughout the research process regarding development of my skills as an interviewer, and whilst collecting my data. At first I was pleased to read that:

“As a private document, a journal can include whatever you want it to. There are no rules about personal reflective writing – the important thing is to use it to achieve the purpose you are using it for, and to write in it in a way you want to write in it” (Jasper, 2008: p. 2000).

True to Dewey's (1933) suggestion that reflection stems from doubt, here is where my doubt began. I started to think about my reflective journals, and their purpose. I needed to think about the reader, and the purpose of my personal accounts. I would need a structured way to approach my reflective writing. I learned that even though I had engaged in what I believed to be reflection, I had much more work to do in demonstrating my reflective ability.

As I began to think about how I would reflect, I noticed that a distinction had already been made between reflection at the time of the research, and then reflection after the fact. Schon (1983) distinguished between two types of reflection: reflection-on-action (after-the-event thinking) and reflection-in-action (thinking while doing). I had indeed engaged in reflection-in-action during my journey from PhD student to researcher, but my journals would need to be revisited in order to demonstrate the outcomes. I also needed to engage in reflect-on-action in order to show my current position as researcher. Mann, Gordon and MacLeod (2009) reviewed literature relating to reflection and reflective practice, and confirmed that reflection appears to fulfil several functions, including helping to make meaning of complex situations and enabling learning from experience. The point is to recapture practice experiences, and mull them over critically in order to gain new understandings and improve future practice. This is understood as part of the process of life-long learning (Finlay, 2008). Mann *et al.* (2009) suggest that reflection does not occur in all situations; the process appears to be stimulated most often by complex problems. As the perceptions of these problems vary according to individuals' experience, the process will vary across individuals and the contexts in which they practice.

Gibbs' (1988) reflective cycle (see figure 54) is a model of reflection that is commonly used to structure reflection. Built from Kolb's (1984) experiential learning cycle, it proposed that theory and practice enrich each other in a never-ending circle.



Figure 54. Gibb's Cycle of Reflection (1988)

Whilst Gibb's reflective cycle offers useful basic questions to help structure reflection, I found that others argued that a broader, more critically reflexive account is needed (Eby, 2000; Fook & Askeland, 2006). For example, Finlay (2008) argues that there is debate over the extent to which practitioners should focus on themselves as individuals rather than the larger social context.

Reflexive practitioners engage in critical self-reflection: thinking critically about the impact of their own background, assumptions, positioning, feelings, and behaviour, while also attending to the impact of the wider organisational, discursive, ideological and political context. Finlay (2008) suggests that the terms reflection, critical reflection and reflexivity are often confused and wrongly assumed to be interchangeable. Finlay and Gough (2003) find it helpful to think of these concepts as forming a continuum. They suggest that at one end stands reflection, at the other end stands reflexivity (a more immediate and dynamic process which involves continuing self-awareness) and critical reflection lies somewhere in between. Observing this distinction helped me to think about how I might begin to structure my

reflexive account. Although I might use Gibb's cycle of reflection to help me think about reflecting back on my experiences, I would also need to include consideration of the wider context. That way, I would be able to provide a comprehensive account of academic development throughout my journey.

On reflection, I first considered that the reflexive section of my thesis would be easy to write. Nevertheless, rather than simply relying on my previous knowledge of reflection, I decided to apply myself to the task by exploring the literature relating to reflexive writing. The experience helped me to think about what I could include in this chapter. I decided that Gibb's cycle would be useful to help me structure my thoughts, I would also have to engage in a deeper, more critical reflection in order to demonstrate my learning within the wider context.

How It All Started

Following my degree, I decided to continue my studies as I wanted to learn more about the research process. I began to explore how I could carry out a research study exploring treatment for eating disorders. Whilst discussing this with several psychologists, a lecturer from my undergraduate degree realised my interest, and invited me to carry out research within a local health service in Wales. I was very interested in this subject area because I have had both personal and professional experience of the treatment of eating disorders. My undergraduate lecturer stated that their overall aim was to find out more regarding the positive and negative aspects of the service for eating disorders in Wales.

Planning and Implementing Research Studies

Collaborating with Others during Protocol Development

The first stage of designing the research project involved several meetings with the clinical psychologists and members of the All Wales Eating Disorders Special Interest Group. Here, the aim was to develop a study that explored the patient journey through the Welsh healthcare system. I was very ambitious and willing to take on anything that they suggested at the time. I also felt that I wanted to do a good job of the research in order to develop my career. The process of developing the research question had both positive and negative outcomes for my development as a researcher. I was able to learn about the health care service, attend meetings and engage with health care professionals who were involved in the treatment of eating

disorders. As a consequence, I felt more confident in my ability to conduct this research project.

During the protocol development, it gradually became apparent that our expectations of the study were too great. For example, the psychologists from the health service suggested a mixed methods approach to data collection, recruitment of a sample including adults and children, and a comparison of rural and urban areas. It was becoming complicated considering the research was intended to be part of a Masters by Research. Furthermore, at times where I made an amendment, another collaborator would ask for the protocol to be adjusted. The collaborating qualified psychologists also had an interest regarding the outcome of the data, and as I felt I was in an inferior position to them, it was sometimes difficult to disagree with their comments. It took around 18 months alone to develop the study protocol with everyone's approval. This challenge was exciting, but also daunting.

Following protocol development, I applied for ethics approval from the NHS to access the data and interview patients that were considered vulnerable. The process was difficult and time-consuming, but forced me to reflect upon aspects of my proposal that may not have been considered until data collection, analysis or dissemination. The NHS provided useful templates for consent forms and information sheets which encouraged me to be specific about the study protocol. Whilst it took a long time to develop the documents to include everything the NHS required, it was beneficial as it enabled me to experience how it felt to carry out real world research. The pressure to manage the project at a high standard felt insurmountable. Real healthcare professionals and service users might potentially rely on me to present representative and accurate data. I wanted to give service users a voice.

The dichotomy was that I had to go through the process in order to learn from it. It isn't something that I could have foreseen without first-hand experience of collaboration. Although this development was tough, it made me a stronger researcher. I was quite naïve at the beginning, and often listened to the advice of others without deciding for myself. Most advice was useful, but some caused extra work and confusion. My research in this phase was valuable, but I can now appreciate the places where I could have acted differently. Now that I am more self-assured in my ability, and I am able to make decisions and justify them.

Designing Tools for Data Collection

My first challenge whilst designing tools for data collection was to develop the interview schedule. As I started to write questions, I realised that it would be appropriate to conduct a thorough literature review, establish my aims and operationalise definitions. Prior to writing the schedule, I thought that writing the schedule would be easy. I would just write down some questions that related to patients' experience of treatment. I was very wrong! I had to account for various constructs of treatment experience, such as motivation, engaging in treatment, and therapeutic alliance. I also had to ask them about their overall journey and so the content felt complicated before I began to write the schedule. I decided to look towards quantitative established measures, as inspiration for the questions I would include. This would then allow me to devise open questions where the participants could tell me about how they felt. It would also allow me to explore the relationships between the constructs at a deeper level.

Writing the questions was a long process. It took a lot of effort to consider all the questions and prompts that might be suitable. Before the pilot, I wrote questions using an academic style. Unfortunately, when I carried out a pilot interview, I realised there was more to consider when conducting an interview. The questions on the schedule were sometimes worded inappropriately, and were therefore difficult to read out to the participant. I started to think critically about my approach. For example, instead of asking whether they established a therapeutic alliance with a healthcare professional, I could simply ask "how was your relationship with this person?" or "did you get on well with that person?"

Throughout my training, I noted that I would need to encourage the participant to talk openly. I would not start to ask questions regarding my research aim until I felt that the participant was talking openly. For example, I included an initial question "can you tell me something about yourself?" Use of such general, open questions helped me to assess how the participant was responding. This was a valuable lesson in my ability to develop semi-structured interview schedules. It was sometimes tempting to begin by asking difficult or intimate questions when I was feeling nervous. By using a carefully planned approach, I was able to create an atmosphere where the participant felt comfortable. I also decided to use font, headings and colours to enable me to navigate through the schedule during the interview. For example, I used colour to distinguish between headings and questions, so that if I became

distracted, I would not accidentally read the wrong part of the text. By identifying this approach, I increased my ability to develop semi-structured schedules.

For Study 2, I designed an intervention to increase awareness of AN in HCPs using a mixed-methods approach. I carried out focus groups and interviews for the formative and process evaluation phases, and employed a quantitative questionnaire to evaluate the outcome of the intervention. Prior to the focus groups and interview, I constructed focus group and interview schedules where I used open, general questions regarding intervention content, purpose and design. I also modified the schedules after each data collection session, so that I could allow the data to evolve from the previous focus group. I recalled the skills I had developed in designing questions from Study 1, and put these into practice for Study 2. For example, removing terminology that may not be understood by participants. I believe that by using this method, I was able to explore HCPs evaluation of the AN awareness campaign, their perception of their knowledge of the disorder.

In order to collect quantitative data, I designed questions to establish whether the intervention had raised awareness of AN. On reflection, prior to writing the questionnaire, I should have operationalised the purpose of my intervention. Therefore, I could have designed my tool more specifically to the variables of that definition. For example, my intervention did not contain any information regarding the symptoms of AN, but I included this as a question in my tool. I think the most valuable lesson that I have learned from this experience is to think carefully about the variables that I would like to manipulate or measure in relation to the data my tool would produce. I also designed different versions of the questionnaire throughout the data collection phases. I did this because I wanted to find out specific feedback each time I collected data so that I could refine my intervention gradually throughout each phase. What resulted was a variety of different data that did not adequately reflect the aims of the study. I sometimes felt confused and found it difficult to decide what to include as I designed the tools. I read lots of guidance on how to construct questionnaires, but I didn't understand why it did not help. I felt frustrated that the measures didn't appear to measure awareness of AN.

As I approached Study 3, I was careful to operationalise the purpose of the intervention and the variables of the study. I chose to focus upon self-efficacy as a variable that could be manipulated by viewing of the intervention, and so it became apparent how I could measure the effects of the intervention. I consulted specific guidance on how to construct self-efficacy tools, and I felt assured that my tool was valid. Although I had previously aimed to raise

awareness of AN in Study 2, I found it difficult to establish whether this had happened as a result of the posters. I was determined not to let this happen again, and decided to be specific about the purpose of the next intervention. By doing this, I was able to construct my tool specifically in relation to the intervention content. For example, one purpose of the intervention was to increase NSs confidence in their ability to ask screening questions. The items on my tool directly related to their confidence in asking screening questions for AN. By using this technique, I was able to measure the differences in NSs self-efficacy of screening behaviour before and after the intervention was shown.

After I devised the self-efficacy tool, it was checked for face and content validity not only by the research team, but by qualified nurses and nursing degree lecturers. In future, I will make sure that as I design interventions, I will establish the specific purpose of the intervention and consider that purpose in relation to the outcome measure. I will operationalise my variables, and I will assess the tool for face and content validity. What I have found throughout this process is that I have progressed substantially in my ability to construct valid questionnaires. This has made me feel more confident in being able to establish whether an intervention is, or is not, successful.

Designing an Intervention

The results from Study 1 suggested that HCP knowledge of AN had an impact on the treatment experience of people who had the disorder. I recognised that it would be difficult to educate every single HCP to specialist level. Therefore, I felt that an awareness campaign for AN would be appropriate: to ask HCPs to simply consider AN when they saw patients in future. I visited literature regarding the process of intervention design, and used the social marketing approach to provide a phased approach to intervention development. During the formative research stage, I carried out focus groups and interviews. Results suggested that some HCPs wanted to learn in-depth information regarding detection, assessment and referral of people who had AN. This contrasted the aim of the study: to create an intervention that raised awareness of the disorder rather than gave detailed information. I had also decided to use posters as the media channel, as literature regarding their use in health education mass-media campaigns reported that posters were a cost-effective, simple method of message delivery. Results from the focus groups and interviews suggested that the posters might not be adequate. On reflection, the results from the HCPs indicated that the intervention needed to be more comprehensive. Furthermore, during the process evaluation phases, HCPs

suggested that they had not seen the poster, again suggesting that the use posters may not appropriate. This could have been a turning point during my decision to use posters as the media channel for the intervention.

I learned a lot from the social marketing approach, such as audience segmentation. My audience would be HCPs in general, and inclusion of different types of HCPs in the formative research phases provided guidance for the intervention design. I included nursing students, chiropractic students and clinical psychologists in the formative research and process evaluation stages, and then qualified nurses and GPs in the outcome evaluation. A problem arose when I reflected on the differences between types of HCPs and their reactions to the intervention. For example, chiropractic students indicated that they did not think the intervention was relevant, but nursing students wanted more information about AN. This was frustrating as the intervention was meant to benefit all HCPs, but it appeared that rather than raising awareness, it presented more questions.

The social marketing approach partially focuses upon using relevant theory and literature to design an intervention. I was aware and fully committed to using theory to underpin my intervention design, and decided to use a number of different factors from different theories and models of behaviour. I decided that by including as many elements as possible, the effectiveness of the campaign in raising HCP awareness of AN might be increased. The models were useful in conjunction with the data that I had collected from the focus groups and interviews when designing the posters. A problem I encountered was how to measure the effectiveness of each of the components of the models, and how to measure whether the intervention had indeed raised awareness of AN. I was under time pressure, and sometimes I failed to make records to justify the decisions I had made.

I have learned a considerable amount when designing interventions for behaviour change. Designing the poster in Study 2 taught me to think of intervention design as a strategical process. Campaign development was new to me, and I found that there were many things to consider when designing an intervention for behaviour change. The results of Study 2 demonstrated that the audience, media channel, and appropriate theory during intervention design and evaluation was vital. Although I had segmented my audience to HCPs in Study 2, further segmentation was needed in order to make my intervention relevant.

During Study 3, I was able to consider NSs feedback from Study 2 regarding the intervention design. I was able to acknowledge their desire for detailed information regarding detection, assessment and referral of people with AN. Furthermore, I understood that I should consider my media channel at a deeper level. I revisited the literature on media campaigns and considered what approach would be most suitable for the purpose and audience of my intervention. I also understood that I had to choose my variables carefully. I explored the literature on behaviour change, and noted that self-efficacy was a common construct in all models I considered during Study 2. I was able to select the TTM as a framework for my intervention, whilst being able to operationalise NSs self-efficacy as my independent variable. Use of the TTM enabled me to design my intervention based on the processes of change, a component of the model which had received support in raising self-efficacy in NSs. Overall, use of the TTM enabled me to have a clear strategy during intervention design and evaluation. From a broader perspective, I have learned that not only is it useful to design an effective campaign, but it is just as valuable to recognise the limitations of an intervention. By doing so, I would be able to develop more effective interventions in future.

Gathering Data: Preparing for the Interviews

Before I engaged in data collection, I decided to carry out a pilot interview with a lady who had previously received treatment for AN. When I was progressing through the schedule, the participant gave limited answers despite the use of open questions. I felt unsure in how I should approach the interview and I felt that the resulting data was limited. I was pleased that I had carried out a pilot interview, because the experience taught me that I should spend more time working on my interviewing skills for a vulnerable population. As a consequence, I engaged in training to develop interviewing abilities.

I realised the importance of developing a relationship with participants from first contact. I knew that there was a possibility that when I sent the information packs, participants may be reluctant to participate. I spoke to them over the phone so that I could talk to them about the research. I would discuss any reservations they had, and convey that it was their opportunity to share their views regarding the service for eating disorders in Wales. I felt uncomfortable about advocating the benefits of their participation as I didn't want to appear like I was being coercive. I decided to approach the phone conversations in a non-judgmental but informative way. I stated the value of the research, but allowed them to make their own decisions regarding participation.

I realised that the way I presented myself may influence the quality of the rapport I could develop with the participant. At first this caused me concern, as I wasn't aware of how to develop a good relationship. I visited guidance on how to make the most of interviews. I researched attire for interviews, and found that smart casual was usually the most appropriate choice of clothing. During the interview, I considered the importance of positioning of the researcher in relation to the participant. For example, not standing when they were sitting in order to maintain eye contact. I recognised that small details were important, such as accepting the offer of a drink, and so I decided to make a conscious effort to be polite. Although this may be something that might be considered obvious, I wanted to make sure that I had taken all opportunities to make the participants feel comfortable. When I first met each participant, I would ensure that I was pleasant and approachable. I explained their part in the research and their right to withdraw. I gave them the opportunity to ask questions, and reassured them that should they not understand or disagree, they could tell me. I feel that my prior planning made me more confident during data collection, and so my confidence also made the participant feel more comfortable during the interviews.

I decided to approach the interview questions by consciously thinking of the participant as the expert in the subject area. When I designed the interview schedule, reflected this approach in the way I wrote the questions. I was aware that the participant might not have understood some of the questions, or that her cognitive ability may have been compromised by AN. My training made me realise the importance of clarification, and so I also decided to confirm with the participant that she had understood the question.

I was aware that I was interviewing people who were classed as a vulnerable population. I wanted to show the participant respect, and acknowledge their feelings during the interview. I was aware that the participants could be recalling experiences that may be distressing. I decided that I should always remain aware of facial expressions and gesticulation, and smile or used other appropriate responses in order to reflect the mood or type of topic being discussed. I was conscious of time and always reassured the participant that we could stop at any point. Apart from this being an ethical consideration, it showed the participant that I was considerate during the interview. Towards the end, I decided to return to everyday conversation such as general statements about weather, or a return to a comment about hobbies that were discussed at the beginning of the interview. I did not leave the participant on a after discussing a difficult subject, and felt that drawing the conversation to a close in a

more general manner was more personable. Finally, I emphasised that I was thankful for her participation in the study.

Learning during the Interviews: Reflection-in-Action

Throughout the interviews, I kept a reflective journal to document what had happened, how I felt about it and how I could plan for the next interview (see Appendix 6). I also engaged in verbal and email reflections with the other members of the research team. I identified during my training in interviewing skills and qualitative data collection that reflections were important. It helped me to focus on any problems that occurred, and how I could overcome them. That way, I enhanced my skills as a researcher, whilst focussing on areas of interest in the data.

During the interviews, I realised that although I had developed new skills throughout my training, they weren't a guarantee that I would elicit meaningful data. I had to be flexible in my approach to asking questions, and to be very familiar with the questions that I was asking so that I could ask them in a different way if the participant did not understand. The semi-structured interview schedule was appropriate, as the participants often gave very detailed answers. At times, it felt as though the participants answered questions from later in the schedule. Familiarity with the interview schedule allowed me to make notes regarding the participant's answers, and then refer to them later when asking them to provide more detail. The nature of the disorder also seemed to present a problem when I asked questions about their treatment experience. Participants described difficulty in answering my questions due to splitting of their internal voices. Participants reported that one part of them wanted to answer for their well-self, and the other part for their anorexic-self. I was aware of this at all times during data collection, but I could not specifically refer to it as I didn't want to influence their answers.

I made the choice to give participants the option of hospital or home for the location of the interview. By allowing the participants to choose the location, it enabled them to make a decision regarding where they would feel most comfortable. The problem with giving participants this choice was that when they chose to hold the interviews at the hospital, it felt formal in comparison to the home interviews. Participants who chose the hospital appeared to view the interview as something that was being conducted from the Welsh Healthcare Service. I spent time with the participants explaining that their data was confidential and that

I was not NHS staff. Participants also appeared concerned about HCPs finding out about how they felt regarding their treatment experience. By allowing participants to choose the location, I ensured that they felt in control. Nevertheless, in future I will be able to anticipate the difference of location, and prepare myself in what I should expect.

At the first interview, we went over the 90-minute time frame I had anticipated. This highlighted that my preparation in devising an appropriate interview schedule, and development of interviewer skills, was eliciting enough data. In subsequent interviews I made participants aware that the interview would possibly go over time, and I checked that they were happy to continue until the end. In future, it will be valuable to know that this problem may be part of the process of qualitative data collection, and is useful when trying to reach saturation of themes.

I was surprised when participants revealed information regarding their experience that I had not anticipated. Although I was carrying out an exploratory study, I expected the results to be clear. When gathering qualitative data, it is not unusual for new concepts to emerge, yet I found this unnerving. I was excited about the amount and quality of data that I collected, but I was also nervous about conveying the results through my writing. This highlighted the need for me to revisit the literature throughout data collection, analysis and write-up. At this point, I realised that reflection-in-action for the qualitative data collection was very important in helping me make sense of my data.

I did not anticipate the effect of talking to participants who were experiencing a mental disorder. Some of the participants I saw were thinner, and some became emotional during the interview. I did not fully consider the impact of discussing difficult topics with the women. I often found myself having to be careful about wording of questions so that I did not make them any more upset. The emotion in which the women related their stories was intense, and although I believed I was able to remain impassive during the interviews, their recollection of treatment experiences provoked reactions by me, such as dismay (that these situations could arise), outrage (on their behalf), and defensiveness (that care had fallen short of what was expected). I was particularly moved by the women's description of events that were not specifically related to treatment, but that had impacted on their outcome. For example, participants described physical assaults, sexual molestation, and break down of relationships with family members. Conversely I also had to manage the feelings of happiness, excitement and satisfaction when participants revealed detailed accounts of their

experiences. As a researcher and interviewer, to gather rich data is desirable. In these interviews, this felt wrong when discussing the negative aspects of the women's care. I also sometimes felt intimidated by the participants when they reacted emotionally to the questions in my interview schedule. What I have learned from this experience is that not only will the participant feel emotions during the interview process, but so will I.

When completing my reflective journal, I made a conscious effort to identify and record my own positive and negative feelings and impressions so they could be acknowledged prior to carrying out data analysis. I was able to reflect with my supervisors and this was invaluable when feeling as though someone else was there to listen about *my* emotions. I admit that prior to the interviews, I thought that reflective journals and supervision sessions were just a tick-box exercise. Now I understand the value of such reflections when collecting qualitative data with a vulnerable population. In future, I will be aware that I may have an emotional reaction to the interviews. I will ensure that I allow myself the opportunity to reflect on the experience fully by keeping a reflective journal, and engaging in reflection with others in my field.

Making Sense of Data

During data collection and analysis for Study 1, I had to step away from the data and look at the broader picture. I had to remind myself that these participants' experiences may not be representative of all the people receiving care for AN. I became emotional during the process of data analysis. It was easy to code and dissect the data to the point where the story became lost. The nature of my method of analysis, and the computer programme I used, meant that the interviews were split up and reconnected in a different ways. As I had interviewed the women, I felt a connection to their stories and wanted to portray this in the results.

What I have learned from this experience is that qualitative data collection is much more complicated than it first appears. Data is messy, and sometimes it is difficult to pull out elements without losing part of the important detail. I feel justified in my method of analysis for Study 1 and have an intimate knowledge of framework analysis. I carefully considered the most appropriate method as the analysis would be time-consuming. It was the most suitable choice in order to develop a framework to explicate relationships between factors of treatment. I was aware that there were other methods of data analysis that I could have

chosen, and I am now confident in selecting an appropriate method should I decide to approach research in a different way.

During Study 2 and 3, I used a mixed-methods approach that produced both qualitative and quantitative data. I chose thematic analysis as it provided a structured approach which allowed me to easily identify, analyse and report patterns regarding HCPs views on campaign content. Although I have already noted my development regarding designing tools for data collection, it is important to briefly consider the impact upon the data it produced. For Study 2, I did not operationalise my variables and this made designing the tool difficult. The tool produced data, but it was difficult to conclude whether the results reflected the aim of the study. At first, I found myself focusing on the positive results during data analysis, and this meant that I began to write conclusions that were not fully justified. I rectified this by revisiting my conclusions in Study 2. In Study 3, I operationalised the variables and designed a tool based on previous literature. As a consequence, I was able to interpret my results appropriately, acknowledge the limitations, and provide realistic conclusions and recommendations for future research.

From Thought to Page: Writing the Thesis

After I had collected and analysed the data for Study 1, I began the process of writing up the results. From previous experience as an undergraduate, I was aware that writing up reports for research could be difficult. I did not anticipate that I would be confused about how to write up the results, or how to manage my time effectively when writing. I had kept a small number of logs and reflections regarding my decisions, but these quickly became forgotten or I felt they were of limited use. I also found that the more I engaged with writing, the more confused I felt. This was partly due to the nature of qualitative data collection. For example, the data set for Study1 was huge, yet in order for the results to be understood, I had to link the concepts in a succinct, meaningful way. I began by familiarising myself with the data so that I could analyse it appropriately. I was able to think about how the different concepts linked together, but at times, reporting the results on paper proved difficult. It was easy to become immersed in the own data so much, that it felt hard to relate it to other research. I found that the women's journeys covered so many different areas of the literature, that I could analyse the data and present my findings in many different ways.

I had to account my for decisions, and sometimes it felt impossible to justify the way I had engaged with research. During the research design process, I had referred to literature to support my decisions. Unfortunately, I had not recorded my decision process appropriately and this made it difficult to write a justification for my thesis. I felt frustrated at times that I was not writing in a way that reflected how confident I felt in my research. From this experience, I learned that I had missed a crucial element of the research design and implementation process. I had not made sufficient notes to which I could refer during my writing. For example, I had gathered literature in order to design my interview schedule, and began writing the literature review for the study. Due to part-time study, there would be times where I was unable to complete my writing, and often this resulted in lack of evidence to support my decisions. For Study 2, I found myself experiencing a similar pattern. I would make decisions, implement changes to the protocol, intervention or even my analysis, but sometimes fail to make sufficient logs of the process. I had ideas about what I wanted to include, and my decisions felt justified, but I did not engage in active writing of reflections or document the outcomes of my literature reviews.

At times I found it difficult to remain objective when interpreting the results of the study. For example, for study 2, I often found myself focusing upon positive results that appeared to show the intervention was successful, rather than admitting that it was not successful in raising awareness of AN. For example, I used the feedback from HCPs to modify the content of the poster, but failed to acknowledge the importance of the finding that the HCPs did not see the poster when it was positioned around the campus. I have learned that I should engage in regular reflections relating to the results of the study, and to ask myself to be objective during interpretation of the results.

During Study 3, I had identified that I needed to make thorough notes regarding decisions I had made. I engaged in regular reflective exercises, including reflective logs, so that I could refer to them during the writing-up stage. For example, I had decided to focus upon one aspect of the TTM for my intervention, but I also needed to remember why I had chosen this model. I documented that I had noticed that the concept of self-efficacy was supported by a variety of different literature sources. When it came to writing up my literature review and intervention design process, I was able to recall my decisions. As with the earlier studies, I began writing my literature review early on, but this time I operationalised my variables. My reflections and logs provided me with a clear account regarding the design of my

intervention, and the data I had collected. I acknowledged that the choice of medium was as important as the content of the message. I thoroughly revised my channel of intervention, and changed from text-based to audio-visual medium.

In future, a valuable lesson that I have learned during research is that I need to document every decision I make. I need to make reference to relevant literature, and account for turning points in the research process. I have learned how to engage in reflective writing by considering its purpose and using models to structure my writing. Not only did reflective writing help me to think my development, but it also supported me when I had to make decisions regarding my methods. When there were periods of time where other commitments took priority over my research, such as paid positions or family matters, I was able to begin again by looking back at my journals and writing. By doing this in Study 3, I was able to account for the psychological theory or research that underpinned my decisions, and integrate it into my writing.

I realised the importance of reflecting on my results and remembering the purpose of the study. That way, I could look at my results in a critical way, and acknowledge any limitations. I noticed that I had previously presented my findings from my own perspective using limited literature to support my points. The process helped me to revisit my writing and consider what conclusions I could sufficiently provide, given the approach and methodology that I had used. I was able to provide realistic recommendations that were based upon critical thinking, rather than limited conclusions regarding success of the intervention. In doing so, I was able to think about my results from the wider context, and therefore the results would be more useful as a contribution to knowledge in my field.

Surviving the Viva Examination and Resubmission

I had finished my research studies, and written up my thesis. My viva was approaching, and I felt as though I was ready to defend my research. I was nervous, but I also experienced excitement in anticipation of hearing the words “congratulations you have passed”. I was optimistic, and during the viva I enjoyed discussing my research. I felt like it was successful even though there were a few moments where I felt awkward. I was shocked when the the examiners recommended I resubmit in a year with substantial amendments. I felt wounded and embarrassed, and I was afraid to face my supervisors and colleagues at the university. I couldn’t understand why it had happened, and at this point, I was ready to give up. I had

worked very hard for many years, and it felt like I failed. I felt incredibly defensive about the decision that was made, and spent a lot of time in denial regarding my part in my self-perceived failure.

At first, I tried to engage with the feedback that was given by the examiners. I met with my supervisors, and also began to reflect-in-action about the recommendations. I found that any contact with my work made me anxious, and I experienced powerful negative feelings about continuing with the research. It took several months for me to consider what I perceived as an enormous task. Prior to the examination, I felt excited about research. After the examination, I felt as though I never wanted to research again. I am very aware when writing this that my response seems overly-dramatic. Researchers are hardened to criticism, after all, this is the nature of research and academia. Learning from something and improving on it in future, it is the only way knowledge can move forward. However, this was the first time I had ever felt like I had failed at something. I made a conscious decision to have some time out in order to rest, rebuild my confidence and consider whether I wanted to start over.

During this time, I began to consider the viva and the months preceding. What had happened that contributed to the result? Why did I not realise that I wasn't doing well during the examination? Why was it such a shock to me? Were the examiners comments justified? I have to admit that, at first, this time was filled with defensive thoughts. I did not agree with the result, I did not want to change my thesis, and I didn't believe that I needed to carry out another study. I sometimes felt as though it was a checklist exercise and I was doing whatever it took to pass. It may seem that I am foolish for admitting this, but I believe it is necessary in order to demonstrate my progression as a researcher. A crucial moment in my development came when a friend asked me why I would want to complete the PhD. My initial reaction was that I wanted to gain a qualification and I wanted it to be over. He then said, "But what did you want to achieve when you began the research?", and I began to reflect: I didn't start the research thinking that it would turn into a PhD, and I certainly didn't start it just to achieve a qualification. I embarked on my studies because I wanted to contribute to the field of knowledge regarding treatment of eating disorders. I wanted to provide findings that could possibly make a difference to future treatment. If I gave up on my studies, or produced a piece of work that could not be understood by others, the initial aim of my research would not come to fruition.

The outcome of viva and the time-out made me feel that I would never lack justification of my research in future. I attended assertiveness and confidence building classes. I was filled with determination to carry out any amendments including defence and justification. This is where my learning really began to come together, and I evolved from PhD student into researcher. As I started to develop my argument for the justification for the third study, I was aware of the need to defend every single choice I had made. This made me reflect on my viva, and my thesis write-up. Had I sufficiently justified myself then? How was I different then, to now? I realised that I had took it for granted that I would pass. I cannot say that I didn't work hard enough: I believe I worked hard. But I had lacked the dogged determination to get through the viva and come out as Dr. Rees-Davies, and this might have translated into some of my thesis.

As I approached the design of Study 3, I concentrated on effectively planning and implementing a well-designed research study. There were also a high number of amendments for the thesis, and I realised that I needed to make detailed records of the design process. I had not sufficiently placed Study 1 within the wider context of treatment for eating disorders, I had not explained the current literature that related to AN, nor had I fully considered my results in comparison to previous research during my discussion. For study 2, I had been ignorant about the importance of the choice of media channel: I over-relied on HCPs' opinions and did not seek adequate support from current literature. I had decided to use a social marketing approach to design the intervention for study 2, but failed to explain that it was an approach to intervention design rather than a psychological theory. In carrying out data collection and writing up my research, I had forgotten to put psychology as the focus. I was told that I needed to include theory, plan the study appropriately, and report the results clearly. I saw the value in my making the amendments so that my thesis reflected the value of my research.

The way I make sense of this moment in my career is thus. In future, I must not lose sight of using psychological theory and scientific research design while I plan and implement a research study. I was able to approach Study 2 with this experience. How would I critique this study? Had I explained myself well enough? Was it based on previous literature? I was ashamed to say that I could not always say it was, or at least, I had not written in a way that sufficiently demonstrated that I had done so. The examiners, even though I didn't want to admit it, had helped me become a researcher. This was a difficult, but valuable point in my

research career. It made me alter my mind-set regarding research, and made me want to be a better researcher. I felt like I really *wanted* to do improve, rather than feeling I *had* to. Continued reflection helped me to use literature and psychological theory to develop my hypothesis, operationalise my variables and design my intervention in Study 3 (including a strong rationale for the media channel, content and characters). It helped me in designing a valid and reliable tool for data collection. Finally, it helped me to consider my findings in a critical light, to admit the limitations of my studies, but to also value its contribution to my field.

There are a number of lessons that I have learned from this experience and the time between my viva and resubmission. Firstly, I am an impatient pragmatist. I prefer to get on with things and although I like to think about theory, I often want to start my research before adequate consideration. I did not make notes of the decisions I made in order to provide sufficient rationale for my methods and conclusions. I have learned how to accept criticism and improve my research and writing, which is crucial in academia and the scientific approach. Critique and reflections will benefit my lifelong learning, and ultimately help me to contribute to the body of knowledge relating to my field.

In future I will design my studies thoroughly, including hypothesis development and design based on psychological literature. I will take notes throughout the design process, and not rely on memory to justify my methods. I will listen to the opinions of other researchers or professionals involved in the research, but have also learned how to be confident in my ability to defend my conclusions. Overall I must not assume that readers will be able to understand my perspective without me writing with transparency. Every choice must be considered, justified and argued. I will evaluate the implications of my work for my field, and how my research fits within the wider context.

Have I Developed?

By engaging in a critical reflection of my journey, I am able to think broadly about my development. Although the reflections that I have written in this chapter are detailed, they do not account for every area in which I have progressed. There have broad areas of experience that have been fundamental to my development. I have had the opportunity to use both qualitative and quantitative data collection and analysis methods. I have experienced the benefits and difficulties when collaborating with others in my field, and I now feel confident

in making concerted decisions regarding the research protocol. I have learned to develop interview and focus group schedules by consulting literature and books, and piloting my schedules. I have engaged in extensive training and become a skilled interviewer and focus group facilitator. I have understood the value of putting psychological theory at the heart of all research, and the importance of always keeping logs and reflections in order to facilitate writing. I have realised that although qualitative data can be messy, the use of framework analysis and thematic analysis provides a clear, structured approach. I have been able to admit instances where my methods have not produced results that are appropriate, learn from the experience, and implement my knowledge in future studies. I understand why and how I can operationalise variables and design reliable and valid data collection tools. I have learned how to segment an audience appropriately and its benefit during intervention design.

Most of all, I have learned that it is okay to make mistakes, as long as I am able and willing to acknowledge them and reflect. Only then will I be able to develop my knowledge further each time I carry out a research study. Overall, I am now more able to write confidently as a result of my education. Learning is life-long, but the process of studying for my PhD has enabled me to feel confident in saying I am now a researcher. Has it been hard? Yes. Has it been worth it? Most definitely. Have I learned anything? Yes, a lot of what other researchers already know, and a little that no-one knows either.

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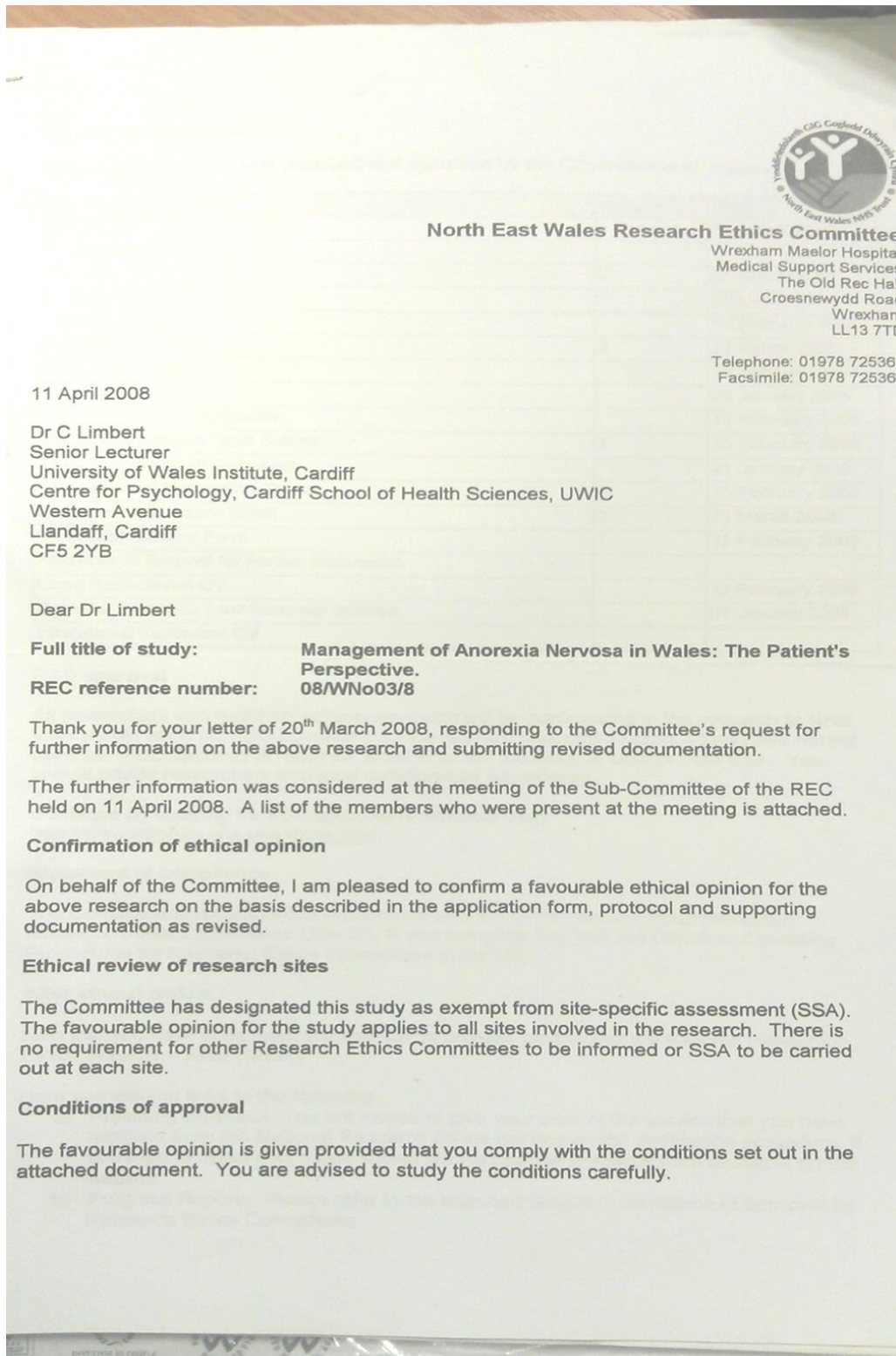
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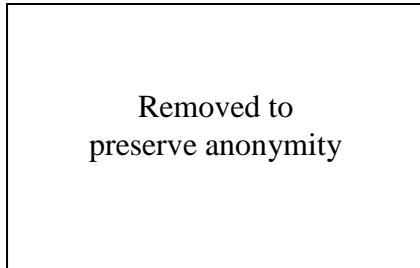
Appendices

Appendix 1: NHS Ethics approval letter (Study 1)



Appendix 2: Letter of invitation for participants (Study 1)

Laura Rees-Davies
Psychology Department



DW/LRD – 16/06/08

Dear

I am contacting you regarding a study that is being carried out within **(name removed)** NHS Trust. The study aims to explore the experiences that patients with anorexia nervosa have in the Welsh healthcare service by interviewing current patients. It also aims to discover patients' prior expectations, perceptions and satisfaction of the service they receive from the NHS for their eating disorder. The service user's motivation to change and estimate of their ability to change will be discussed. The relationship between the therapist and service user will also be considered. By now your Care Co-ordinator should have made you aware of this study and the possibility that you may be contacted.

You have been contacted because you are on the current list of patients receiving secondary care for Anorexia Nervosa within the **(name removed)**. Therefore you are invited to participate in an interview for the above study. It is entirely voluntary and should you choose to take part, you may withdraw at any time.

Enclosed is a service user information sheet and consent form. These forms provide more detailed information regarding the study and should be read carefully. Should you decide to take part, you will be asked before the interview to sign and date both forms. You need not bring the enclosed copies, as these will be provided on the day.

You will be contacted via telephone or letter to ask if you would like to take part. If you decide to be involved, you will be asked what location you would prefer for the interview (your home or **(name removed)** Hospital Psychology Department). The date and time of the interview will then be booked. You will receive a follow up phone call prior to the interview to confirm details.

May I take this opportunity to thank you for your time.

Yours sincerely,

Laura Rees-Davies

Appendix 3: Consent form (Study 1)

Service user identification number for this trial:

CONSENT FORM

Management of Anorexia Nervosa in Wales:
The service user's Perspective.

Name of researcher: Laura Rees-Davies

Please initial box

1. I confirm that I have read and understand the information sheet

dated (Version 2) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to

withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

3. I understand that **(names removed)** and

my care co-ordinator are aware that I am taking part in this study. I am aware that they will not have full access to the transcript of my interview and therefore will not be able to identify me from my interview.

Continued

Appendix 4: Participant information sheet (Study 1)

Protocol reference: Service user information sheet

PARTICIPANT INFORMATION SHEET

PART 1

Management of Anorexia Nervosa in Wales:
The service user's Perspective.

You are invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others or the researcher about the study if you wish.

- Part 1 tells you the purpose of this study and what will happen to you if you take part.
- Part 2 gives you more detailed information about the conduct of the study.

Please ask us if there is anything that is not clear or if you would like more information. Take your time to decide whether or not you wish to take part.

What is the purpose of the study?

We want to find out more about the experience a service user with anorexia nervosa has within the Welsh healthcare service so that improvements can be targeted in the areas that don't appear to be working so well. Data will be gathered by conducting interviews with a sample of the patients with anorexia nervosa who agree to take part in the study. The proportion selected will depend on the number of people who agree to participate. Data will be gathered by conducting interviews with a sample of patients with anorexia nervosa. Questions we will ask will explore your perception of the experiences that you have had within the Welsh healthcare service with regard to your eating disorder. We will also ask about the duration of your illness.

In addition to asking about your personal experience, we will also ask how you feel about the treatment and the health professionals you have encountered as part of this process. For example, your perceptions, expectations, and satisfaction with the service and your relationship with health professionals. Your motivation to change and estimate of your own ability to recover will be discussed.

The research study involves the **(names removed)**.

Why have I been chosen?

You have been chosen to take part in this research study because you have been diagnosed with anorexia nervosa, you are over 18 years of age and have been referred for secondary care (i.e. you have been referred to see a specialist by your GP).

Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.

What will happen to me if I take part?

Should you decide to take part, you will be asked to attend the Psychology Department at **(name removed)** Hospital or have a researcher come to your home (whichever you prefer). You will be asked to read and sign exact copies of this information sheet and the consent form, and given the opportunity to ask questions regarding the research. You will then be asked to participate in an interview that should last an average of 1.5 hours. The interview will ask questions about your experience of the Welsh healthcare service in relation to your treatment for anorexia nervosa. You are entitled to have someone else present during the interview should you so wish.

The total time therefore that you will be asked to devote to the research study is approximately 1 hour 30 minutes (excluding travel time). You will only need to attend the hospital or receive the researcher at your home once.

What do I have to do?

In order to take part in the study, you will need either to attend the hospital or meet a researcher at your home on a mutually agreed date and time. You will need to sign a consent form to take part. You will then take part in a discussion between yourself and the interviewer about your experience of the Welsh healthcare service with regard to anorexia nervosa.

What are the possible disadvantages and risks of taking part?

The interview may cause an inconvenience to yourself with regards to taking up your time. Discussion of your experience of the Welsh healthcare service may also cause distress if your particular experience was unpleasant in any way.

What are the possible benefits of taking part?

A benefit of taking part would be that you are able to tell of your particular experiences of the Welsh healthcare service. You will be asked to discuss your initial expectations of the healthcare service and whether these expectations matched the outcomes. You will be able to talk about your experience in terms of satisfaction. You will be able to discuss your relationship with your therapist and your motivation and ability to change. You are free to highlight the parts of your journey through the Welsh healthcare service that you felt were either good or bad.

What if there is a problem?

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. Please refer to Part 2 for more details.

Will travel expenses be reimbursed?

Yes travel expenses will be reimbursed following the completion of an expenses form and valid receipt, up to a maximum of 10 GBP per person.

Will my taking part in this study be kept confidential?

Procedures for handling, processing, storage and destruction of your data are compliant with the Data Protection Act 1998. Data will be stored securely and only authorised members of the research team will have access to them. The research team consists of Laura Rees-Davies, **(names removed)**. Regulatory authorities and Research and Development audit personnel will also have access to data/information should the study be selected to be investigated or audited. The data may be retained for use in future studies but in this event further Research Ethics Committee approval will be sought.

All information that is collected about you during the course of the research will be kept strictly confidential. Any information about you that leaves the hospital/surgery will have your name and address removed so that you cannot be recognised from it. You have the right to check the accuracy of the data held about you and correct any errors.

Contact details:

Laura Rees-Davies

Removed to preserve anonymity

This completes Part 1 of the Information sheet.

If the information in Part 1 has interested you and you are considering participation, please continue to read the additional information in Part 2 before making any decision.

PART 2

What if relevant new information becomes available?

Sometimes during the course of a research project, new information becomes available about what is being studied. If this happens, your research contact will tell you about it and discuss whether you want to or should continue in the study. If you decide not to carry on, your research contact will make arrangements for your care to continue. If you decide to continue in the study you will be asked to sign an updated consent form.

Also, on receiving new information the researcher might consider it to be in your best interests to withdraw you from the study. He/she will explain the reasons and arrange for your care to continue.

If the study is stopped for any other reason, you will be told and your continuing care will be arranged.

What will happen if I don't want to carry on with the study?

If you withdraw from the study, we will destroy all your identifiable information and the data collected up until that point.

What if there is a problem?

Complaints:

If you have a concern about any aspect of this study, you should ask to speak with the researchers who will do their best to answer your questions **(telephone number removed)**. If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure. Details can be obtained from the hospital.

Harm:

In the event that something does go wrong and you are harmed during the research study there are no special compensation arrangements. If you are harmed and this is due to someone's negligence then you may have grounds for legal action for compensation against the **(name removed)** but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you (if appropriate).

What will happen to the results of the research study?

The results of the study are intended for peer-reviewed publication. The results will also be available to participants should they be requested. You will not be identified in any report/publication unless you have consented to release such information.

Who is organising and funding the research?

The research is being organised by the NHS Trust and the University of Glamorgan. The research is not funded and the researchers involved are not being paid for including and looking after patients (you) in the study.

Who has reviewed the study?

The Research and Ethics Committee of **(name removed)** NHS Trust reviewed this study.

You will be given a copy of this information sheet and a signed consent form to keep.

Thank you for considering taking part and taking the time to read this information sheet.

Interview Schedule

Settle participant and start audio recording. Read all italicised text to participant.

Introduction

Researcher:

Hello

Thank you for coming.

My name is Laura Rees-Davies and I am a researcher.

The reason we are meeting today is to chat about your experience of the Welsh healthcare service. I'll give you an idea of what I would like us to talk about.

I would really like to know how you feel about the topics I bring up. There are no right or wrong answers but I would like it if you could answer the questions honestly.

I would like to make you aware again that you are free to withdraw at any time.

Do you have any questions? (Answer any questions that arise).

Are you happy to proceed? (If 'no' terminate interview).

If you don't understand the question or what I am saying, please tell me. It's fine to take your time and think about your answers, and I will give you a chance to think about the question or any more answers you may have, so there may also be times where there's silence.

Ok then we'll start the interview.

- 1. Ok to get started, can you tell me something about yourself? For example a hobby you have or something you enjoy?***

Service user journey and therapeutic alliance

Ok I would now like to ask some details about the treatment you have had.

- 2. When did you first experience symptoms of an eating disorder?***

What age?

How long ago was that?

- 3. When, if at all, did you first go to your GP regarding your eating disorder?***

How long did you have your eating disorder before you went to see your GP?

4. Did you see your GP before your eating disorder diagnosis was made?

Looking back do you think this may have been related to your eating disorder without you realising?

5. Did your GP refer you to someone else?

Who was this?

How would you describe your relationship with this person?

e.g. Did you trust them, did you get on well?

Did you always agree on what treatment was best for you?

Were there times when you didn't follow advice given by this person?

Can you tell me about a time when this happened?

Why did this happen?

e.g. reason being Anorexia or didn't trust/like this person

Would you say that overall, you agree with the treatment you received/are receiving from this person?

Did you see anyone else at the same time?

Who was this? (e.g. dietician)

How would you describe your relationship with this person?

e.g. did you trust them/get on well?

Did you always agree on what treatment was best for you?

Were there times when you didn't follow advice given by this person?

Can you tell me about a time when you didn't follow their advice?

Why didn't you follow advice?

e.g. the reason being Anorexia or didn't trust/like this person

Would you say that overall, you agree with the treatment you received/are receiving from this person?

6. Did you see anyone else after this?

(If yes repeat questions as above and keep going until all history is complete to present)

7. Were there any breaks in your treatment?

Did you decide to stop going for treatment?

(Yes) Why?

Can you tell me the story surrounding this?

Or

(No) Why was there a break in your treatment?

e.g. were you on a waiting list for further treatment, did your doctor decide to cease treatment?

Can you describe how this made you feel?

8. Have you been on a waiting list for treatment?(unless answered above)

How many times?

For how long?

How did this make you feel?

Can you tell me about a time when this happened?

Perceptions

9. Can you tell me what you knew about the type of service for Anorexia before you first saw someone for treatment?

Where did this information about the service come from?

How did that information make you feel about going for treatment?

Expectations

10. Going back to before you had contact with the service; can you describe what you expected?

How did you expect the service to make you feel?

What did you expect to happen to you physically?

How did you expect the people in the service to be?

e.g. the staff attitudes

Expand if needed

11. Did you expect the health service to be good?

What did you think was going to be good about it?

e.g. that they would be friendly – your disorder would improve?

12. When you did go for treatment, did the good things you expected actually happen?

What good things happened?

What good things that you expected didn't happen?

Do you expect any of these good things to happen in treatment in the future?

Do you feel like your expectations affected how satisfied you were with the service?

Can you tell me a story about a time this happened?

e.g. if the good or bad things happened, it changed your satisfaction with treatment.

Elaborate if needed/focus on details.

13. Did you expect anything bad before you had treatment?

What bad things did you think would happen?

Did any of these bad things happen?

Can you tell me a story about when one/some of these bad things happened?

Describe which bad things happened?

Do you feel like this affected how satisfied you were with the service?

Did you then expect these bad things to happen again in the future?

Which of the bad things didn't happen?

Again, do you feel like this affected how satisfied you were with the service?

Were you still worried that they might happen in the future?

Elaborate if needed/focus on details

14. Overall, has your experience been better or worse than you expected?

15. Why is that?

16. Can you tell me about a time when something happened that changed your expectations of the service?

17. Would you say your expectations of any treatment you may have in the future have now changed as a result of the treatment you have already received, compared to how you felt before you had any treatment at all?

18. Can you tell me what you now expect from the service?

Expand on points and talk about good/bad expectations now present.

Motivation to change

19. Tell me about the circumstances that led to you entering treatment?

What would you say your goals were when you entered treatment?

Were there any other reasons?

(If someone else made them enter treatment, ask them how this made them feel)

20. How motivated were you to recover from your anorexia? (on a scale of 0-10)

Why were you at ... and not ...?'

What made you feel motivated?

21. Do you think if you had been more/less motivated, your outcome would have been different? How do you think your level of motivation affected your outcome?

22. How do you think your motivation to recover has affected your satisfaction with the service?

23. When you first came in contact with the healthcare service for eating disorders, how confident did you feel that you would be able to respond to treatment?

On a scale of 1-10

How do you think this affected the success of the treatment?

You said earlier that you had certain expectations of your treatment. How do you think this affected your confidence in being able to respond to that treatment?

Has your confidence now changed after receiving treatment?

In what way?

So how would you describe your confidence now compared to before treatment? (e.g. the same/better/worse)

When you first came in contact with the service, did you feel that one day you'd feel comfortable with a normal body image?

Did you think that you would ever feel satisfied with your body image?

Do you think this affected the extent to which you recovered from anorexia?

Has your confidence now changed after receiving treatment?

In what way?

So how would you describe the confidence in your body image now compared to before treatment?

(e.g. the same/better/worse)

24. To what extent has your confidence in being able to recover has influenced your satisfaction with treatment?

Please describe why.

Engaging in Treatment

25. Do you feel that you really made an effort to become involved in your treatment and do what the health professionals suggested?'

What made you do this/ why didn't you?

e.g. Did you usually follow advice given to you by your therapist during your treatment?

What made you follow the advice?

And what, if anything, made you decide not to follow guidelines?

Do you think this was the Anorexia that made you decide not to follow advice?

Were you afraid that the treatment would not work?

Can you give me an example of a time when you did or didn't follow advice?

26. How ready did you feel to make changes to your behaviour or take action to help you get well? (on a scale of 1 – 10?)

e.g. to stop restricting your food intake

Do you feel this may have been related to what you expected from the service?

Do you feel more or less ready to change now after receiving treatment?

Why?

Can you tell me if your expectations now affect how ready you feel to change your behaviour?

27. To what extent do you feel that the way you became involved with treatment affected your satisfaction overall?

e.g. if you had engaged more or less, would it have affected your satisfaction with the service you received?

Satisfaction

28. Please tell me what aspects of the service you have been satisfied with and why.

Anything else?

Can you tell me a story about a time when you were satisfied with the service?

29. Please describe to me the aspects of the service you feel could be improved and why.

Are there any other aspects of the service you think could be improved?

e.g. waiting lists, type of treatment, being able to choose treatment, location of treatment, the way you are treated by the service.

Can you tell me a story about a time when you felt the service could be improved?

30. Would you say you are dissatisfied with any parts of the service?

What are you dissatisfied with?

Why?

Can you tell me a story about a time when you were satisfied with the service?

Would you be more satisfied with the service if this was rectified?

31. Do you think that the characteristics of Anorexia also affect your satisfaction with treatment?

e.g. Fear of gaining weight being a characteristic of the disorder and gaining weight being a goal of treatment.

32. Can you think of anything else that affects your satisfaction with the service, however small?

33. Can you describe what they are and why?

The close of the interview

Ethnicity

Before we finish, please can you tell me how you would describe your ethnicity?

If participant is uncertain...

For example

1. White

- a) British*
- b) Welsh*
- c) Other*

2. Mixed

- a) White and Black African*
- b) White and Black Caribbean*

- c) White and Asian**
- d) Other Mixed**

3. Asian or Asian British

- a) Indian**
- b) Pakistani**
- c) Bangladeshi**
- d) Other Asian**

4. Black or Black British

- a) Caribbean**
- b) African**
- c) Other Black**

5. Chinese

6. Other

Age

And what is your age please?

Close

Ok thank you. Is there anything else you would like to talk about with regard to your contact with the Welsh healthcare service for eating disorders?

Now that is the end of the interview. Thank you very much for taking the time to participate. Do you have any questions?

Appendix 6: Reflective Journal (Study 1)

Interview 1

I have done the first interview phew!

One thing I have to note is that I was late for the interview. Firstly the traffic was so bad, and my sat' nav' audio wasn't working so I kept missing my directions. I got caught behind a tractor and then went way too far. By the time I finally found the house I was a little stressed but I was aware of this and tried not to let it affect me. I was also aware that as I was half an hour late, that the participant might be in a hurry to get it over. This did prove to be an issue as she was due to meet a friend and the interview ran over. Therefore the end of the interview was rushed. Also I found that towards the end I was skipping questions because I felt that they had been answered already. I was also aware that a lot of the time it sounded like I repeated myself a lot. But the participant was really good, and at the times when I felt like I might be leading her (which I know is a poor interview technique) she disagreed and elaborated without prompting. I am aware that this will not be the case in other interviews and therefore I need to be aware of this for the next interview.

I haven't a clue whether it went well or not yet. I'm looking forward to listening to it and transcribing it. I think it went well although I think at times the different concepts got confused as they were so similar. It took a lot of energy to distinguish between them and explain myself well. Otherwise though it was really good and the participant did talk a lot thank goodness. Although she seemed quite satisfied with the service, she said she thought that there were some things that she thought could be improved, but that she was not dissatisfied. When she talked about motivation she said she was motivated to stay thin! This highlights that the wording of the questions has to be spot on. I think I did say initially about it being the motivation to recover and she was saying it to present a counter-argument. Anyway I'll type it up. One thing I found extremely hard was keeping track of the things she said in relation to the topics. All the different topics kept popping up all over the place (as she was describing things, not necessarily as a result of the questions I was asking) and I was getting really confused and it felt like I was repeating myself. I was afraid that if I didn't ask it again that the thing she had talked about previously was not the answer to the question.

I found it very interesting that the participant felt the need half way through to say something along the lines of 'the thing is with the questions you're asking, I sometimes have two answers, one being the anorexic voice in my head and the other being me'. When she said this I said it was great that she had distinguished between the two and that she should explain things in those terms from now on. This is something I think I will include in future interviews.

I noticed some mistakes in the transcripts with wording too that need to be worked on and I have made notes on the transcript when needed. I will amend the interview schedule accordingly. I will also look at the order of things, but I think that having the short introduction at the beginning suited the interview. I also think that getting the background was good, but the expectations but really needs to be first and possibly mixed with the questions. I also found it really hard as the service user said that the factors (expectations and satisfaction) and the possible themes (self-efficacy, motivation to change, therapeutic alliance and engaging in treatment) changed throughout her treatment. I had to try really hard to keep track and ask her to describe in stages what she felt like. I think this is

something that I have to be aware of. It isn't enough simply saying 'were you motivated at the start of treatment' because for her, her treatment started when she started seeing the psychologist at (name removed), not when she first saw the GP (although the GP did try to help/treat in the first instance by seeing her regularly instead of referring her).

One thing I also noticed was that the participant half way through had to go to the door and was gone about ten minutes. When she returned it took a little while to get back into the interview. Also her friend who she had arranged to meet phoned near the end of the interview. It appeared as though her friend was annoyed that she was late. After this the participant was in a hurry to get the interview over. Although this could not be helped, I think that it is important to make sure there is adequate time for the interview.

I have to amend the version number on the consent form to 2 and look at the wording/order of some questions following transcription of this interview.

Email to Bev and Caroline:

I have done the first interview phew! I haven't got a clue whether it went well yet! I'm looking forward to listening to it and transcribing it! I think it went well although at times I think the different concepts got confused as they were so similar. It took a lot of energy to distinguish between them and explain myself well. Otherwise though it was really good and the participant did talk a lot thank goodness. Although she seemed quite satisfied with the service, she said she thought there were some things that could be improved, but that she was

not

dissatisfied.

You're going to say I told you so when you read the transcript too - when we were talking about motivation (I think) she said she was motivated to stay thin! Did you phone her beforehand?! Anyway I think I did say initially about it being the motivation to recover and she was saying it to present a counter-argument (does that make sense?).

Anyway I'll type it up and send it to you both to have a look. The one thing I found extremely hard was keeping track of the things she said in relation to the topics. All the different topics kept popping up all over the place (as she was describing things and not necessarily as a result of my asking her something) and I was getting really confused!

Interview 2

The second of the twelve interviews we hope to get. I need to note that I am writing this reflective diary on the third day following the interview. I was unable to write it before then due to family commitments and it being the weekend (the interview finished late Friday afternoon).

Firstly the interview was held at (name removed) hospital this time as opposed to the first interview which was at the participant's home. I felt that there were both positive and negative comparisons that could be made for and against both sites. The first thing I realized was that the room originally booked for me was the one that the participant may have visited for her sessions. Whilst this may be conducive if she was comfortable talking during her sessions, I did not know either way and decided it best to change the room that she was less likely to be familiar with. That way I avoid the possibility of another condition that may affect her disclosing information during the interview.

I was also aware that because the psychology department was used, that the participant may already have some pre-conceived idea of what she would talk about prior to the interview, and that this would have affected the content of the actual interview. It could also work both ways with regard to the sites that the participant may feel more or less comfortable speaking in each surroundings. Therefore I believe that allowing the participant to choose the location means that I am not creating possibly awkward situations for participants, and that the place they choose is most likely to be the place they feel most comfortable at.

I should note that for both interviews I made a conscious effort to wear casual clothing (e.g. Jeans and a t-shirt). I felt this necessary in order to make the participant feel at ease, as well as not portraying myself as a psychologist which might hinder (or in some instances foster) a professional-service user role during the interview. This is especially true of the participants that come to (name removed) Hospital for their interviews. It would be interesting to do half the interviews in my usual work attire and the others casual and see if there are any effects, although at this moment I have enough to do and would worry too much about there being negative effects! Therefore I am going to stick with casual clothes and think about that in the future!

During the interview itself, I was aware that the participant took a while to warm up, and this was similar in the first interview. The participant again seemed unsure of what was required and this was sometimes reflected in her answers. I also felt that she found it difficult to concentrate and sometimes when I asked questions she appeared confused in a distant way, as though she had simply not heard any of what I had said. This was further explained when she said that she had suffered cognitive decline as a result of her restriction of food and consequential weight loss. I do also accept that the questions require a great deal of effort to consider and think about the answers. They are novel and therefore I am asking people to consider something they may not be used to answering. At the same time I am asking people to remember times which may be traumatic, and the person had buried the memories and they are sometimes difficult to retrieve (as I found in this case). It may also be the case, such as this participant, that they cannot remember due to cognitive impairment through the illness. This participant noted that she felt it was a blur as she could not think properly. This is important to note when looking at the results as the extracts will be simply that person's perception/recollection, not the true happening. I think it could be argued though that this is the case with almost every qualitative interview, as people have been shown to construct their answers for the purposes of impression management as well as answering the question. I think therefore that while this should be included in the discussion, that the findings should not be considered any less noteworthy.

I found that the order of the questions was awkward during the interview. The participant's history was so long it took the first hour and a half to get it all! I felt like some of the issues came up that I was to later ask about (so that proved useful when I ran out of time!). But after this interview I am less confident that I have the data I need. I could probably have talked for at least another hour. I have the feeling that I have the answers I need from the interview at present, although I am unsure about whether I can use it as evidence as I did not ask the specific question. Therefore I need to find out if I can use statements in response to one question for the purposes of another theme. I think I can, but I would like to make sure.

I felt like as the interview progressed, I did get a good rapport with the participant. It felt more comfortable than the first interview and this was due to two factors: the participant (whom I could talk easily to), and that I have done one interview so therefore am more comfortable with how to ask the questions and follow leads. I was also less stressed as I was

there early and I am used to the room that I was in. Therefore I felt more relaxed and confident. One thing that I did note was that I could hear people outside in the corridor at times and was worried during the interview that this would put the participant off talking. I need not have worried though as this was not a problem, and on reflection, I would imagine that the participant is used to this during her sessions.

I would also like to note that the participant I saw today appeared to be less recovered (I'm not sure how else to put it without entering into, what is thinner, less unwell etc!). I was then surprised to find that the participant was nearing the end of her treatment. I found this a bit of a shock (even though I have worked with people in the past with such disorders) It was also interesting to note then in the interview that the participant mentioned that she had lost weight as the thought of coming to the end of her treatment was frightening. She also talked about her relationship with her psychologist in terms of a friendship, and that whilst she appreciated it was a professional relationship, she felt a loss that this relationship was coming to an end. I was not expecting this to be a factor in treatment (although it seems obvious now) and I think it really should be considered when evaluating the service. I think that her anxiety over the end of treatment was exacerbated by the withdrawal of inpatient treatment she had previously encountered.

I think though that it is important to note now though that the theme of therapeutic alliance appears to be a big factor in treatment of the two participants I have seen so far. Their explanations of their therapeutic relationships were both similar and different to one another in many aspects. Nevertheless the relationship itself appears to have bearing on their expectations of possible future treatment and their confidence and motivation (this was discussed in the second interview with more purpose). This could possibly be a better finding to discuss if it comes up again, rather than the topics in isolation to one another. I also think that it is important to look at therapeutic alliance and the way it can perhaps cause relapses such as this service user. Her loss of the relationship with the psychologist has in some way caused her to relapse somewhat. Thus the relationship has been inhibitory. I am not arguing the importance of a therapeutic relationship here, in fact I think it is pivotal in treatment. I could go on for ages about this!

Engaging in treatment and motivation to change appear to be something that is developed throughout treatment. I believe that this is due to the evolving nature of the illness and recovery process. The service user starts off with a mainly 'anorexic voice' (yes that analogy was used again word for word!), and throughout treatment the healthy voice takes over. When this process is taking place, the person becomes more receptive to the treatment. Therefore their willingness to engage in treatment, their recovery self-efficacy and their motivation increase as an on-going process. I think whilst this is similar to the stages of change theory, that theory does not explain the treatment being an important aspect of the change process. It also does take into account the nature of the illness itself and the effect it has on the service user with regard to the three factors. I think there is a gap therefore for a model of change throughout treatment for anorexia nervosa. I do not think that there is such a model at present. Perhaps an idea to keep throughout the interviews and analysis anyway!

Email to Caroline:

Thanks for the detailed feedback about my reflective diary. I agree with all of your comments - it's putting them into practise is the hard bit! I agree the main point though that I should allow the person to explore what they would like to talk about rather than the rigid

schedule. It seems like even when I can't follow it fully; I still get interesting data (which by the way is taking FOREVER to transcribe!! I have also been asked to transcribe for extra money for my job outside of my working hours so I will be transcribing in my sleep soon!) I have found that as the interviews have progressed, and also as I do each one - I become better at identifying what can be classed as evidence for some of the points I could make. I can also keep track of what we're talking about better. At first I found it hard to let them shape it although I still think I did a good job and got valuable data, or certainly very interesting data! It takes so long to get their history though - so what I think I will do is ask as I go along. I'm not going to book any more interviews now until I have got the bulk of work from these out of the way too.

I have looked at the stages of change but I did disregard it after you said it was discredited. To be honest though I need to look at my lit review again after data collection as I have more to go on now.

I haven't spoken to (name removed) yet. I wanted to transcribe it fully and begin analysis before I did that. They also know which p's I have seen (as they introduced them). Although they know they are taking part - I have said that they will not see the full transcript (which I believe was a good decision to make). I don't think for one minute that their treatment would be affected negatively but one participant did say they didn't like (name removed) and didn't want her seeing the transcript. So I have to be careful what I say in case it identifies a particular person in a negative way. The main reason being though that I like to be organised and so would rather have something concrete to show them. Does this sound okay?

Interview 3

This was the last of my currently booked interviews. I have to get contact details of the potential participants on my list, and also get the numbers of the CMHT's to contact the people that are on the list for further interviews. I think this time will be very beneficial in between. I am surprised at how long the interviews are taking to transcribe, although I am being extra careful to try and capture the essence of the interview. The time will also mean I can begin to analyse some of the data and look again at the interview schedule and the order of the questions.

Today's interview was more difficult in general than the others. I wasn't necessarily expecting the participant to be as talkative as the first two, but it did take more effort today to get her to talk to me. She had just finished work (which is in the hospital) and had been there since 7.30am. She chose the time and day as being after work so I could not control this. I would have arranged at a different time, but I don't think this would have changed the fact that she works there and therefore saw me as a member of staff there. I think this hindered her talking to me initially. I also felt that when I made sounds to agree and confirm I had heard her (such as 'mmm', 'uhuh' and 'okay'), she saw this as a signal to stop talking. Despite this when I left gaps of silence, she looked very uncomfortable and was looking away. She would also end her sentence with something like 'so yeah' and would smile. I really felt like she was saying what I wanted to hear sometimes (although I said at the beginning that I want her perception of the treatment, not what she thinks is the right answer). I also recognized her, and I think it's from the Bulimic Clinic. I worked there as an Assistant Psychologist and welcomed the service user's into the clinic. I think that she may have attended that clinic for treatment at some point and so may have recognized me

too. When she came into the room, she asked how the research was going and knew that I had started to interview the week before. Therefore I felt that she already had a preconceived idea about the research and associated it with the psychology department. When she answered the questions with a negative statement about the service, she always seemed to try and counteract it with something like 'but I understand that's just me' or 'I understand that it's all the service can do'. Despite not feeling like the interview was as fruitful as the first two, I did still feel like I got some useful data.

During the interview the participant became tearful. I found this very difficult as she was getting upset that she had not recovered despite years of treatment. Her last session was today and the interview seemed to make her think more about the reasons why she had not recovered (such as the motivation questions). I was very careful to change the subject and move onto to a different topic to alleviate the pressure, but I still felt that she was delicate and I was treading on potentially upsetting territory. From what she said, she blames herself for not recovering and appeared to be defeated. This was an interesting interview to have as she had been for various treatments, all of which she felt she was motivated to use but they have not succeeded in 'curing' her anorexia nervosa. I think it is interesting to note that I think the participant believed that by simply having the treatment she would be better. Although she said she was motivated, she kept saying that the Anorexia was still strong in her (yes another 'anorexic voice'!). I am not in any way qualified to assess whether she was ready for treatment, and by her saying that she was motivated I have to accept that this is what she thought she was. But I do believe that although she might have been optimistic about treatment, she may not have accepted that she had to engage fully in order to feel the results. She said that every week she wouldn't do as her psychologist told her. She also seemed very upset and kept saying 'if I had made more use of the treatment I might be better now'. I had to be very careful what I was saying so that I did not cause further upset. So sometimes the answers are short. This made it easier though not to need more time than two hours! (I asked her if it was okay if we ran over the hour and a half stated and she agreed).

* I have to find out whether I need to notify anyone if I think that the participant may be vulnerable. I did make sure at the end of the interview to reassure the participant that her taking part was very valuable and I asked her a number of times if she was okay to leave and was there anything she would like to discuss. She assured me she was okay and I ensured we had a light hearted conversation before she left. I was still worried about her after though!

Despite this I felt that the participant did give some useful information. She said that she had several negative expectations of the service, and that these evolved as she progressed throughout various treatments. She was satisfied when her negative expectations weren't met, therefore supporting the current literature that expectations being met may not simply lead to satisfaction. She also talked about the relationships with professionals and the way they made her feel when they were withdrawn. She also talked about the transition from inpatient to day-service user care, and the variety of therapies that were no longer offered to her as a result. She particularly felt that the lack of family therapy in day service user/outpatient care was an important factor in her slowed progress towards recovery.

I feel like I need to try and establish why the participant couldn't talk as much as the other participant's, but I really do believe that it was just due to individual differences in the participant today. She mentioned at one point that she had nearly lost her job that day which I think she mentioned being because she had lost weight. I felt lost for words and really wanted to console her and give her advice as I would during a session as an Assistant

Psychologist. Obviously I couldn't though as I may have led her into answers to questions and would be unprofessional. It was quite hard to do this and I felt I was tailoring my questions to ease the pressure and to try and make her feel better. Although I was doing this because it would be unprofessional of me to continue with a line of questioning that would cause distress, I also felt that I was doing it for myself so that I didn't feel awkward when she was crying. I also felt like I should terminate the interview at some points, but by changing the questions and topics I was able to manage the situation. It helped to know though that she is the type of person to sometimes clam up completely and therefore the way she opened up to me today was a privilege. Therefore I think that I managed the questions in the most appropriate way I could, and I'm happy that I did what I could to manage her feelings during the interview. Whilst I think that the questions triggered upset, I think that the upset was already there as frustration and upset with the lack of recovery she had expected from treatment. I think this will become clearer when the transcripts are completed and I can provide evidence to what I'm saying.

The interview also seemed to support what I have said so far about therapeutic alliance. As I have said, the withdrawal of treatment appears to cause at least fear and anxiety, and in the worst case scenario, possible relapse. The trust between the professional and participant in the case of the anorexia nervosa service user appears to be of utmost importance, with the service user placing a great deal of trust and faith in that professional. When the service is withdrawn for whatever reason, the service user feels a loss as a result. This can cause emotional distress, and whilst the professional may prepare the service user for the end of treatment, the loss can sometimes cause so much distress and fear of the unknown that the service user may relapse as a result.

I did try and modify the questioning order during the interview. I began asking for the history and when she naturally began talking about things that I would have asked about, I let the questioning follow that lead. I did feel though that this caused problems though as I thought that it was bringing up topics in a disorganized way. I decided therefore to go back to the line of questioning. Nevertheless, I did allow the participant to continue what she was saying and then say 'that's interesting and I would like to come back to that later if that's okay?' I felt that this was the most appropriate way to organize the questioning. It does mean though that I need to have a great memory! In this interview I did find it easier to remember things though, probably because I was more relaxed and comfortable about the questions I was asking.

I did find it interesting that the participant was so disappointed that she no longer had family therapy. She discussed that she felt that whilst her treatment was heading in one direction, her family were no longer having therapy with her and she felt they were still trying to do what they had been told to do in therapy before. She also said that she felt that her family was a factor in her anorexia nervosa. Whilst I think this is really interesting, I do believe to focus on this too much would be going off on a tangent. I think to include that the lack of a choice in therapy is appropriate, as well as the withdrawal of treatment as a negative thing. It seems shocking that treatment is withdrawn simply that it comes to the end of the specified number of session, not because the person has recovered (in all or some respects). I realize that the service is limited, but the nature of the illness means that trust and support is imperative during recovery.

I feel as though this reflective diary isn't as useful as the others (probably due to my feeling that the interview didn't go as well as the others). I'm going to revisit it another day so that I have had time to reflect further and will add comments below.

Interview 4

Firstly I need to note that I am writing this reflective diary after the sixth interview. It's not ideal as I'm not recording my feelings at the time of the interview. This is due to illness of me and my children. There has also been a long break between the third and fourth interview due to personal problems and therefore this means I felt a bit rusty prior to the interview. I was also a bit late which meant I was flustered, but luckily the participant was also late so this gave me a chance to get myself organized!

It is also important to note that the participant phoned me to take part. This suggests that she wanted to take part in the research from her own point of view. This is not necessarily a negative thing as this suggested to me that she had something to tell and therefore the data would be rich. Nevertheless, it is important to be aware that she may possibly be involved as she wanted to make something known.

I think on the whole the interview went really well. Again I found it very hard to manage time as I do not think that the 90mins estimated was long enough. Unfortunately this could not have been avoided as interviews of this nature have not been done before. I could not do a pilot on one of the participants prior to ethical approval as this would not be allowed. Therefore I have made sure I have made this known to participants prior to the interview and usually ask them if they mind carrying on. So far no one has minded carrying on as they seem quite happy. I did note though that the participants appear to find it hard to concentrate after this long period as there is a lot of information they are asked to recall. The sheer volume of information regarding their history of treatment is largely to blame for the time period needed for the interview. I did not anticipate that participants would have such long complicated histories, and also the health professionals they have seen have been many and varied. I found that the history was essential though, in order to meet the needs of the health professionals involved in the research, and also to get a feel for the treatment for each participant. As the participant was going through their history, I asked them about their therapeutic alliance with members of staff. I also found that a lot of my prompt questions were being answered yet I still found myself asking the questions in case I missed something. I think for the next interview I will try to omit questions that I feel have been answered.

I was interested to note in this interview that funding played a large part in the way the participant felt about her treatment. The participant suggests that her treatment was perhaps a waste as she did not have the full course of treatment. She suggested that she was told that her (and another person from Wales) inpatient treatment in England was cut short because funding was withdrawn, yet on her notes she found they had written that she was discharged for self-harm. The participant suggests that she self-harmed because she was told she had to leave early and it was a reaction to this. I found this alarming as it appears that the health service in some respects is causing patients with anorexia nervosa to carry out drastic action in order to make their feelings known. It is also alarming that so much money is being spent on treatment when they are withdrawing it early. It would be interesting to look at the implications of withdrawing treatment early and funding. Why are these patients so aware that funding is not available and that they may not get help? I think this will impact on the treatment outcome and the way the patients feel about their treatment. I also get the feeling that this impacts on the way the service user feels valued, and with a disorder where confidence and self-valuation is so lacking, what impact must this have on the patients going through treatment? It is also interesting in terms of the expectations and satisfaction. If they expect it to be scary but helpful, what impact does this have when they go for help and are

valued in terms of money and the treatment does not work? I guess this is my personal reaction to it. I am still careful not to make any judgments during the interview though and try not to show too much reaction to what they are saying.

I think that considering the large break between interviews this interview went well. I was disappointed that there was no mention of the 'eating disordered personality' vs. the 'well personality', but I think that when I read through the transcripts that I may find other evidence of this. I am also happy to find that it does not seem as clear cut as expectations lead to satisfaction as suggested by previous definitions. I think that something that appears to come across is that participants have negative expectations of treatment due to the nature of their disorder (e.g. not wanting to 'get fat' and 'strict regimes'. I find that participants appear nervous or reluctant for future treatment when these expectations are actually met. Therefore the simple expectations met leading to satisfaction in this case is not a truth. I am also enjoying it when things arise that I didn't expect. Certainly the awareness of funding being so central in patients is something I didn't expect. I also didn't expect them to be so aware that their treatment is not sufficient. It feels as though when they have the disorder that few people listen to them. This seems so bizarre when this should be exactly what we are doing as researchers in order to learn more about how to treat the disorder effectively.

This leads on to another point that patients bring up. During this interview the participant mentions that certain members of staff have made some very inappropriate comments (and my personal feeling being that this would have a negative impact on the service user's treatment and their confidence and feeling of being valued as a service user). I was interested to hear that the participant had learned to manipulate certain health professionals and situations if they could get away with it. Yet interestingly the participant appeared to value these members of staff less. This appeared to go hand in hand with the health professionals' lack of awareness about the disorder. The participant appeared to value those staff members who were firm but that had understanding. A lack of knowledge about the disorder appeared to give the participant the opportunity to lie about behaviours. General health professionals and agency staff appeared to come into this category.

Interview 5

I found again that this interview suffered due to the complicated history and limited time. I also felt that the participant was talking so much I couldn't get any of my questions in! She did answer my questions without my asking them though and this time I had no choice but to skip them and not ask. Therefore I feel I took a risk as I was not able to ensure that I got everything I needed, but I guess to develop as an interviewer I need to take risks such as this and make judgments as to what information I have.

I got the feeling again from this interview that funding was a major issue. I was also interested that the participant had received treatment from England and Wales, and also privately and from the N.H.S. This did mean that I was unsure about whether to ask questions about the England and private treatment, but I just went with what she was talking about and feel I got some information that I could perhaps use for comparison.

In the previous interview I forgot to mention that I felt as though I was becoming desensitized to what the participants were saying as it was becoming a familiar story of them feeling let down and having negative experiences. I was shocked therefore when the participant was describing her history I was having emotional reactions to what she was saying (e.g. when she described a suicide attempt). Obviously I am glad about this yet it did

mean that I had to monitor my reactions to what she was saying. I also felt a connection to this participant that I hadn't to others. I'm not sure what it was other than finding it good that despite her admitting she very rarely talked openly to people, that she was opening up so much to me (she mentioned this later in the interview). I also felt admiration for her as she was obviously fighting very hard to get what she wanted out of life despite her disorder and the other obstacles in her life.

I again got the feeling that participants felt as though they were low in self-worth so they thought perhaps they did not deserve the treatment or they should be grateful that they had any treatment. I am disappointed that I get the feeling that this is because it appears that they are made to feel as though they as being silly or they are not taken seriously about their disorders by certain members of staff and that the treatment they receive they should feel grateful for (e.g. the funding issue). This participant also mentioned that she was aware that when she was receiving treatment that she was aware there was someone else who could be seriously ill waiting for treatment, and this made her feel guilty. I find it difficult to understand why this is allowed considering an aspect of the disorder being low self-confidence etc.

Interview 6

I was a little late for this interview which was held at the participant's home. I was also apprehensive prior to the interview as the participant had said on the phone 'you'll have access to my notes and I don't want that' and 'I'm doing well I don't want you looking through my notes'. I said that it was okay and that she did not have to take part, but that I did not have access to any of her notes, and she asked me to phone back. I did and she agreed to take part. When I arrived at the house I was not thinking of this too much as I was concentrating on getting there as quickly as possible and getting the right house. When I got into the house I was surprised that she was older than I expected and her house was stunning! I know this is my personal feelings but as an interviewer I then felt myself lose confidence as I think I was possibly a little intimidated! I got the feeling that the woman was a professional and this impacted on my ability to immediately develop a rapport with her. I also had an eye infection and felt pretty run down so that did not help.

I was aware that these things were present though and therefore I consciously tried to manage this. I was also disappointed that there was a long period where her cleaner was using the vacuum cleaner and therefore I will have to work hard to get the audio from that. I was alarmed to find also that the recording device I used had run out of battery after 1hr15mins. I thought that it would beep when out of battery (and when I started recording the battery sign was full) so I must note that I have to use new batteries every time!

The greatest message I got from this interview was that funding was not in place. The participant had gone to the GP after many years of having the eating disorder and was shocked to find that she would not be helped in the way that she expected. This time it was more a case that her expectations were not met and therefore she was not satisfied and dissatisfied. She also had to self-fund a large part of her treatment in a private hospital after the NHS withdrew funding. The participant and her family also campaigned to get her more treatment by seeing local MPs and the doctors.

The participant described the experience of seeing the first psychiatrist she encountered and the negative impact of the way he treated her. I think this is important in terms of therapeutic alliance. She was very keen to say how good another part of her treatment was

with a clinical psychologist though and therefore it does not seem that she was against all treatment (which is what I was worried about when she was talking). She describes not being able to sing the clinical psychologist's praises enough. It is interesting that again, despite trusting the clinical psychologist that the participant still did not follow advice given. When explored it seemed as though this was the nature of the disorder itself. The participant also mentioned that because the clinical psychologist was caring and able to be flexible in the treatment, that she found treatment to be more successful. She suggested that every person is different and therefore treatment should be tailored around that. Again there was mention about people not having enough knowledge and the way she was able to manipulate people in order to carry out her eating disordered behaviours.

I'm not sure I got as much out of this interview, but the history and interview itself was shorter and I came away feeling as though she withheld from saying totally how she really felt as she did not want to think about it too much. I also feel as though I did not want to push her too much as I did not want to be responsible for upsetting her and reminding her of things that she said may cause her to relapse. She mentioned that she was so afraid of relapse because she would not want to go for the treatment again. Although I agree the treatment will always be difficult, I feel as though it was such a negative experience for this person as she felt so let down. The participant also mentioned that she did not feel like she was treated as a person who was able to make decisions and was not listened to or respected at times.

I feel that I may not have thought this interview went as well possibly because there is no new information. This can be seen as a positive thing though in terms of data collection as it means I may be approaching saturation of themes.

Interview 7

I have written this reflective diary well after the fact unfortunately but I guess that it is worth also noting that what I remember now must have stuck in my mind with this last participant. I noticed that this participant was underweight. She smoked (while I was there which made things a little difficult inside) and appeared to be quite subdued. She seemed quite passive and sounded as though she might be on medication as her voice was quite low and her words long. I found it quite difficult to get the information from her at first. I also felt myself being quite lethargic to be honest and this may have impacted on the interview. I was surprised that although she had been in the service so long that she was still so, as far as I was concerned, at the beginning of her treatment in terms of her attitude towards it. The other co-morbid conditions also made me think that her situation was quite complicated and therefore it may have been difficult to tease apart what influences what. I should imagine that they are very delicately intertwined with one another and this may be why the disorder is so enduring. She got very tired towards the end of the interview though. This isn't surprising as it was a long interview but it was like as though she switched off and was hearing me rather than not understanding. I think this may be the cognitive deficits experienced by patients with anorexia nervosa but of course I have no evidence for this. I also got the impression that she did not really understand what I was doing there, and that she wasn't really active in the conversation. Afterwards I was quite relieved that that interview and the data collection process were completed. Despite this relief it is worth noting that I felt that I have developed throughout the data collection phase, and both my technique and the process of data collection has grown throughout.

Appendix 7: Charts of quotation numbers

Service user description of anorexia

Theme	P1	P2	P3	P4	P5	P6	P7
AN as a functional disorder		1009		97; 190			
AN as a dysfunctional disorder	369; 1264	1057			110; 120; 197; 200; 255		
AN as a separate inner voice	531; 739; 1162; 1348; 1496; 1568	462; 498; 736; 818; 1085	68; 166; 173	72		50	223
AN as consciously manipulative	283; 215; 307; 385; 989; 1104	198	542	64; 116		113; 268	77

Expectations of treatment for anorexia

Themes	P1	P2	P3	P4	P5	P6	P7
Positive expectations of the Welsh healthcare service	673; 841; 845	858; 891; 893; 911; 923	136; 144; 150; 166; 173; 180	186; 206	184	225; 229; 233; 235; 245; 251; 257; 275; 281; 339	147; 157; 159; 162; 170
Negative expectations of the Welsh healthcare service	681; 729; 773; 1220; 1312; 1648	1005	116; 148; 166	179; 184; 198; 216; 218; 248	186; 203; 234;		167
Expectations of the healthcare service as a result of having treatment		1283	102	211; 229; 234; 235; 272; 278; 288; 294	214; 216; 237	279; 293; 297; 303; 339; 359	186; 195; 196; 267
Expectations of treatment that were not met	857; 1312	858; 891; 893; 1134; 1263; 1283	136; 150; 173; 180	179; 186; 206; 218		225; 229; 235; 251; 257; 291; 339	147; 159; 162
Expectations of treatment that were met	1230	1021; 1057		186; 194; 198	234		

The journey through the health service for anorexia

Themes	Subtheme	P1	P2	P3	P4	P5	P6	P7
Initial presentation of anorexia nervosa		85	95	48; 62	36; 236;	51	32	29
Accessing healthcare for the first time	Initial diagnosis	105; 193; 283	216		37	61; 68; 88; 230	34	34; 201
	Failure to diagnose	109; 125; 163	95	54; 68			43; 52; 58; 120	38
Feeling that treatment would not be provided					95; 171; 290; 294	200; 201	205	
Inpatient treatment approach	General acute mental health ward		1001		99; 114			65
	Specialist ED unit		248		62; 68; 75	202; 218; 232; 238; 262	68; 77; 81; 184	70; 78; 199
Aspects of treatment	Treatment as a privilege	657; 1768; 1771			92; 171			
	Psycho-education as a valued treatment	465; 531; 1264			75			
	Range of HCPs available		602		54; 155	105	115; 164	78; 86
	Breaks in treatment and/or waiting lists	587	308		169; 171	102; 174; 176	58; 64; 81; 137; 169; 191; 205	40; 135; 141
	Services received outside of NHS	1546				120; 122; 129; 164; 178	50; 52; 71; 137	
	Withdrawal of treatment from NHS		228; 248; 594;		68; 161; 198;	99	75; 84	

Themes	Subtheme	P1	P2	P3	P4	P5	P6	P7
			678; 716; 967; 985; 1255; 1283		235; 278; 294			
	Communication in the healthcare service		542; 566; 985; 1001; 1355;		48; 169			
Engaging in treatment	Barriers to engaging in treatment	419; 557; 989; 1496	716		51; 83; 132	141	76; 81; 150; 180; 239; 305	122; 215; 219; 245; 277
	Reasons to engage in treatment		590; 740; 780	238; 268;	226; 254; 280	226; 254		47; 219; 275
Recovery as a gradual process		377; 1288; 1348; 1468	530; 858; 985; 1009; 1085	150			225	
Relapse or slow recovery as disappointing to the service user			840; 1122	173				

Therapeutic alliance during treatment for anorexia

Themes	Subthemes	P1	P2	P3	P4	P5	P6	P7
Contributors to therapeutic alliance	Personality of HCP	397; 989; 1682	474; 594; 654; 1315		90	120; 141; 144; 168	83; 85; 143; 147	113
	HCP knowledge about anorexia nervosa	397; 1787			64; 75; 77; 101; 106; 153		83; 147; 293	
	Trust between HCP and service user	517; 1292; 1428	474; 610	116		168; 185	147	94; 114
	Respect and negotiation between HCP and service user	537; 565	462; 788		54; 62; 77; 136; 165; 232; 276	78; 81; 82; 102; 120; 141; 142; 150; 168; 266	83; 86; 142; 147	97; 98; 100; 114; 120; 173; 186;
Barriers to therapeutic alliance	Personality of HCP	259	290; 354; 656; 730		124		108; 120	101
	HCP lack of knowledge about anorexia nervosa	283; 385		68; 86; 102; 562	158		108; 142; 176; 197	293
	Threats used during treatment by HCP	323; 325				142		
	Characteristics of anorexia nervosa		736	166	107; 132		297	
	Lack of professionalism by HCP		95	68	107; 114; 155; 156; 158; 222	108; 157; 170	43; 108	101
	Lack of trust between HCP	531		562		110; 135;	197	101; 132

Themes	Subthemes	P1	P2	P3	P4	P5	P6	P7
	and service user					214; 270		
	Lack of respect and negotiation between HCP and service user		750		124	75; 157; 164; 170; 214; 235	108; 127; 142; 171; 180; 197	101
Loss of relationship with a HCP		1264	290; 594; 774; 780		68	72; 99; 144; 269	87	92; 94
Therapeutic alliance as a confusing relationship		519; 935	780			144		

Satisfaction with the health service

Themes	P1	P2	P3	P4	P5	P6	P7
Aspects of the treatment service users are satisfied with	445; 449; 1220; 1682	1110; 1315		232; 280; 282; 284	202; 218; 228; 250; 267		281
Difficulties with classifying parts service users are satisfied with	290	1315		226; 231	205; 208; 273; 291		281; 293
Being <i>not satisfied</i> rather than dissatisfied	1676; 1787	1138		214; 288	205	288; 329	177; 281; 291
Expressing lack of satisfaction through anorexic behaviours		1134; 1167		161		48	

Service user recommendations to improve the health service

Themes	P1	P2	P3	P4	P5	P6	P7
Early intervention for anorexia nervosa		1003; 1257; 1357	103			56; 114; 194	
Better treatment options for anorexia nervosa		959; 983; 995; 1140; 1197; 1341; 1349		93; 96; 105; 115; 146; 208; 223; 285; 287	172; 176; 189; 263	69; 113; 126; 163; 181; 304	138; 140; 180; 184; 284; 285; 302
Better information for service users regarding anorexia nervosa and treatment	625	1039; 1055	139	305		258; 264	
Address long waiting lists	1770	566		170	176	186; 208	284
Address funding difficulties		588; 678; 909; 929; 975; 999		68; 170; 208; 232; 279	200; 201; 263; 269	52; 63; 68; 75; 140; 190; 230; 232; 326	
Treatment closer to home		893		143; 146; 232; 285	147; 172	68; 113	120; 284; 302
Better HCP knowledge about anorexia nervosa and treatment	223; 1700	660	113;	90; 115; 154; 158; 160; 223	261	42; 113; 142; 236; 269	164
Better communication in the NHS		584; 985; 1003		170	100; 142		
Control high turnover of staff					90; 100		92

Appendix 8: Participant information sheet (Study 2)

Protocol reference: Focus group information sheet

PARTICIPANT INFORMATION SHEET

PART 1

Management of Anorexia Nervosa in Wales:

A Health Education Campaign for Anorexia Nervosa

You are invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others or the researcher about the study if you wish.

- Part 1 tells you the purpose of this study and what will happen to you if you take part.
- Part 2 gives you more detailed information about the conduct of the study.

Please ask us if there is anything that is not clear or if you would like more information. Take your time to decide whether or not you wish to take part.

What is the purpose of the study?

In a previous study we asked patients with anorexia nervosa about their experience within the Welsh healthcare service, so that improvements can be targeted in the areas that don't appear to be working so well. One area that participants identified was that some Healthcare Professionals were not aware of the characteristics of anorexia nervosa. Participants also discussed the negative impact this had on their treatment.

In this part of the study, data will be gathered by conducting focus groups with a sample of students and healthcare professionals who may work with patients who have anorexia nervosa. Questions we will ask will explore views on what should be included in a health education campaign for healthcare professionals about anorexia nervosa, and why these aspects should be included. We will do this by discussing within a group what participants think should be included in a Health Education Campaign and recording the answers by using a digital recording device and/or asking you to write your answers on an answer sheet in response to specific questions.

The research study involves the **(name removed)** NHS Trust, the University of Glamorgan (where the researcher, Laura Rees-Davies, is a postgraduate student), and the **(name removed)**.

Why have I been chosen?

You have been chosen to take part in this research study because you are a student or Healthcare Professional who may come in contact with a service user with anorexia nervosa, and you are over 18 years of age.

Will my taking part in this study be kept confidential?

Procedures for handling, processing, storage and destruction of your data are compliant with the Data Protection Act 1998. Data will be stored securely and only authorised members of the research team will have access to them. The research team consists of Laura Rees-Davies, Dr Sue Faulkner, Dr Caroline Limbert and Dr Bev John. Regulatory authorities and Research and Development audit personnel will also have access to data/information should the study be selected to be investigated or audited. The data may be retained for use in future studies but in this event further Research Ethics Committee approval will be sought.

All information that is collected about you during the course of the research will be kept strictly confidential. Any information about you will have your name removed so that you cannot be recognised from it. You have the right to check the accuracy of the data held about you and correct any errors.

Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason.

What will happen to me if I take part?

Should you decide to take part, you will be asked to attend the Psychology Department at Glamorgan University or meet at a mutually convenient location on any of the University of Glamorgan's campuses. You will be asked to read and sign exact copies of this information sheet and the consent form, and given the opportunity to ask questions regarding the research. You will then be asked to participate in an focus group that should last no more than 1 hour. The focus group facilitator will ask questions about what you think should be included in a Health Education Campaign for Anorexia Nervosa. You are entitled to have someone else present during the focus group should you so wish.

The total time therefore that you will be asked to devote to the research study is approximately 1 hour (excluding travel time). You will only need to attend the University once for this study.

What are the possible disadvantages and risks of taking part?

The interview may cause an inconvenience to yourself with regards to taking up your time. Discussion of your experience of the Welsh healthcare service may also cause distress if your particular experience was unpleasant in any way.

What are the possible benefits of taking part?

A benefit of taking part would be that you are able to tell of your particular experiences of the Welsh healthcare service. You will be able to discuss with other students and/or healthcare professionals what you think should be included in a Health Education Campaign that will be used to raise awareness about anorexia nervosa for healthcare professionals.

What if there is a problem?

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. Please refer to Part 2 for more details.

Will travel expenses be reimbursed?

No travel expenses will not be reimbursed as the study will take place during working hours within the University of Glamorgan Campuses.

Contact details:

Laura Rees-Davies

HASS Psychology Department

Treforest Campus

Pontypridd

CF37 1DL

01443 480480 (please leave a message with Dr Bev John or Dr Sue Faulkner)

This completes Part 1 of the Information sheet.

If the information in Part 1 has interested you and you are considering participation, please continue to read the additional information in Part 2 before making any decision.

PART 2

What if relevant new information becomes available?

Sometimes during the course of a research project, new information becomes available about what is being studied. If this happens, your research contact will tell you about it and discuss whether you want to or should continue in the study. If you decide not to carry on, your research contact will make arrangements for your care to continue. If you decide to continue in the study you will be asked to sign an updated consent form.

Also, on receiving new information the researcher might consider it to be in your best interests to withdraw you from the study. He/she will explain the reasons to you should this happen.

What will happen if I don't want to carry on with the study?

If you withdraw from the study, we will destroy all your identifiable information and the data collected up until that point.

What if there is a problem?

Complaints:

If you have a concern about any aspect of this study, you should ask to speak with the researchers who will do their best to answer your questions (01443 480480). If you remain unhappy and wish to complain formally, you can do this through the University Complaints Procedure. Details can be obtained from the University of Glamorgan.

What will happen to the results of the research study?

The results of the study are intended for peer-reviewed publication. The results will also be available to participants should they be requested. You will not be identified in any report/publication unless you have consented to release such information.

Who is organising and funding the research?

The research is being organised by the NHS Trust and the University of Glamorgan. The research is not funded.

Who has reviewed the study?

The University of Glamorgan Ethics Committee has reviewed and passed this study as being ethical and appropriate.

You will be given a copy of this information sheet and a signed consent form to keep.

Thank you for considering taking part and taking the time to read this information sheet.

Appendix 9: Consent form (Study 2)

PARTICIPANT CONSENT FORM

Management of Anorexia Nervosa in Wales

Please initial box

8. I confirm that I have read and understand the information sheet
for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

9. I understand that my participation is voluntary and that I am free to
withdraw at any time, without giving any reason.

10. I understand that I will not be paid now nor in the future any amount
for taking part in the study.

11. I agree to take part in the above study by completing a questionnaire and my answers
will be kept anonymous.

.....
Name of participant

.....
Date

.....
Signature

Appendix 10: Interview/focus group schedule (Study 2: Clinical psychologist)

Interview

Would you start by telling what your thoughts are on the idea of a health education campaign?

What do you see a health education campaign being?

What do you think a health education campaign for anorexia nervosa should consist of?

Who would you aim the health education campaign towards?

Do you think there will be a difference in the way different healthcare professionals receive the health education campaign? (E.g. doctors vs. nurses)

What would you include in the health education campaign for anorexia nervosa?

Do you think they will take notice of the health education campaign?

What difference do you think this health education campaign would make to the Welsh healthcare service?

Appendix 11: Focus group schedule (Study 2: Health psychologist-in-training)

Anorexia Nervosa in Wales: A Health Education Campaign Focus group outline

Hi my name is Laura Rees-Davies and I am from the University of Glamorgan. I am conducting research into the way patients with anorexia nervosa experience the care they receive in Wales. I have interviewed patients with anorexia nervosa.

One of the themes that has emerged is that lack of awareness of anorexia nervosa amongst healthcare professionals. This lack of awareness has an effect on the way that patients experience their treatment. Therefore we have decided to construct a series of posters which address this lack of knowledge.

The poster will also set out to alert healthcare professionals to the possibility that their participant may have anorexia nervosa.

I would like to talk to you today about what you think should be included in the poster. I would like it to be a group discussion where you discuss the possible answers to the questions I ask. I may intervene occasionally to facilitate the discussion and it should take no longer than thirty minutes.

Consent

Firstly can you all confirm that you understand that this focus group is being recorded and say your name for the purpose of transcription?

(Names and consent)

Okay thank you.

Questions

1. Okay firstly can you discuss what would make a good poster for healthcare professionals about anorexia nervosa? Remember that the aim of the poster is to alert healthcare professionals to the possibility that their service user may have anorexia nervosa, and to give them an indication as to what to do next.
 - a) Why do you think that would make a good aspect of the poster?
 - Why would you include that in your poster?
 - b) Can anyone else think of a better way of conveying that information to the healthcare professionals?
 - c) What text would you include in the poster? In other words what words or sentences would be on the poster?
 - Why?
 - d) What pictures if any would you include on the poster?
 - Why?
 - e) What colour or other graphic elements would you include on the poster?
 - Why?
 - f) What contact details would you have on the poster?
 - Why?
 - g) How many chunks of information would you have on the poster?
 - Why?

Appendix 12: Focus group schedule (Study 2: Mental health NS)

Focus group schedule

Introduction

My name is Laura Rees-Davies and I am a PhD researcher from the University of Glamorgan. I have conducted interviews with patients with anorexia nervosa. One of the themes that has emerged from the interviews is that a lack of awareness of anorexia nervosa by healthcare professionals can have an impact on the relationship between the service user and healthcare professional. Therefore we have decided to develop a health education campaign for healthcare professionals about anorexia nervosa.

We have conducted focus groups with clinical psychologists, psychology students and health psychologists-in-training. I will introduce some of the topics that have come up in these focus groups about the health education campaign and I would like you to comment on them and offer an alternative if you see fit.

Location:

Okay so to start, the health education campaign will be in the form of a series of posters for anorexia nervosa. So far the focus groups have identified the following areas for the posters to be displayed:

In both primary and secondary care

GP surgeries

Gastro wards

Health visitor clinics

Gyms

Dentists

Schools - nurse areas

Diabetes clinics

Are there any other places you think you could put the posters?

What about the particular area in that place that would be best?

Content:

Design of the poster:

Other focus groups have discussed the design of the poster and suggested that it be:

Formal, clinical with facts and symptoms with links to other information

Pictures and slogans, with vivid colours and short bullet points to draw attention

Can you think of any other aspects that you would like to see on the poster for healthcare professionals about anorexia nervosa?

Image on the poster:

It has been suggested that the image on the poster be a person who may have anorexia nervosa. The image will:

Challenge stereotypes such as low weight and female sufferers

Therefore the models will be both male and female, possibly wearing baggy clothes with pale skin and dry hair. The image can be of one person or a group of people representing a peer group or family.

Can you think of any other aspects of the image that could be included, such as props or other characteristics of the model?

Advice:

Other focus groups participants have discussed the content of the poster and early diagnosis has been identified as important.

What information would you like to be on the poster for you as a healthcare professional with regards to early diagnosis?

They have also discussed wanting information as to how to approach the person who may have anorexia nervosa. What information would you like to see on the poster to inform you as a healthcare professional about how to approach a service user who may have anorexia nervosa?

Referral

Other participants have identified referral possibilities that the healthcare professional can use:

B-EAT (the UK leading charity)

Map of Medicine – a website that healthcare professionals can use in order to identify illness and refer on

Specialist service contact details

NHS Logo

Glamorgan University Logo

Can you think of any other referral possibilities that you would like to see on the posters?

Slogans

Finally the following slogans have been proposed (hand out slogans)

Appendix 13: Focussed task outline instructions (Study 2)

Focus group task

Anorexia nervosa health education campaign

Before we start:

You should now become part of a group of between 3-5 people.

Please write the number of your group as assigned by the researcher

How many students are there in your focus group? _____

Task: Thinking about designing a poster for general healthcare professionals about anorexia nervosa.

Your group needs to design a poster for healthcare professionals who may come in contact with people who have anorexia nervosa.

Your poster will need to meet the following criteria:

- Make the healthcare professional think about whether their service user has anorexia nervosa
- Inform the healthcare professional about the characteristics of anorexia nervosa
- Be considerate of any ethical issues that might arise from being exposed to the poster

Your group will need to rough sketch the poster with the layout and make the message(s) obvious on the “rough sketch of your poster” sheet provided at the back of this questionnaire.

Please answer the following questions when designing your poster:

1. What do you think should be included in a health education campaign poster? (i.e. text, pictures, contact details)

2. Why do you think that should be included?

3. How have you prompted the healthcare professional to think about whether their service user has anorexia nervosa?

4. What are the ethical considerations that you have taken into account?

5. How did you overcome these ethical issues?

6. Is there anything else you can think of that needs to be taken into account when designing the poster?

Thank you for participating – have you signed your consent form?

If so please return your fully completed consent form (including group number) to the researcher now.

Appendix 14: Possible headlines for posters (Study 2)

Slogans

Which six would you choose to be on the poster and why? Please decide as a group and discuss your reasons why.

1. 'The hidden truth' (to indicate deception)
2. 'I am less likely to seek help than a female' (from a male model to challenge stereotype)
3. 'I don't know how to help them... do you?' (from a healthcare professional or family member to relate to healthcare professional)
4. 'My friend is skinnier than me' (to highlight a person with early symptoms of anorexia nervosa)
5. 'I will be wearing baggy clothes' (to highlight that it may not be obvious the person has anorexia nervosa)
6. 'It is not just physical' (to highlight that anorexia nervosa is not just about the person's weight)
7. 'When does anorexia start?' (to highlight that anorexia nervosa starts before the weight gets extremely low)
8. 'Would you consider this person anorexic?' (to show that the person may look normal)
9. 'Would you agree this person has anorexia nervosa?' (to show that the person may look normal)
10. 'Could this person have anorexia nervosa?'
11. 'I think you are very scared... do you have anorexia nervosa?' (From a healthcare professional to a person with anorexia nervosa)
12. 'I won't always admit I have anorexia nervosa' (to show deception)
13. 'I may not even realise myself...' (to show the person may not even realise they have anorexia nervosa)
14. 'You need to gain my trust before I will tell you' (to show that a therapeutic relationship is important)
15. 'I may not want your help... but I need it' (to show that there may be a resistance from the person with anorexia nervosa)
16. 'I may not tell the truth...' (to show deception)
17. 'If you don't care... I won't tell you' (to show that a therapeutic relationship is important)
18. 'I don't want you to notice my disorder' (to show resistance/deception)

Appendix 15: Campaign evaluation questionnaire A.v2. (Study 2)

Anorexia Nervosa Awareness Campaign Evaluation

Name of researcher: Laura Rees-Davies

CONSENT:

I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my legal rights being affected.

I understand that relevant sections of any data collected during the study, may be looked at by Laura Rees-Davies, Dr Bev John and Dr Susan Faulkner from the University of Glamorgan, and from regulatory authorities from within the NHS Board, where it is relevant to my taking part in this research. I give permission for these individuals to have access to data from this study.

I agree to the use of the data from the questionnaire I complete, unless I give notice to withdraw from the study. I understand that according to NHS Board policy, the data will be destroyed fifteen years after the research is complete.

I agree to take part in the above study.

.....

Name Date Signature

Anorexia Nervosa Awareness Campaign Evaluation

Anorexia nervosa is a life-threatening mental disorder. The effects of this disorder can include severe weight loss, osteoporosis, low blood pressure, mood swings, depression, dizziness, fainting, poor memory, and even heart failure. Early diagnosis and treatment for anorexia nervosa is crucial to service user outcome.

In order to recognise patients who may have anorexia nervosa, an awareness of the disorder is vital, as well as the ability to seek out further information and refer patients to appropriate staff members.

The campaign was developed with the help of focus groups and interviews with healthcare professionals within the South Wales area. The campaign intends to inform healthcare professionals about anorexia nervosa, and encourage healthcare professionals to identify a possible disorder, seek information, and refer patients to appropriate members of staff.

It is really important that we check how effective our campaign is, improve it, and to learn lessons for future communications to improve service user quality and safety, therefore the University of Glamorgan are asking healthcare professionals, such as yourself, for your views. Please complete this short, anonymous questionnaire.

Section A: Personal information

What sex are you? Male Female

What is your age? (Years)

What is your profession? Student Nurse Qualified Nurse

- GP Junior Doctor
- Therapist Psychologist
- Other student Auxiliary nurse
- Consultant

Other (please specify)

What is your highest qualification? A levels NVQ Degree

Masters PhD/Doctorate

Other (please specify).....

What grade are you? Bands 1-4 Bands 5-7 Bands 8+

Where is your place of work? Please state which hospital or name of other location and type of ward/practice (For example only: Royal Gwent Hospital, Newport; Gastroenterology):

.....

Section B: Knowledge, referral and behaviour with a service user with anorexia nervosa

Please imagine you have met a service user whom you think **may** have anorexia nervosa. Please consider your responses carefully and answer honestly.

(Tick as appropriate for each statement)

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
I would be able to identify a service user who may have anorexia nervosa					
I would know where to refer a service user who may have anorexia nervosa					
I would know how to refer a service user who may have anorexia nervosa					
I feel confident I could signpost services to a service user who may have anorexia nervosa					
I am confident I can access appropriate information on anorexia nervosa					
I would seek advice from a colleague or supervisor if I suspected a service user may have anorexia nervosa					
I believe I need more training on anorexia nervosa*					

* If you feel that you need more training on anorexia nervosa, please describe what it is you require training on:

.....

.....

.....

.....

.....
.....
.....
.....

Thank you for taking the time to complete this questionnaire.

If you would like to discuss this campaign, please contact Laura Rees-Davies,

School of Psychology, University of Glamorgan, lreesdav@glam.ac.uk, 01443 480480

Debrief Information

What is the purpose of the study?

In a previous study we asked patients with anorexia nervosa about their experience within the Welsh healthcare service, so that improvements can be targeted in the areas that don't appear to be working so well. One area that participants identified was that some Healthcare Professionals were not aware of the characteristics of anorexia nervosa. Participants discussed the negative impact this had on their treatment. In this part of the study, data has been gathered by conducting focus groups with a sample of students and healthcare professionals who may work with patients who have anorexia nervosa. The purpose of this stage of research is to explore Healthcare professionals perceptions of anorexia nervosa.

Why was I chosen?

You were chosen to take part in this research study because you are a healthcare professional that works at the location in which recruitment for the study was taking place, and you are over 18 years of age.

Will my taking part in this study be kept confidential?

Procedures for handling, processing, storage and destruction of your data are compliant with the Data Protection Act 1998. Data will be stored securely and only authorised members of the research team will have access to them. The research team consists of Laura Rees-Davies, Dr Susan Faulkner and Dr Bev John. Regulatory authorities and Research and Development audit personnel will also have access to data/information should the study be selected to be investigated or audited. The data may be retained for use in future studies but in this event further Research Ethics Committee approval will be sought.

All information that is collected about you during the course of the research will be kept strictly confidential. You have the right to check the accuracy of the data held about you and correct any errors.

Appendix 16: Campaign evaluation questionnaire B.v2. (Study 2)

Anorexia Nervosa Awareness Campaign Evaluation

Study Information

Anorexia nervosa is a life-threatening mental disorder. The effects of this disorder can include severe weight loss, osteoporosis, low blood pressure, mood swings, depression, dizziness, fainting, poor memory, and even heart failure. Early diagnosis and treatment for anorexia nervosa is crucial to service user outcome.

In order to recognise patients who may have anorexia nervosa, an awareness of the disorder is vital, as well as the ability to seek out further information and refer patients to appropriate staff members.

The campaign was developed with the help of focus groups and interviews with healthcare professionals within the South Wales area. The campaign intends to inform healthcare professionals about anorexia nervosa, and encourage healthcare professionals to identify a possible disorder, seek information, and refer patients to appropriate members of staff.

It is really important that we check how effective our campaign is, improve it, and to learn lessons for future communications to improve service user quality and safety, therefore the University of Glamorgan are asking healthcare professionals, such as yourself, for your views. Please complete this short, anonymous questionnaire.

Consent:

I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my legal rights being affected.

I understand that relevant sections of any data collected during the study, may be looked at by Laura Rees-Davies, Dr Bev John and Dr Susan Faulkner from the University of Glamorgan, and from regulatory authorities from within the NHS Board, where it is relevant to my taking part in this research. I give permission for these individuals to have access to data from this study.

I agree to the use of the data from the questionnaire I complete, unless I give notice to withdraw from the study. I understand that according to NHS Board policy, the data will be destroyed fifteen years after the research is complete.

I agree to take part in the above study.

.....

Name	Date	Signature
------	------	-----------

Section A: Personal information

What sex are you? Male Female

What is your age? (Years)

What is your profession? Student Nurse Qualified Nurse

- GP Junior Doctor
- Therapist Psychologist
- Other student Auxiliary nurse
- Consultant

Other (please specify)

What is your highest qualification? A levels NVQ Degree

Masters PhD/Doctorate

Other (please specify)

What grade are you? Bands 1-4 Bands 5-7 Bands 8+

Where is your place of work? Please state which hospital or name of other location and type of ward/practice (For example only: Royal Gwent Hospital, Newport; Gastroenterology):

.....

Section B: Knowledge, referral and behaviour with a service user with anorexia nervosa

Please imagine you have met a service user whom you think **may** have anorexia nervosa. Please consider your responses carefully and answer honestly.

(Tick as appropriate for each statement)

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
I would be able to identify a service user who may have anorexia nervosa					
I would know how to refer a service user who may have anorexia nervosa					
I would know where to refer a service user who may have anorexia nervosa					
I feel confident I could signpost services to a service user who may have anorexia nervosa					
I am confident I can access appropriate information on anorexia nervosa					
I would seek advice from a colleague or supervisor if I suspected a service user may have anorexia nervosa					
I believe I need more training on anorexia nervosa*					

* If you feel that you need more training on anorexia nervosa, please describe what it is you require training on:

.....

.....

Have you previously completed and submitted answers to the questions above for this research questionnaire?

Yes **No**

Section C: Awareness of the campaign

During the past month have you become aware of an anorexia nervosa awareness poster campaign?

Yes No Not sure

There are four posters in the campaign. Please describe the theme of the poster(s) that you have seen:

1.

2.

3.

4.

Section D: Attitudes towards the campaign

(Tick the appropriate box)

To what extent do you think the anorexia nervosa awareness campaign posters are...?

	Yes	No	Undecided
Appealing			
Memorable			
Irrelevant			
Informative			
Detailed			
Unclear			
Quick to understand			
Complex			

Section B: Evaluation of the campaign

(Tick the appropriate box)

To what extent do you think the anorexia nervosa Awareness campaign posters are...?

	Yes	No	Undecided
Appealing			
Memorable			
Irrelevant			
Informative			
Detailed			
Unclear			
Quick to understand			
Complex			

Section C: Your confidence with investigating and referring following the Anorexia Nervosa Awareness Campaign

(Tick as appropriate for each statement)

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
The poster has made me more confident in being able to refer a service user who may have anorexia nervosa					
The poster made me question my prior knowledge of anorexia nervosa					
The poster has made me more confident in being able to access appropriate information on anorexia nervosa					
The poster has made me more confident in being able to ask a colleague about anorexia nervosa					
The poster has given me new information about anorexia nervosa					
The poster has made me aware of how to signpost services to a service user who may have anorexia nervosa					

Do you have any further comments on the content/layout of the poster?

.....

.....

.....

.....

Debrief Information – please read:

What is the purpose of the study? In a previous study we asked patients with anorexia nervosa about their experience within the Welsh healthcare service, so that improvements can be targeted in the areas that don't appear to be working so well. One area that participants identified was that some Healthcare Professionals were not aware of the characteristics of anorexia nervosa. Participants discussed the negative impact this had on their treatment. In this part of the study, data has been gathered by conducting focus groups with a sample of students and healthcare professionals who may work with patients who have anorexia nervosa. The purpose of this stage of research is to explore Healthcare professionals perceptions of anorexia nervosa.

Why was I chosen? You were chosen to take part in this research study because you are a healthcare professional that works at the location in which recruitment for the study was taking place, and you are over 18 years of age.

Will my taking part in this study be kept confidential? Procedures for handling, processing, storage and destruction of your data are compliant with the Data Protection Act 1998. Data will be stored securely and only authorised members of the research team will have access to them. The research team consists of Laura Rees-Davies, Dr Susan Faulkner and Dr Bev John. Regulatory authorities and Research and Development audit personnel will also have access to data/information should the study be selected to be investigated or audited. The data may be retained for use in future studies but in this event further Research Ethics Committee approval will be sought. All information that is collected about you during the course of the research will be kept strictly confidential. You have the right to check the accuracy of the data held about you and correct any errors.

Thank you for taking the time to complete this questionnaire. If you would like to discuss this campaign, please contact Laura Rees-Davies, School of Psychology.

Laura Rees-Davies

Anorexia Nervosa
Campaign Evaluation:
Data collection

INSTRUCTIONS FOR STUDY

- Read the study information and consent section on the questionnaire you have been given
- Sign and date to indicate your consent to participate **BUT DO NOT TURN OVER THE PAGE UNTIL ADVISED**
- **PLEASE DO NOT SPEAK TO ANYONE FROM THIS POINT**

INSTRUCTIONS FOR STUDY

- You will now be shown a series of posters designed as an awareness campaign for healthcare professionals about Anorexia Nervosa
- Each poster will be displayed for one minute


I'm too scared to
ask you...
Please,
ask me.

Could it be...

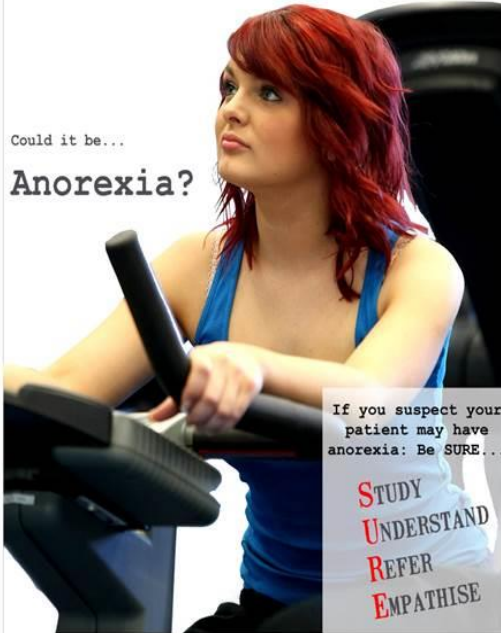
Anorexia?

If you suspect your patient may
have anorexia: Be SURE...

STUDY
UNDERSTAND
REFER
EMPATHISE

 For symptomology and advice visit;
www.nhs.uk/conditions/anorexia-nervosa/pages/introduction.aspx

Maybe if I was thinner,
someone might notice...



Could it be...

Anorexia?

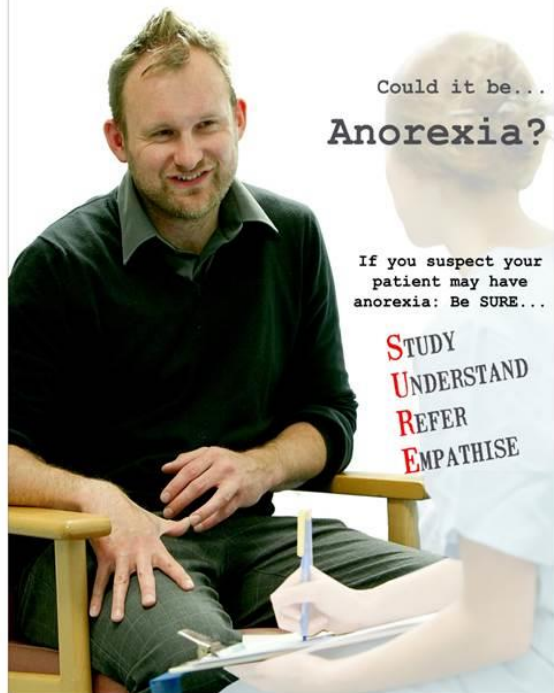
If you suspect your
patient may have
anorexia: Be SURE...

STUDY
UNDERSTAND
REFER
EMPATHISE



For symptomology and advice visit;
www.nhs.uk/conditions/anorexia-nervosa/pages/introduction.aspx

I can't be ill... I'm a man.



Could it be...

Anorexia?

If you suspect your
patient may have
anorexia: Be SURE...

STUDY
UNDERSTAND
REFER
EMPATHISE



For symptomology and advice visit;
www.nhs.uk/conditions/anorexia-nervosa/pages/introduction.aspx


I may not want
your help...
but I need it.


Could it be...

Anorexia?

If you suspect your patient may
have anorexia: Be SURE...

**STUDY
UNDERSTAND
REFER
EMPATHISE**



 For symptomology, and advice visit
www.nhs.uk/conditions/anorexia-nervosa/pages/introduction.aspx

INSTRUCTIONS FOR STUDY

- Please do not talk
- Now complete all sections of the questionnaire in front of you
- Again please give consent to participate, you are free to withdraw at any time
- When completed, please pass your questionnaire to the end of your row

INSTRUCTIONS FOR STUDY

- Thank you for participating!
- If you have any questions, please contact me on lreesdav@glam.ac.uk

Appendix 19: Brief evaluation questionnaire for HCPs (Study 2)

By completing this questionnaire, you consent to take part in the study
You have the right to withdraw at any time

What is your occupation.....

Age:.....years

Sex: Male
 Female

Have you seen the poster about anorexia nervosa at the surgery?

Yes
No

Did you read the information on the poster?

Yes
No

1. The poster raised my awareness about anorexia nervosa

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
-------------------	----------	----------------------------	-------	----------------

2. Since seeing the poster I have looked for more information about anorexia nervosa

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
-------------------	----------	----------------------------	-------	----------------

3. The poster made me think that one of my current patients could have anorexia nervosa

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
-------------------	----------	----------------------------	-------	----------------

4. In future I now intend to be mindful of anorexia nervosa when seeing patients

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
-------------------	----------	----------------------------	-------	----------------

For further information please contact Laura Rees-Davies
on laura.rees-davies@southwales.ac.uk

Appendix 20: Debrief information for healthcare professionals in GP surgeries

Debrief information

Thank you for displaying the anorexia nervosa awareness campaign for healthcare professionals at your surgery. Please display this notice near the poster so that all healthcare professionals who participated can be debriefed about the nature of the evaluation.

The University of Glamorgan has been exploring service user's experience of the Welsh healthcare service for anorexia nervosa. Patients who were receiving secondary care were interviewed, and results suggested that increased awareness of anorexia nervosa by healthcare professionals may have benefits in terms of therapeutic alliance and how patients experienced treatment.

An anorexia nervosa awareness campaign was therefore devised following focus groups and interviews with healthcare professionals and utilising psychological theories of behaviour change.

We have asked you to complete the evaluation as we would like healthcare professionals use the poster and what effects it may have. Even though the questionnaire is brief, it contains valuable information regarding the effectiveness of the campaign.

Thank you for completing your questionnaire, and if you have any further questions, please email me on lreesdav@glam.ac.uk or telephone 01443 482050.

Kind regards,

Laura Rees-Davies

Appendix 21: TTM educational intervention film

The TTM educational intervention film can be accessed at:

<https://www.youtube.com/playlist?list=PL8Sgo1D72xPYttXF5BBph7fzW78GXaIWI>

**Appendix 22: Nursing student self-efficacy of initial management of anorexia
nervosa instrument**

Adult Nursing Confidence Questionnaire

This questionnaire is designed to assess your confidence in being able to detect, assess and refer patients who may have anorexia nervosa.

By completing this questionnaire, you are confirming that you have read and understood the information sheet that has been given to you by the researcher. Your data will be anonymised. By completing the questionnaire you are also giving consent for the data to be used anonymously for a PhD thesis, journal article and/or conference presentation. You have the right to withdraw from the study until the point that you hand the questionnaire in to the researcher. You understand that you are not able to withdraw your data after the questionnaire has been handed back to the researcher, as all questionnaires are anonymous.

Practice Rating

To familiarize yourself with the rating form, please complete this practice item first.

If you were asked to lift objects of different weights **right now**, how certain are you that you can lift each of the weights described below?

Rate your degree of confidence by recording a number from 0 to 100 using the scale given below:

0	10	20	30	40	50	60	70	80	90	100
Cannot do at all				Moderately can do				Highly certain can do		

Physical Strength

**Confidence
(0-100)**

Lift a 10 pound object	_____
" 20 "	" " _____
" 50 "	" " _____
" 80 "	" " _____
" 100 "	" " _____
" 150 "	" " _____
" 200 "	" " _____
" 300 "	" " _____

Please turn over.

Appendix 23: Study 3 information sheet

Information sheet (Version 3: 08/07/15)

Information sheet

Study title: Nursing student awareness of anorexia nervosa: development of an educational intervention.

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or would like more information. Take time to decide whether or not to take part.

What is the purpose of the study?

The purpose of this study is to explore nursing students' confidence in their ability to detect, assess and refer a patient who may have anorexia nervosa, before and after educational material has been presented.

Why have I been invited?

You are a nursing student in your second or final year of study.

Do I have to take part?

It is up to you to decide. This information sheet outlines the purpose of the study and what would happen to you, including possible disadvantages and risks of taking part. Should you then decide you would like to participate, we will ask you to take part in the study. You do not have to take part if you do not want to. You are free to withdraw at any time without giving a reason, until the questionnaires are completed and handed back to the researcher. After this point, as the data is anonymised, we will be unable to identify which questionnaire relates to your data and therefore it will be included in the study.

What will happen to me if I take part?

The study should take no longer than 40 minutes in total. You will be asked to

complete a short questionnaire, view material regarding anorexia nervosa (information sheet or video, depending on which group you are assigned to), and then complete another questionnaire.

By handing back the completed questionnaire, you are also consenting to participate in the study.

What will I have to do?

Complete two questionnaires and view material regarding anorexia nervosa.

What are the possible disadvantages and risks of taking part?

You may find that the information that is presented in the questionnaire or short film may make you feel uncomfortable or experience negative emotions. We recommend that you visit the NHS and NICE websites for more information regarding anorexia nervosa. You may also want to read the current diagnostic criteria for anorexia nervosa in the International Classification of Diseases. This is available online.

If you find that the subject of the study has brought up some difficult thoughts, emotions or questions and you would like more information, then please visit the following websites:

www.b-eat.co.uk

<http://www.nhs.uk/Conditions/Anorexia-nervosa/Pages/Introduction.aspx>

If you are concerned that you may have anorexia nervosa, please visit your GP and refer to the webpages above. If you are concerned about another person, seek information from the webpages above, and advise the person to visit their GP.

What are the possible benefits of taking part?

We cannot promise the study will help you but the information we get from the study will help to increase understanding of use of interventions and awareness of anorexia nervosa in nursing students.

What if there is a problem?

If you have a questions about any aspect of this study, you should ask to speak to the researcher who will do their best to answer your questions (01443 480480 Laura Rees-Davies). If you have a complaint then please speak to Dr Bev John (01443 480480).

If you remain unhappy and wish to complain formally you can do this by the University of South Wales complaints procedure. Please contact Jonathan Sinfield, Research Governance Officer on 01443 484518/483143.

There may be a risk that the information presented to you during data collection may cause psychological distress. If you feel that this applies to you at any time during data collection, please let the researcher know as soon as possible. You have the right to withdraw from participation in the study at any time until the questionnaires have been collected. If you feel distressed or concerned at any point after the data collection process, you may contact the researcher or use the websites listed in the section 'What are the possible disadvantages and risks of taking part?' The study has received ethical approval from the Faculty of Life Sciences and Education at the University of South Wales, and therefore is covered by University indemnity arrangements.

Will my taking part in the study be kept confidential?

You not required to provide your name for this study. Procedures for handling, processing, storage and destruction of data are in accordance with the Data Protection Act 1998.

Data will be collected using the two questionnaires. The data will be stored securely and will contain participant numbers that will not be related to your personal details in any way. You will not be able to be identified by your data. Paper copies of the questionnaires will be kept in a locked cabinet, and electronic data will be kept on a password protected computer known only by the research team. Data will not be used for any future studies. Data will be kept for a minimum of two years after data collection is complete.

What will happen if I don't carry on with the study?

If you withdraw from the study all the information and data will be destroyed. As the data is anonymised then this will only be possible up until the point that the questionnaires are given back to the researcher. If you feel you would not like to participate, you do not have to complete or return the questionnaire to the researcher.

What will happen to the results of the research study?

We anticipate that the results will be published in a thesis, and a journal article.

Who is organising the research?

The University of South Wales.

Further information and contact details:

Laura Rees-Davies: email laura.rees-davies@southwales.ac.uk

Appendix 24: Study 3 Debrief Sheet

Debrief Information about the study

What was the study about today?

Thank you for taking part in the research study today. You have been a participant in a pre-post test design. You have completed a questionnaire, and watched an educational film regarding anorexia nervosa, and then completed the questionnaire again.

The questionnaire that you completed was designed to measure your confidence (self-efficacy) in your own ability to detect, assess and refer a patient who may have anorexia nervosa. The questionnaire that you completed before watching the film was the same as the questionnaire you completed afterwards.

The educational film that was shown to you was designed to raise your awareness of the eating disorder, specifically making you feel more able to detect, assess and refer patients who may have anorexia nervosa.

The film was based upon the Transtheoretical Model, also known as the Stages of Change model. This model suggests that as an employee, you go through processes of change before you will carry out a new behaviour. According to the model, as you move through the stages of change, towards changing a behaviour, your confidence in your ability to carry out the behaviour increases. Therefore the film was designed to increase your confidence in being able to detect, assess and refer patients who may have anorexia nervosa.

Rationale for the current study

Previous research findings have suggested that some healthcare professionals have limited knowledge regarding anorexia nervosa. This has been demonstrated to have a negative effect on the therapeutic relationship, treatment satisfaction and patient outcome. Education regarding the disorder may be useful in increasing awareness of anorexia nervosa. This may increase nurses' confidence in being able to identify, detect and refer patients who may have anorexia nervosa. This will then often lead to early intervention and better prognosis for those patients. We would like to

explore whether there is a difference in confidence ratings before and after educational material was presented to you. There may also be a difference between the two types of medium of educational material, i.e. film vs. leaflet.

You are still free to withdraw your data from the study now. If you would like to withdraw, please make the researcher, Laura Rees-Davies, aware of your wishes. If you decide to withdraw from the study, the questionnaires that you have completed will be destroyed and the data will not be used.

I feel like I need more information about anorexia nervosa, where should I go?

We recommend that you visit the NHS and NICE websites for more information regarding anorexia nervosa. You may also want to read the current diagnostic criteria for anorexia nervosa in the International Classification of Diseases. This is available online.

This has brought up some difficult personal issues for me, where can I go for help or advice now?

If you find that the subject of the study has brought up some difficult thoughts, emotions or questions and you would like more information, then please visit the following websites

www.b-eat.co.uk

<http://www.nhs.uk/Conditions/Anorexia-nervosa/Pages/Introduction.aspx>

If you are concerned that you may have anorexia nervosa, please visit your GP. If you are concerned about another person, seek information from the webpages above, and advise the person to visit their GP.

I would like more information about the study now that I have taken part

If so, please contact Laura Rees-Davies on 07507836177 or email:

laura.rees-davies@southwales.ac.uk

Appendix 25: Audio-Visual Script for TTM film

**AV SHOOTING SCRIPT
ANOREXIA NERVOSA FILM**

Scene or Time	Audio	Visual
S1 20 Seconds		<p>BLACK SCREEN</p> <p>TITLE – FADE IN</p> <p>T1: You are about to hear patient stories about their personal experience of the healthcare service for anorexia nervosa.</p> <p>TITLE – FADE OUT</p> <p>TITLE – FADE IN</p> <p>T2: Specific types of healthcare professionals, such as nurse/doctor/psychologist/dietician will not be identified. They will be referred to collectively as ‘healthcare professionals’.</p> <p>TITLE – FADE OUT</p> <p>TITLE – FADE IN</p> <p>T3: The voices are actors, but the stories are from real patients.</p>
S2	<p>PATIENT 1: I sought help because I missed my periods. They told me to come back when I had missed them for six to twelve months. When I went back, they just put me on the pill.</p>	<p>FADE FOR BLACK:</p> <p>Out of focus Patient 1 entering Doctors surgery.</p> <p>Out of focus Patient 1 waiting in waiting room of Doctors surgery,</p>
S2	<p>PATIENT 1: I went to another Healthcare professional but she said ‘oh just eat a</p>	<p>Out of focus Patient 1 sat in consultation room over healthcare professional’s shoulder.</p>

	<p>bit more and you'll be okay. Can't you just eat a bit more? Can't you eat a biscuit and have a bit of cake every day?' and sent me away. I understand now but at the time I was just like 'no I can't', or 'yeah alright I'll do that' and not do it. Because it wasn't just about going and having a piece of cake 'cause there was lots of emotions tied up in the reasons why I wasn't eating. So I found she was quite ignorant about it. I could lie to her. I could fob her off because she didn't really know anything. She had crap weighing scales. It was only when someone else phoned her on my behalf and complained that she took me seriously. I think she could have been better trained, and I think she realised that as well.</p>	<p>CU: healthcare professional's mouth saying 'oh just eat a bit more and you'll be okay. Can't you just eat a bit more? Can't you eat a biscuit and have a bit of cake every day?'</p> <p>Out of focus Patient 1 over healthcare professional's shoulder. She sends her out of the room.</p> <p>Out of focus Patient 1 walking though doctor's surgery</p> <p>Out of focus Patient 1 Walking out of Doctor's Surgery.</p> <p>Out of focus Patient 1 Walking though park she sits on a beach.</p> <p>CU: of the back of Patient 1's head.</p> <p>CU: of Phone being dialled.</p> <p>CU: Of mouth angrily talking on phone.</p> <p>MCU: Consultation room over healthcare professional's shoulder. On phone she puts the phone down.</p>
S2	<p>PATIENT 1: More awareness of anorexia nervosa is needed in the healthcare service. I expected to be met by people who were trained regarding eating disorders. HCPs should be better educated about how to deal with them.</p>	<p>Low Angle of Out of focus Patient 1 sat on beach in park, the focus is on her hands she rubs them together for warmth,</p> <p>WS: Out of focus Patient 1 sat on beach in park, alone.</p> <p>Cross dissolve to next Patient</p>
S2	<p>PATIENT 2: I first went to see a HCP when I was 17, and told her I was jealous of anorexic people. She said I was attention seeking. I didn't go to get help for another two years about that. I understood what</p>	<p>Out of focus Patient 2 sat look lonely in bed room. (Back of head, objects in foreground in focus)</p>

	<p>she meant, that I was probably trying to seek help, but at the time the comments upset me. I tried to seek help after that, but I didn't think I could ask.</p>	<p>Out of focus Patient 2 walking up to door stopping and walking away</p>
S2	<p>PATIENT 2: I went to a HCP after and it came up on the screen 'underweight'. I nearly said something, but the HCP didn't mention it so neither did I. I felt too fat to ask for help. I had anorexia nervosa for four years before it was diagnosed.</p>	<p>ECU: the word underweight fills the screen with other words surrounding it blurred out.</p> <p>ECU: of patient's mouth, she goes to say something but hesitates and doesn't say anything.</p> <p>Go back to bedroom.</p> <p>Cross dissolve to patient 3.</p>
S2	<p>PATIENT 3: I went to see a healthcare professional and they told me to 'go away, eat three meals a day you you'll be fine'. I felt like there was something wrong with me, but I felt too fat to ask for help. The healthcare professional I saw was totally unhelpful I I lost faith in the health service. I wanted to feel like I could trust a healthcare professional. To receive help and encouragement. I expected help. I expected to be cured.</p>	<p>Out of focus patient 3 walks through surgery door.</p> <p>ECU: of healthcare professional mouth saying 'go away, eat three meals a day and you'll be fine'</p> <p>Out of focus patient 3 walking away down the street.</p> <p>Out of focus patient 3 sat on wall or ledge, shot from behind. 360 round head shot.</p> <p>Cross dissolve to patient 4.</p>
S2	<p>PATIENT 4: Someone who doesn't understand eating disorders can make you feel unsafe, because you might not be able to tell them the truth. The service needed more people who knew about eating disorders.</p>	<p>Out of focus patient 4 sat at bus stop. Low angle wide. A car passes in front of the frame. Cut to</p> <p>ECU: In doctor surgery, HCP walks past frame, out of patient 4 mouth, mouthing or saying Yeah I'm okay.</p>

S2	<p>PATIENT 4: Healthcare professionals who didn't know about eating disorders would say things like 'oh come on, everyone worries about what they look like'. I felt like there was a general feeling of irritation towards me.</p>	<p>Out of focus patient 4 sat in consultation room, over the shoulder of healthcare professional.</p> <p>ECU: Healthcare professional mouth saying 'oh come on...'</p> <p>Out of focus patient 4 sat in consultation room, over the shoulder of healthcare professional.</p>
S2	<p>PATIENT 4: I know they were trying to help but I thought they were going to make me fat.</p>	<p>Patient 4 back of head, patient looks down, in background healthcare professional out of focus.</p> <p>Dissolve to patient 5.</p>
S2	<p>PATIENT 5: A healthcare professional was taking blood from me and she couldn't find a vein. She asked me if I had eaten that day, and then proceeded to talk about when she was ill and really thin.</p>	<p>Patient 5 CU: arm attempting to have blood taken.</p> <p>ECU: Healthcare professionals mouth saying 'have you eaten today?' and carry on talking but can't tell what she is saying.</p> <p>ECU: patient 5 eyes, look of confusion.</p> <p>FADE TO BLACK</p>
S3		<p>Focus pull so background goes blurry.</p> <p>TITLES FADE IN</p> <p>T4: What's important to know?</p> <p>Focus pull background next scene in focus</p>
S3	<p>Psychologist: Eating disorders can be severe and enduring mental illnesses that have serious physical, psychological and social consequences.</p>	<p>WS: Low angle USW professional building.</p>

	<p>Psychologist: Anorexia nervosa has the highest mortality rate of any psychiatric illness through suicide and direct physical effects.</p>	<p>MS: Psychologist Laura Rees-Davies sat in office</p> <p>Title: Laura Rees-Davies, Lecturer in Psychology, University of South Wales.</p>
	<p>Psychologist: Additionally, patients who suffer with an eating disorder are very likely to also have other mental health problems or disorders.</p>	<p>CU: Psychologist Laura Rees-Davies sat in office</p>
S3	<p>Nurse: Nurses play an important role in their early detection, assessment and treatment.</p>	<p>EXT. Hospital WS</p>
	<p>Nurse: A Framework for Wales has been written by the Welsh Assembly government specifically for eating disorders.</p>	<p>INT: HOSPITAL WARD</p> <p>MCU: Nurse speaking the camera, busy ward behind him.</p> <p>Title: Kelly James, Qualified Nurse.</p>

	<p>Nurse: The framework highlights that there are major weaknesses and gaps across Wales which can result in individuals not receiving the care their condition requires. The framework explicitly reinforces the role of primary care teams, generic psychiatric and ¹physical health services in identifying, assessing and intervening with people who have an eating disorder.</p>	<p>Framework on PC</p> <p>CU; Framework being scrolled on PC screen.</p> <p>Cut to</p> <p>Doctors surgery</p> <p>Cut to</p> <p>Nurse sat talking to someone in a house.</p> <p>Cut to</p> <p>Hospital ward</p>
	<p>Nurse: This means that at all levels, healthcare professionals have a responsibility to be aware of anorexia nervosa, and have the ability to assess and refer cases if necessary.</p>	<p>INT: HOSPITAL WARD MCU: Nurse Kelly James</p>
	<p>Nurse: Recently, the Welsh Assembly Government committed funding to improve the current health service for eating disorders in Wales. Therefore, a commitment towards better identification, treatment and outcome for patients with anorexia nervosa has been made.</p>	<p>EXT. WS. WELSH ASSEMBLY, CARDIFF BAY.</p> <p>Picture goes out of focus.</p> <p>Title: Identification Treatment Outcome</p>

S3	<p>Nurse: On a personal level, you are taught that you should adopt six core values, known as the six c's. These enduring values and behaviours underpin compassion in practice.</p>	<p>INT: HOSPITAL WARD CU: Nurse Kelly James</p>
	<p>They include care, compassion, competence, communication, courage and commitment. Therefore, it is imperative that you become more aware about anorexia nervosa, in order to be able to provide appropriate care to patients that may present with symptoms of the disorder.</p>	<p>INT. HOSPITAL WARD. Picture goes out of focus. Title fade. Titles: Six C's: Care Compassion Competence Communication Courage Commitment</p>
S4		<p>The C's list fades away except Care and the title care gets bigger TITLES FADE OUT</p>
S4	<p>Nurse: Caring defines us and our work. People who are receiving care expect it to be right for them consistently throughout every stage of their life.</p>	<p>Back into focus Nurse Kelly James CU Hospital Ward</p>
S4	<p>PATIENT 3: Funding was a problem. I didn't feel worthy of help, and I didn't think I could have it anyway. Having treatment made me feel guilty, because I felt like someone else might die because I was receiving their treatment.</p>	<p>Out of focus patient 3 sat on wall or ledge in street. Hands up to side of head, head in hands, looking concerned.</p>
S4	<p>PATIENT 4: I felt privileged to receive any kind of treatment.</p>	<p>Patient 4 walks away with healthcare professional, who has their hand on her back in a comforting way.</p>

S4	Nurse: Patients often report feeling as though they don't deserve treatment. In order to care for our patients, we should foster an environment where patients have realistic expectations regarding treatment, and that those expectations are met.	Continue previous shot, with VO of Nurse Kelly James. PICTURE OUT OF FOCUS
S5		6 C'S TITLE FADE IN T6: Caring title goes back into list, Compassion gets bigger, other titles fade away. TITLES FADE OUT
S5	Nurse: Compassion is how care is given through relationships based on empathy, respect and dignity. It can also be described as intelligent kindness and it central to how people perceive their care.	Focus pull back, Nurse Kelly James
S5	P2: Healthcare professionals who were approachable and friendly were better. Some healthcare professionals were scary and intimidating.	INT. Out of focus P2 it talking to HCP nodding. INT. Out of focus P2 sat low angle HCP stood look down on them
S5	P2: Treatment was frightening because my control was taken away. I did trust some of the healthcare professionals in the service.	Continuing from previous shot. Camera tracks in to HCP
S5	P3: The healthcare professional was really good, he used to let me take all the time I ² needed for my appointments. He would let me just sit there	INT: Consultation room Male HCP and P5 talking

	for forty minutes and cry if I needed to.	
S5	Nurse: now that we are aware that this is how patients feel, we are able to be compassionate about their disorder and treatment experience.	Nurse Kelly piece to camera PICTURE OUT OF FOCUS
S6		6 C'S TITLE FADE IN T7: Compassion title goes back into list, Competence gets bigger, other titles fade away. TITLES FADE OUT
S6	Nurse: Competence means all those in caring roles must have the ability to understand an individual's health and social needs and the expertise, clinical and technical knowledge to deliver effective care and treatments.	FOCUS PULL BACK TO KELLY Nurse Kelly piece to camera
S6	P1: The HCP was knowledgeable and referred me when I needed to be referred. I thought she was professional.	INT: by desk in hospital Nurse referring patient talking on phone
S6	P3: I wanted to feel like I could trust the healthcare professionals, to receive advice and encouragement. A healthcare professional I felt comfortable with was knowledgeable and helpful. She didn't force me to do things I didn't want to do.	INT: Consultation room Male HCP and P5 talking
S7	P1: I trusted healthcare professionals with more knowledge.	INT: Library Nurse looking at book
S7	Nurse: Having the willingness to discuss the disorder with a patient may only be	INT: ward Nurse Kelly piece to camera

	useful if you have an awareness of the disorder from a clinical perspective.	
S7	P4: Some of the HCPs felt like they had to have their two cents 'cause everyone has something to say to me. 'Cause just like 'are you saying this from the position of a doctor or a nurse or as just someone who wants to say 'oh well this is what I think you should do?'' and that's quite weird, so personal. You get confused. Education is the most important thing.	INT: Hospital corridor POV of P4 HCP saying unhelpful things as they walk down the corridor.
S7	P5: Someone who was persistent and gave a sense that she knew what she was doing. She wouldn't let things escalate. I didn't feel like I could get away with not complying and so I trusted her, something I don't do easily.	INT: Waiting room P5 sat in waiting room, sat relaxed. HCP comes to meet her and she sits more upright and looks at HCP
S7	Nurse: Recovery involves a collaborative effort between the individual and the healthcare professionals. It requires sufficient motivation to change and adequate support and guidance. The healthcare professional needs to understand the patient's dilemmas and ambivalent feelings, while promoting the possibility of change and recovery.	INT: ward Nurse Kelly James piece to camera PICTURE OUT OF FOCUS
S7		6 C'S TITLE FADE IN T8: Competence title goes back into list, COMMUNICATION gets bigger, other

		titles fade away. TITLES FADE OUT
S7	Nurse: Communication is central to successful caring relationships and to effective team working. Listening is as important as what we say and do, and essential for ‘no decision about me without me’.	FOCUS PULL BACK TO KELLY Nurse Kelly piece to camera
S7	P5: The good healthcare professionals are the ones that listen and know what they are doing. They do their job as it needs to be done.	INT: consultation room HCP listening to out of focus P5
S7	P3: I preferred healthcare professionals who were willing to compromise. They were fantastic. They met patients mid-way. This helped us to stay safe – not necessarily about getting better, but about getting no worse. Someone who was prepared to talk in my language.	INT: consultation room Over the shoulder of P3 with HCP looking at food diary, nodding
S7	Nurse: Communication is the key to a good workplace with benefits to staff and patients alike.	INT: ward Nurse Kelly piece to camera Picture out of focus
S8		6 C’S TITLE FADE IN T9: COMMUNICATION title goes back into list, COURAGE gets bigger, other titles fade away. TITLES FADE OUT
S8	Nurse: Courage enables us to do the right thing for the people we care for, to speak up when we have concerns and to have the personal strength and vision to innovate and to	FOCUS PULL BACK TO KELLY INT: ward Nurse Kelly piece to camera

	embrace new ways of working. This includes being confident in using brief tools to assess whether a patient may have an eating disorder.	
S8	P1: I've been to various people and not one of them said 'do you think you're eating enough?' I just didn't know what was going on but now I think it's a really obvious thing you know you should ask someone. I felt a bit neglected I guess.	INT: corridor P1 exits consultation room and walks down corridor
S8	Nurse: Your awareness of anorexia nervosa will result in increased confidence and courage to be able to detect, assess and refer the patient to the appropriate services.	Continue from previous shot Picture out of focus
S9		6 C'S TITLE FADE IN T9: COURAGE title goes back into list, COMMITMENT gets bigger, other titles fade away. TITLES FADE OUT
S9	Nurse: A commitment to our patients and populations is a cornerstone of what we do. We need to build on our commitment to improve the care and experience of our patients. To take action to make this vision and strategy a reality for all and meet the health and social care challenges ahead.	FOCUS PULL BACK TO KELLY INT: ward Nurse Kelly piece to camera Picture out of focus
S10		TITLES FADE IN TITLE: HOW WILL THIS BENEFIT THE PATIENT?

		TITLES FADE OUT
S10	Psych: Research suggests that by learning more about anorexia nervosa, you are more likely to be able to detect, assess and refer patients who may have the disorder. This will benefit the patients by providing early intervention. Early intervention will improve the clinical outcome for many people who have an eating disorder, and studies demonstrate that prognosis is better with early intervention.	<p>FOCUS PULL TO PSYCHOLOGIST</p> <p>INT: office Psychologist piece to camera</p> <p>CUT TO Nurse looking in a book</p> <p>CUT TO Nurse talking to a patient</p> <p>CUT TO Patient walking out of hospital</p>
S10	Psych: The patient is more likely to trust you if you are aware of the characteristics of the disorder. This means you are more likely to develop a therapeutic alliance with the patient. This also contributes to a more positive prognosis for the patient during their treatment.	<p>Over the shoulder talking to patient like she knows what she is doing.</p> <p>CUT TO Psychologist talking</p> <p>PICTURE OUT OF FOCUS</p>
S11		<p>TITLE FADE IN</p> <p>T12: HOW WILL THIS BENEFIT YOU?</p> <p>TITLES FADE OUT</p>
S11	Psych: You will know that you are working from evidence based practice by providing this care. You will be contributing to a positive change in treatment experience for patients who have anorexia nervosa. Your goal should be to be more aware of the disorder when caring for patients in the future.	<p>FOCUS PULL TO PSYCHOLOGIST</p> <p>Mid shot piece to camera</p> <p>Close up</p> <p>PICTURE OUT OF FOCUS</p>

S12		TITLE FADE IN T13: WHAT IS ANOREXIA NERVOSA? TITLES FADE OUT
S12	Psych: The following diagnostic information has been summarised from the current diagnostic and statistical manual of mental disorders, and the international classification of diseases.	FOCUS PULL TO PSYCHOLOGIST INT: office Psychologist piece to camera
S12	Nurse: Anorexia nervosa is serious mental health condition that may develop into an enduring mental disorder that requires appropriate responses from healthcare providers. Anorexia has the highest mortality rate of any psychiatric illness through suicide and direct physical effects. Additionally, patients who suffer with an eating disorder are very likely to also have other mental health problems or disorders.	INT: ward Nurse Kelly piece to camera PICTURE OUT OF FOCUS
S12		TITLE FADE IN T: Signs and symptoms of anorexia TITLES FADE OUT
S13	Nurse: There are three essential features of anorexia nervosa: persistent energy intake restriction; intense fear of gaining weight or of becoming fat, or persistent behaviour that interferes with weight gain; and a disturbance in self-perceived weight or shape.	Background blurry. T19: <u>Diagnostic Features</u> A: Persistent energy intake restriction B: Intense fear of gaining weight or of becoming fat, or persistent behaviour that interferes with weight gain C: Disturbance in self perceived weight or shape

S13	Psych: The individual maintains a body weight that is below a minimally normal level for age, sex, developmental trajectory, and physical health.	T20: Maintains a body weight that is minimally normal level for age, sex, developmental trajectory, and physical health. Focus pull background back in focus
S14	Nurse: The second sub-type of anorexia nervosa is the binge-purging type. During the last three months, the individual has engaged in recurrent episodes of binge eating, or purging behaviour such as self-induced vomiting or the misuse of laxatives, diuretics or enemas.	Focus pull so background goes blurry. T17: Binge-eating/purging type: Last 3 months HAS engaged in recurrent episodes. Engaged in recurrent episodes of binge eating and purging e.g. Self-induced vomiting or misuse of laxatives, diuretics or enemas Focus pull background back in focus
S14	Nurse: Most individuals with the binge-eating/purging type of anorexia nervosa who binge eat also purge through self-induced vomiting or the misuse of laxatives, diuretics, or enemas. Some individuals with this subtype of anorexia nervosa do not binge eat but do regularly purge after the consumption of small amounts of food.	INT: ward Nurse Kelly piece to camera CUT TO Toilet door shutting CUT TO Laxatives on table
S14	Nurse: Crossover between the subtypes over the course of the disorder is not uncommon; therefore, subtype description should be used to describe the current symptoms rather than the longitudinal course.	CUT TO Nurse Kelly

S14	<p>Nurse: The severity of the disorder can be assessed, for adults, using the body mass index or BMI. The ranges are from the World Health Organisation categories for thinness in adults. The level of severity may be increased to reflect clinical symptoms, the degree of functional disability, and the need for supervision.</p>	<p>Focus pull so background goes blurry.</p> <p>T18: Mild: BMI ≥ 17 kg/m²</p> <p>Moderate: BMI 16-16.99 kg/m²</p> <p>Severe: BMI 15-15.99 kg/m²</p> <p>Extreme: BMI < 15 kg/m²]</p> <p>Focus pull background back in focus</p>
S17	<p>Psych: Individuals with this disorder typically display an intense fear of gaining weight or of becoming fat. This intense fear of becoming fat is usually not alleviated by weight loss. In fact, concern about weight gain may increase even as weight falls. Younger individuals with anorexia nervosa, as well as some adults, may not recognise or acknowledge a fear of weight gain.</p>	<p>INT: Office Psychologist piece to camera</p> <p>CUT TO POV Patient standing on weighing scales</p> <p>CUT TO Close up of scales</p>
S17	<p>Psych: The experience and significance of body weight and shape are distorted in these individuals. Some individuals feel globally overweight. Others realise that they are thin but are still concerned with certain body parts.</p>	<p>Over the shoulder out of focus patient looking in mirror, checking body parts</p>
S17	<p>Psych: Weight loss is often viewed as an impressive achievement and a sign of extraordinary self-discipline by the patient, whereas weight gain is perceived as an</p>	<p>INT: Office Psychologist piece to camera</p>

	unacceptable failure of self-control.	
S17	Psych: Often the individual is brought to professional attention by family members after marked weight loss or failure to make expected weight gains. If the individuals seek help on their own, it is usually because of distress over the somatic and psychological effects of starvation. It is rare for an individual with anorexia nervosa to complain of weight loss per se. In fact, individuals with anorexia nervosa frequently either lack insight into or deny the problem.	CUT TO INT: Consultation room Over the shoulder of patient and mother. Mother is explaining what is happening and HCP looks at patient, patient shakes head MID SHOT and CLOSE UP
S18		Focus pull so background goes blurry. T21: Associated features supporting diagnosis Focus pull background back in focus
S18	Psych: The semi-starvation of anorexia nervosa, and the purging behaviours sometimes associated with it, can result in significant and potentially life-threatening medical conditions.	INT: Office Psychologist piece to camera
S18	Psych: Physiological disturbances, including amenorrhea and vital sign abnormalities, are common. While most of the physiological disturbances associated with malnutrition are reversible with nutritional rehabilitation, some, including loss of bone mineral density, are often not completely reversible.	HCP looking at results on paper CUT TO HCP looking at scan results on computer or x ray CUT TO Patient in waiting area back of head zoom in

	However, some individuals with anorexia nervosa exhibit no laboratory abnormalities.	
S18	Psych: When seriously underweight, many individuals with anorexia nervosa have depressive signs and symptoms such as depressed mood, social withdrawal, irritability, insomnia, and diminished interest in sex.	INT: Patient on their own at table whilst groups around them converse and interact
S18	Psych: Obsessive compulsive features, both related and unrelated to food, are often prominent. Most individuals with anorexia nervosa are preoccupied with thoughts of food. Some collect recipes or hoard food. Observations of behaviours associated with other forms of starvation suggest that obsessions and compulsions related to food may be exacerbated by undernutrition. When individuals with anorexia exhibit obsessions and compulsions that are not related to food, body shape, or weight, an additional diagnosis of obsessive-compulsive disorder, or OCD, may be warranted.	INT: ECU of food diary with patient writing on it CUT TO Scanning food with phone scan app CUT TO Hand-washing and repetitive behaviours such as turning key in lock, turning light on and off.
S18	Psych: Compared with individuals with anorexia nervosa, restricting type, those with binge-eating/purging type have higher rates of impulsivity and are more likely to abuse alcohol and other drugs.	ECU of alcohol bottles wine CUT TO Person drinking CUT TO Prescription Codeine pills on table
S18	Psych: A subgroup of individuals with anorexia nervosa show excessive levels of	EXT: person running down track (Sirhowy trail) X5 different shots

	<p>physical activity. Increases in physical activity often precede the onset of the disorder, and over the course of the disorder increased activity accelerates the weight loss.</p>	
S18	<p>Psych: Individuals with anorexia nervosa may misuse medications, such as manipulating dosage, in order to achieve weight loss or avoid weight gain. Individuals with diabetes mellitus may omit or reduce insulin doses in order to minimise carbohydrate metabolism.</p>	<p>INT: ECU of insulin needle CUT TO Diabetes medication box CUT TO Patient looking at medication to consider using it but putting it back down</p>
S18	<p>Psych: In addition to amenorrhea, there may be complaints of constipation, abdominal pain, cold intolerance, lethargy, and excess energy.</p>	<p>INT: patient rubbing tummy and then rubbing themselves because they are cold and leaning back on sofa</p>
S18	<p>Psych: Some individuals may have scars or calluses on the dorsal surface of the hand from repeated contact with the teeth during induced vomiting.</p>	<p>ECU: patient hand over other hand covering up scar OR Picture of scar from repeated contact with teeth during vomiting.</p>
S19		<p>Focus pull so background goes blurry. T22: How do you assess anorexia? Focus pull background back in focus</p>
S19	<p>Nurse: Nurses play an important role in early detection, assessment and treatment of anorexia nervosa. Unfortunately, there is strong evidence that patients who go on to develop very serious eating disorders are likely to have attended generic health services on a number of occasions without their disorder being reported by patients or detected by the</p>	<p>INT: Nurse Kelly on ward</p> <p>CUT TO Different shots of patient going in and out of surgery door (sped up)</p> <p>CUT TO</p>

	healthcare professionals. There is a need therefore to develop a greater awareness amongst front line healthcare professionals of suitable screening tools and to encourage their wider use.	SCOFF questionnaire paper print out
S19	Nurse: Firstly, height and weight can be measured to determine a low or high BMI. Either presentation should trigger you to question the patient regarding attitudes and behaviours relating to weight and body shape.	ECU: height measuring stick CUT TO Weighing scales CUT TO BMI chart
S19	Nurse: A simple screening tool such as the SCOFF assessment can establish if referral is required. The SCOFF questions are:	INT: Nurse Kelly piece to camera
	Do you make yourself Sick because you feel uncomfortably full? Do you worry you have lost Control over how much you eat? Have you recently lost more than one stone in a three month period? Do you believe yourself to be Fat when others say you are too thin? Would you say that Food dominates your life?	Focus pull so background goes blurry. T23: 1. Do you make yourself Sick because you feel uncomfortably full? 2. Do you worry you have lost Control over how much you eat? 3. Have you recently lost more than One stone in a three month period? 4. Do you believe yourself to be Fat when others say you are too thin? 5. Would you say that Food dominates your life? Focus pull background back in focus
S19	Nurse: For this screening questionnaire, you award one point for every yes answer that a patient gives. A score of two or more indicates a likely case of anorexia nervosa	ECU: HCP ticking first and second item on SCOFF questionnaire

	or bulimia.	
S19	Nurse: People with anorexia nervosa typically have mixed feelings about change. The prospect of treatment and recovery can feel incredibly frightening. Their behaviours may give a sense of being in control, albeit in an insecure and distressing way. Letting go of an eating disorder can increase fears of loss of control, evoking a deep fear of change. This may result in the patient feeling compelled to withhold information from you, or not tell the truth when you ask them questions.	INT: ward Nurse Kelly piece to camera CUT TO EXT: patient with anorexia on park bench alone with arms around themselves, crossed arms CUT TO INT: Nurse Kelly ward piece to camera
S19	Nurse: Patients often report experiencing conflicting voices in their head when they were about to seek help for anorexia nervosa, or during their treatment.	INT: Nurse Kelly piece to camera
S19	P3: The eating disorder voice in my head told me not to trust HCPs. I thought they were going to make me really fat. People with eating disorders are very sensitive and very volatile. Putting trust into healthcare professionals means that I had to relinquish control. This is something that is very difficult given the controlling nature of the disorder.	INT: Patient 3 silhouette, current time, explaining past treatment CUT TO
S19	P2: I didn't tell the truth about my anorexia behaviours. I had two voices in my head, the eating disorder voice and the well voice. It was hard for me to distinguish between myself and the anorexia.	INT: P2 different setting/person silhouette, explaining situation

S19	<p>Psych: Early intervention of anorexia nervosa can prevent the condition from escalating and can avoid long term damage or the condition continuing. When people with anorexia nervosa present for the first time in adulthood, the disorder may turn out to be already of some years' duration and may require longer periods of intervention and monitoring. Swift referral will allow for speedy assessments to identify risks and indicate where early intervention or advice on care management could prevent an individual's physical or mental health deteriorating.</p> <p>Your increased awareness of the characteristics of the disorder will enable you to approach the subject with care and compassion. Even though the patient may not be ready to tell you that they are experiencing symptoms of the disorder, their confidence in the health service may be increased as a result of the care that you provide.</p>	<p>INT: Psych Laura in office piece to camera</p> <p>CU: psych Laura head shot</p> <p>Montage of patient in waiting room talking to HCP, measuring weight, measuring height, scoff questionnaire</p> <p>INT: Nursing student (purple scrubs) on ward talking to patient</p> <p>CUT TO</p> <p>INT: Psych laura in office piece to camera</p>
S20		<p>Focus pull so background goes blurry.</p> <p>T24: How do you refer someone who may have anorexia nervosa?</p> <p>Focus pull background back in focus</p>
S20	<p>Nurse: If you suspect that one of your patients has anorexia nervosa, you should refer to the appropriate</p>	<p>INT: Nurse Kelly piece to camera</p>

	<p>healthcare professional in your department. This will depend upon whether you are working within a primary or secondary care team.</p> <p>At first, you should refer to a senior member of staff. This staff member may carry out a diagnostic assessment, or the patient should be referred to psychiatric services. You should also fully document your concerns in the patient file so that communication with other healthcare professionals is achieved. You should always raise your concerns with another healthcare professional to assist in the early intervention and treatment of anorexia nervosa.</p>	<p>CUT TO INT: Nursing student on ward talking to qualified nurse</p> <p>CUT TO INT: Nursing student on ward talking to doctor (dressed in normal clothes with lanyard)</p> <p>CUT TO INT: ward nurse Kelly piece to camera</p>
S21		<p>Focus pull so background goes blurry.</p> <p>T25: Summary</p> <p>Focus pull background back in focus</p>

	<p>Nurse: Anorexia is a serious condition that warrants awareness of characteristics of the disorder, and the ability to detect and refer cases if necessary. Your increased awareness and confidence of the disorder will mean that you are providing appropriate care for your patients, and improving the service for eating disorders across Wales. Thank you for listening. If you would like any further information, please refer to NICE guidelines, the eating disorders framework for Wales, the international classification of diseases and the current diagnostic and statistical manual of mental disorders.</p>	<p>INT: Nurse Kelly ward piece to camera</p> <p>CUT TO Montage: scenes from referral nursing student, patient speaking to HCP, weighing, looking for information about anorexia nervosa, scoff questionnaire</p> <p>CUT TO: TITLES OVER BLACK: www.nice.org.uk Eating disorders framework for wales (2009) ICD10 DSM-5</p>
		<p>Credits Psych laura P1 P2 P3 P4 Nurse Kelly Student Nurse Doctor Paul Camera crew etc</p>