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**The Construction of Adolescent Perfectionism
and its Relevance for Clinical Contexts**

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Doctor of Philosophy

Clinical and Health Psychology

University of Edinburgh

2016

To the pursuit of happiness in an imperfect world.

Declaration

I hereby declare that this thesis:

- (a) has been composed entirely by myself
- (b) is my own original work
- (c) has not been submitted for any other degree or professional qualification except as specified

Susannah C. Johnston

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Abstract

This thesis explored conceptual and pathological issues of perfectionism within the developmental period of adolescence. Quantitative and qualitative methodological approaches were utilised in the study of both general and clinical adolescent populations. Overall, the thesis aimed to provide an empirically driven account of adolescent perfectionism within a clinical context.

Introductory chapters discuss adolescent development and mental health, developmental theories of perfectionism, and adolescent expressions of perfectionism. Historical and conceptual developments in perfectionism theory are critically discussed before the current conceptualisations used in adolescent research are identified and considered.

The findings of a systematic review examining associations between perfectionism, mental illness, and treatment outcomes in clinical adolescent populations are reported. PRISMA guidelines and pre-specified qualitative assessment criteria were utilised. Sixteen studies were included in the review. Good quality research indicates that socially-prescribed perfectionism relates to suicide and depression. Lower quality research suggests that self-oriented perfectionism has a role in eating disorders. Studies of eating disorder, depression, and chronic fatigue syndrome treatment all indicate that perfectionism negatively impacts on outcomes for these adolescent groups but the effect is less consistent in suicidal adolescents

A questionnaire-based survey of 507 Scottish adolescents (272 females, 233 males; age range: 12.24-15.50 years) was conducted to explore the relationships of perfectionism and clinical perfectionism to mental health risk in the general adolescent population. Exploratory and confirmatory factor analyses were performed on the Child-Adolescent Perfectionism Scale (CAPS) and the Clinical Perfectionism Questionnaire (CPQ). The

identified factor structures of these measures were then used to examine risk for depression, anxiety, and eating disorders in adolescents. Path analyses using structural equation modelling identified unique paths between varied facets of adolescent perfectionism and mental health disorders. Perfectionistic concerns, measured by the CPQ, was found to be transdiagnostic for all three disorders in adolescents.

A focus group study of clinician perspectives of adolescent perfectionism was conducted and analysed through thematic analysis. The results highlighted similarities and differences between clinician-perspectives and published conceptual models. The study also revealed some of the issues clinicians face in their clinical work with clinical adolescent perfectionists. The study provided a reference framework to inform the development of the final study.

With the aim of developing a novel conceptualisation of perfectionism in adolescent clinical populations, a grounded theory study of sixteen adolescents diagnosed with an eating disorder was conducted. Semi-structured, individual interviews were conducted and methodically analysed according to grounded theory methodology to explore the young peoples' experiences of perfectionism. A novel framework for adolescent clinical perfectionism is proposed based on the findings of this study. The framework encapsulates a developmentally relevant construction of perfectionism as it is experienced by these young people.

The thesis findings are related to associated literature regarding mental health problems in adolescents and conceptualisations of perfectionism. Implications for clinical intervention are suggested. Future directions for the field of adolescent clinical perfectionism are proposed. The unique contribution of this thesis to the wider adolescent perfectionism literature is discussed.

Lay Summary

This thesis explored theoretical and mental health issues of perfectionism in adolescents. Multiple methods are used in the study of both general and clinical adolescent populations. Overall, the thesis aimed to provide a detailed account of adolescent perfectionism within a clinical context.

Introductory chapters discuss adolescent development and mental health, developmental theories of perfectionism, and adolescent expressions of perfectionism. Historical and conceptual developments in perfectionism theory are critically discussed before the current theories used in adolescent research are identified and considered.

The findings of a systematic review examining associations between perfectionism, mental illness, and treatment outcomes in clinical adolescent populations are reported. Guidelines were used to review sixteen relevant research papers. Good quality research indicates that socially-prescribed perfectionism relates to suicide and depression. Lower quality research suggests that self-oriented perfectionism has a role in eating disorders. Studies of eating disorder, depression, and chronic fatigue syndrome treatment all indicate that perfectionism negatively impacts on outcomes for these adolescent groups but the effect is less consistent in suicidal adolescents

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unique contributions of certain types adolescent perfectionism to mental health disorders.

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Chapter 1: Introducing Perfectionism, Adolescent Development, and Mental Health

1.1 Thesis Overview

The thesis explores the construct of perfectionism in adolescents, within the context of mental health problems. It has been recommended that future research should assess perfectionism with multiple measures and through a range of methods to develop a more comprehensive understanding of perfectionism in young people (Rice & Preusser, 2002). Moreover, the use of qualitative research with perfectionistic young people was recommended to complement future scale refinement and exploration of childhood perfectionism. With these recommendations in mind, this Ph.D. adopted a multimethod approach, drawing on previously defined measures and conceptualisations of perfectionism, before expanding this knowledge base through a qualitative exploration of the construct in clinical adolescent populations. As a result, this thesis makes a substantial, comprehensive, and original contribution to the literature.

Chapter 1 introduces adolescent development and mental health, developmental theories of perfectionism, and a discussion of why perfectionism may present differently during adolescence compared to adulthood. In Chapter 2, historical and conceptual developments in perfectionism theory are critically discussed before the current conceptualisations used in adolescent research are identified and considered. Chapter 3 briefly synthesises literature highlighting the links between perfectionism and mental

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health problems in the general adolescent population before reporting a systematic review of clinical literature. This systematic review considered how perfectionism is currently conceptualised in clinical adolescent literature and what is known about the relationship between perfectionism, mental health disorders, and treatment outcomes during adolescence.

Three empirical studies of perfectionism in adolescents are then presented. Chapter 4 reports a cross-sectional survey study exploring current models of perfectionism. In this study, the factor structure of measures of perfectionism was robustly analysed. Then the relationships between identified perfectionism factors and three mental health conditions – depression, anxiety, and eating disorders – were examined in a general population of adolescents. The second and third studies in the Ph.D. both employed qualitative research methodologies to explore and redefine perfectionism as it presents in clinical adolescent samples. Chapter 5 reports a focus group study of clinician perspectives of clinical adolescent perfectionism. This study provides insight to how clinicians based within a Child and Adolescent Mental Health Service understand and work with perfectionism in adolescent clinical populations. Chapter 6 reports a grounded theory exploration of clinical adolescent perfectionism. In this study, semi-structured interviews, with a sample of adolescents currently engaged in clinical services for treatment of a diagnosed eating disorder, were analysed according to grounded theory methodology. This final study enabled the development of a novel framework for understanding the construct of perfectionism in adolescents.

This multimethod project provided access to adolescent perfectionism through a variety of perspectives: those represented in the literature, quantitative self-reports by the general adolescent population, perspectives of clinicians involved in the care of clinical adolescent populations, and detailed qualitative accounts by adolescent perfectionists

themselves. The result is a rich account and analysis of adolescent perfectionism, with a specific emphasis on conceptualisations relevant to mental health during this unique developmental period of life.

1.2 Introduction

“Perfectionism – wanting to do the best that you can, all the time, at everything. That’s how I’d describe it.” – An adolescent perfectionist.

While many of us may hold a general idea of what perfectionism is, psychologists have invested much time and effort into researching and debating the precise conceptualisation of this construct. Preliminary pathological conceptualisations of perfectionism have been followed by a trend towards multidimensional models of the construct. Perfectionism is now generally acknowledged as being a trait that involves setting high standards and striving for flawlessness, which may be accompanied by concern about whether these standards will be met. Examination of contemporary models has revealed shared core dimensions of perfectionism – perfectionistic strivings and perfectionistic concerns – which can interact to result in more or less adaptive or healthy dispositions (Stoeber & Otto, 2006). Perfectionism has historically been implicated in psychological distress and so researchers employing modern conceptualisations of perfectionism have continued to explore its role in mental health problems. Maladaptive and unhealthy presentations of perfectionism have frequently been identified as playing a role in a variety of mental health problems including, depression, anxiety, eating disorders, obsessive-compulsive disorder, and suicidal behaviour (Affrunti & Woodruff-Borden, 2014; Morris & Lomax, 2014; Shafran & Mansell, 2001). The construct has also been observed to impact negatively on the successful treatment and recovery from such mental health disorders as depression and eating disorders (Blatt, 1995; Blatt, Quinlan, Pilkonis, & Shea, 1995; Blatt, Zuroff, Bondi,

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Sanislow III, & Pilkonis, 1998; Sutandar-Pinnock, Blake Woodside, Carter, Olmsted, & Kaplan, 2003).

The nature of perfectionism in adolescents has received comparatively less attention than that of perfectionism in adults, despite adolescence being suggested as a crucial time for the development of more maladaptive types of perfectionism (Flett, Hewitt, Oliver, & Macdonald, 2002). Certainly, adolescence is a complex period in our lives characterised by many developments across a range of domains. These multiple, overlapping transitions create a remarkably unique period of increased stress, which has the potential to render adolescents particularly vulnerable to the onset of mental health problems (Graber & Brooks-Gunn, 1996; Kessler et al., 2005). Development of a mental health disorder during adolescence, in turn, can hold significant implications for life-long mental health (Kessler et al., 2007). Arguably, perfectionism may be susceptible to change during adolescence because of the vast developmental transitions which young people experience during this time. Indeed, many prominent perfectionism researchers have stressed the importance of providing effective interventions to both prevent and reduce unhealthy types of perfectionism in adolescents (Flett & Hewitt, 2014; Nehmy & Wade, 2015). Such interventions require a strong evidence base and conceptual framework of perfectionism within the unique developmental context of adolescence.

1.3 Adolescence and Developmental Transitions

1.3.1 The Period of Adolescence

The World Health Organization recognises adolescence as being the second decade of life, between 10 and 19 years of age (World Health Organization, 2016). Adolescence is also commonly defined as the period of life between childhood and adulthood, initiated by the biological processes of puberty and ending in culturally relevant progression into

adulthood (Blakemore & Mills, 2014; Casey, 2015; Sawyer et al., 2012; Smetana, Campione-Barr, & Metzger, 2006). Some researchers also parse adolescence into three periods: early adolescence (approximately 10-13 years), middle adolescence (14-17 years), and late adolescence (18 years until mid-twenties) (Smetana et al., 2006).

These definitions of adolescence are not strictly agreed upon, however, and adolescence is perhaps best described as a fluid concept greatly influenced by social, cultural, and environmental factors. While many consider puberty to signify the beginning of adolescence, the age at which this occurs can vary widely and holds little practical validity across social and cultural contexts (Patel, Flisher, Hetrick, & McGorry, 2007). The United Kingdom's National Health Service (NHS) considers the onset of puberty to occur at the age of 11 for girls and 12 for boys but considers onset anywhere between 8 and 14 years to be normal (National Health Service, Accessed: October 7, 2016). The end of adolescence is not easily defined, with culturally specific social and psychological characteristics being cited as the most commonly used markers (Sawyer et al., 2012). For example, in many non-Western cultures, social events, such as a marriage, typically mark the end of adolescence. In more individualistic Western cultures, markers specific to the individual are more commonly used. These may include independent living, financial and cognitive self-sufficiency, emotional self-reliance, and behavioural self-control (Arnett & Taber, 1994). Consequently, the end of adolescence in Western culture may be better understood as a gradual transition that occurs over a period of years. The previously defined period of late-adolescence may be better regarded in Western cultures as 'emerging adulthood', a period of time between 18 and 25 years, that differs from adolescence demographically, subjectively, and in terms of identity exploration (Arnett, 2000). Alternative markers of the end of adolescence arise from physiological research. For example, if we consider the attainment of complete brain development to be a marker, then we would have to consider adolescence to continue well into our

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twenties, as accumulating research shows us that brain maturation continues far past our teen years (Blakemore & Choudhury, 2006). The end point of adolescence could also be defined by examining chronotypes – the behavioural manifestation of an individual’s circadian rhythm. While children typically wake early, during adolescence people begin to sleep progressively later until a peak chronotype delay occurs around the age of 20, followed by a sharp chronotype advancement. The point at which this happens has been suggested as marking the end of adolescence, with girls reaching peak lateness around 19.5 years and boys reaching it around 20.9 years (Roenneberg et al., 2004).

This thesis will define adolescence as the period between the ages of 10 and 20 years, i.e. the ‘teen years’. This incorporates the suggestion of regarding the early-twenties as being “emerging adulthood” while not seeking to refute clear evidence of continued development past this period nor to disregard cultural differences. Rather, the intention is to reflect the main period of adolescent development, in line with the typical social, cultural, physiological, and psychological context of the United Kingdom (UK), a western European country, in which the thesis was conducted.

1.3.2 Developmental Transitions in Adolescence

Adolescence is a unique developmental period in the human lifespan, characterised by rapid growth and multiple transitions in a range of developmental domains. This period of life is distinct from both earlier childhood and subsequent adulthood due to its multiple transitions in many life areas within the context of such significant cognitive and socioemotional development. Some of these key developmental transitions are outlined here.

As a consequence of puberty, adolescents undergo vast changes in physiology over a period of time. Girls develop breasts and experience menarche while boys develop facial hair and experience voice changes (Dorn & Biro, 2011; Sawyer et al., 2012). Adolescent-

parent relationships go through significant transformations during adolescence with issues of parenting style, relationship quality, parental authority, and conflict reasoning all diverging with age (Smetana et al., 2006). The social world of the adolescent is also more complex than that of childhood. Adolescents typically become more concerned about the evaluation and support of their peers than of their parents (Larson & Richards, 1991; Larson, Richards, Moneta, Holmbeck, & Duckett, 1996; Rubin, Bukowski, & Parker, 2006; Rubin et al., 2004). They also experience increased self-consciousness compared to childhood (Coleman, 2011; Elkind, 1967). Romantic and sexual relationships are often experienced for the first time, presenting a new set of physical and emotional experiences (Collins, 2003). Adolescents are also typically endowed with greater personal and social responsibilities as they grow older, as though in preparation for the complexities of adulthood (Smetana et al., 2006). For modern adolescents, the 21st century phenomenon of increased exposure through social media intensifies these societal expectations and perceived evaluations across various areas of adolescents' lives, including education, appearance, and relationships (Coleman, 2011).

Beyond the transitions in physical appearance and social behaviours, adolescents also experience significant cognitive and neurological developments. Cognitive development during adolescence centres around the gradual attainment of a more conscious, self-directed, and self-regulating mind (Keating, 2004). Metacognition, for example, has a prolonged developmental trajectory through adolescence (Weil et al., 2013). In early adolescence, improvements in reasoning, information processing, and expertise are observed, which are generally thought to lead to young people becoming more capable of abstract, multidimensional, planned, and hypothetical thinking as they continue to develop into middle adolescence (Keating, 2004). Developments in cognitive ability of adolescents have been described as the assembly of an advanced 'executive suite' of capabilities (Donald, 2002). This integrative account of adolescent cognitive

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development has been supported by substantial advances in the study of adolescent brain development since the turn of the century (Fuhrmann, Knoll, & Blakemore, 2015). In 2010, a special issue of *Brain and Cognition* published a range of studies highlighting how the adolescent brain differs from that of the child or the adult in terms of grey matter (Gogtay & Thompson, 2010), white matter (Paus, 2010), structural connectivity (Schmithorst & Yuan, 2010), and neurotransmission (Doremus-Fitzwater, Varlinskaya, & Spear, 2010; Wahlstrom, Collins, White, & Luciana, 2010). Steinberg (2010) argues “...the brain changes characteristic of adolescence are among the most dramatic and important to occur during the human lifespan” and refutes any claims otherwise (Epstein, 2007; Males, 2009). A recent review of human neuroimaging and animal studies described adolescence as a sensitive period in which the environment can strongly influence brain and behaviour. Furthermore, normative brain changes in adolescence may lead to an imbalance between the rapidly developing limbic circuitry and the more slowly developing prefrontal circuitry (Powers & Casey, 2015).

Adding further complexity to the developmental context of adolescence is the reality that these multiple transitions do not occur within a vacuum. Human development has been described as reliant on numerous complex relationships between a range of environmental systems nested within one another. Development, as described by the Ecological Systems Theory of human development, results from the various effects of five environmental systems on the individual (Bronfenbrenner, 1979). Adolescence represents a period in which the context, and not just the content, of development changes radically (Steinberg & Morris, 2001). Adolescent development, therefore, needs to be further understood as a developmental process involving multiple interactions between individual, familial, societal, cultural, and political systems. Suffice to say, adolescent development is a complex process that can lead the adolescent to be vulnerable to a range of adverse outcomes.

1.4 Adolescent Mental Health

Multiple developmental transitions can increase stress on the adolescent, which in turn can increase the risk for the onset of mental health difficulties. Mechanisms causing this stress are suggested to be such issues as anticipation of or anxiety about the future, regret for the stage passed, psychological adjustment, and ambiguity of status during transition (Graber & Brooks-Gunn, 1996). Research has also highlighted developmentally related conflicts and tensions (Smetana et al., 2006) and developmental timing (Galvao et al., 2014; Kaltiala-Heino, Marttunen, Rantanen, & Rimpelä, 2003) to be linked to mental health problems during adolescence. While not all adolescents will experience this time of their lives as turbulent and filled with crises, characteristics of and transitions between the developmental processes of adolescence leave room for the onset of difficulties in some individuals (Cicchetti & Rogosch, 2002; Fuhrmann et al., 2015). For example, during the transition from childhood into adolescence, depression and social phobia have been found to rise in girls and the transition from early to mid-adolescence represents an increased risk period for substance abuse, panic disorders, and generalized anxiety disorder (GAD) in both boys and girls. Additionally, during these transitions, mental health disorders become increasingly likely to be accompanied by significant functional impairment; the experience of one disorder significantly increases the chance of continuing to have a disorder or developing another compared to other young people (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003). Half of all lifetime cases of mental health disorders begin by the age of 14 years old, with three quarters of cases by the age of 24 years (Kessler et al., 2005). This marked increase in the emergence of mental illnesses seen during adolescence includes the onset of mood and anxiety disorders, eating disorders, psychosis, substance abuse, and self-injurious behaviours

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(Casey, Oliveri, & Insel, 2014; Compas, Orosan, & Grant, 1993; Kessler et al., 2005; Paus, Keshavan, & Giedd, 2008).

Converging evidence suggests that approximately a quarter of young people have experienced a mental health disorder in the past year and around a third have experienced one in their lifetime (Merikangas, Nakamura, & Kessler, 2009). In the U.K., the most recently published survey carried out by the Office of National Statistics on behalf of the Department of Health and Scottish Executive was conducted in 2004, finding that in the UK, 11.5% of adolescents (aged 11-16 years) had a diagnosis of a mental health disorder (Green, McGinnity, Meltzer, Ford, & Goodman, 2005). Within this population, 5.0% had emotional disorders, 6.6% had conduct disorders, 1.4% had hyperkinetic disorders, and 1.4% had less common mental disorders such as autism, tics, eating disorders, or selective mutism. Overall, boys were more likely to be diagnosed as having any mental disorder (12.6%) than girls were (10.3%), yet girls (6.1%) were found to be more likely to be diagnosed with an emotional disorder (e.g. anxiety, depression) than boys (4.0%). An updated version of this national survey, the Survey of the Mental Health of Children and Young People (MHCYP) 2016, is currently underway and will provide insight into the current rates of psychiatric illness in British adolescents (due to be published in 2018). A 3-month prevalence study of mental health disorders in children and young people conducted in the United States (Costello et al., 2003) found comparable rates to the U.K. survey (Green et al., 2005) with 13.3% of this population having any diagnosis. Due to the 3-month longitudinal design of this study, the authors were able to predict the cumulative prevalence of mental health disorders by age 16 years to be 36.7% for any disorder, with boys (42.3%) having higher risk than girls (31.0%).

The culmination of the various and dramatic developmental transitions across numerous domains places the adolescent in a position of increased risk and susceptibility to the experience of psychiatric illness (Blakemore, 2008; Casey, Getz, & Galvan, 2008). As highlighted earlier, timing also plays a key role in these transitions. For example, early pubertal onset is associated with increased mental health problems (Galvao et al., 2014; Kaltiala-Heino et al., 2003). Adolescents who experience greater decision-making autonomy in early adolescence have poorer psychological adjustment than those who experience this during mid to late adolescence (Smetana, Campione-Barr, & Daddis, 2004). Emerging literature highlights brain plasticity in early adolescence and the important implications this holds for vulnerability to mental health difficulties but also intervention in adolescents (Gogtay & Thompson, 2010). Environmental and genetic factors may influence adolescent brain development leading to lowered capacity for emotion regulation and increased risk of psychopathology (Powers & Casey, 2015).

A psychological construct that has also been implicated in various mental health problems across adolescence is perfectionism (Affrunti & Woodruff-Borden, 2014; Morris & Lomax, 2014). Perfectionism is generally understood as a trait that leads an individual to set high standards, strive for flawlessness, and potentially be concerned about whether these standards will be met. The complex developmental context of adolescence has been suggested as posing a potential key time for the development of perfectionism (Flett et al., 2002). Changes in physical appearance accompanied with increased self-consciousness may magnify any perceived societal pressure to appear physically perfect. Increased self-consciousness might also make adolescents more aware of their abilities and, in turn, lead to them choosing to work towards a desirable standard or becoming overly concerned and preoccupied with their relative successes and failures. Inflexible cognitive styles have been linked to less healthy forms of perfectionism (Egan, Piek, Dyck, & Rees, 2007), highlighting the role of cognitive abilities

that are developing during adolescence. The chapter will now discuss literature regarding the development of perfectionism to explore how this may relate to adolescent development.

1.5 Developmental Models of Perfectionism

While the general field of perfectionism has made great advances over the past couple of decades, our understanding of how and why perfectionism develops through childhood and adolescence remains somewhat lacking (Stoeber, Edbrooke-Childs, & Damian, 2016). In their developmental analysis of perfectionism, Flett et al. (2002) discussed the potential roles of the social expectations model, social learning model, social reaction model, and anxious rearing model, before presenting a preliminary integrative model of the development of perfectionism. Three distinct hypotheses of perfectionism development have since been summarised (Stoeber & Childs, 2012; Stoeber et al., 2016), each emphasising the role of parents in the development of an individual's perfectionism.

1.5.1 The Parental Perfectionism Hypothesis

The *parental perfectionism hypothesis* is rooted in social learning theory (Bandura, 1977). Social learning theory describes the learning of behaviours through observational learning; children model their actions based on what they observe others doing. Studies of aggressive behaviour in children support this theory, and also suggest an effect of gender with same-gender modelling being even more apparent (Bandura, 1973; Bandura, Ross, & Ross, 1961). The parental perfectionism hypothesis reflects this theory by describing the development of perfectionism as being learned through the observation of a perfectionist parent. Research has supported this theory by revealing associations between the perfectionism of young adults and that of their parents (Chang, 2000; Frost, Lahart, & Rosenblate, 1991; Vieth & Trull, 1999). One of these studies also found higher associations between the perfectionism of mothers and daughters and of

fathers and sons, indicating same-gender modelling effects as predicted by social learning theory (Vieth & Trull, 1999). However, social learning theory does not explain the finding that opposite gender modelling did not exist at all, with unrelated (father-daughter) or even negative (mother-son) associations of perfectionism being observed.

There are limitations to this hypothesis. Much of the literature that evidences support for the hypothesis consists of correlational, retrospective studies with university students and their parents. Clearly, the correlational nature of this research prevents any clear understanding of specific and intricate contributions of parental perfectionism in the development of the child's perfectionism. As with all retrospective research, the literature here will also suffer from hindsight bias and impaired memories. A further limitation to the parental perfectionism hypothesis is that it fails to acknowledge the possibility of individuals other than parents being the focus of modelled behaviours. While parents may be the more obvious demonstrators of behaviour – since children are likely to be in close proximity to them for long periods of time – Bandura's social learning theory was based on experimental studies exploring children's modelling of behaviour exhibited by a non-related adult and, therefore, there is no reason for this hypothesis to limit itself to parents' perfectionism. Other people can be demonstrators of behaviour, for example, siblings, peers, nursery workers and teachers. These individuals may also spend significant time with children throughout their development and so it would be advisable for this hypothesis to account for the potential impact of perfectionism in individuals other than the child's parents.

1.5.2 The Parenting Style Hypothesis

Another perspective is the *parenting style hypothesis* which focuses on the potential role of authoritarian parenting (Baumrind, 1971, 1991) in the development of perfectionism. Authoritarian parenting style is characterised by a harsh and controlling attitude

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towards the child. Parents who adopt this style have very high expectations and demands of the child and are typically very low in terms of responsiveness to their child. Psychological control characteristics of authoritarian parenting are thought to restrict the development of adolescents' autonomy, preventing the development of a secure sense of self, and in turn resulting in dysfunctional psychosocial functioning (Barber & Harmon, 2002). Authoritarian parenting has indeed been linked to maladaptive perfectionism (Enns, Cox, & Clara, 2002; Soenens, Vansteenkiste, Luyten, Duriez, & Goossens, 2005). Parental responsiveness, on the other hand, was found to be negatively related to perfectionistic concerns (Miller-Day & Marks, 2006) highlighting the likelihood that authoritarian parenting may contribute towards the development of perfectionism. Evidence of the development of perfectionism over time was revealed in a study which reported increases in perfectionistic concerns over time in adolescents whose parents exhibited authoritarian parenting styles (Soenens et al., 2008).

While these studies suggest a link between a specific parenting style and maladaptive perfectionism or perfectionistic concerns, no explanation has yet been offered to explain the role of parenting in the development of adaptive perfectionism. More positive parenting styles, such as authoritative parenting (a balanced style characterised by a warm, responsive approach with reasonable demands), are not accounted for in this particular developmental perspective of perfectionism. In fact, on closer examination of the literature, it is apparent that despite the reference to maladaptive perfectionism profiles, it is only the dimension of perfectionistic concerns which is accounted for by this hypothesis.

1.5.3 The Parental Pressure Hypothesis

A third hypothesis is the *parental pressure hypothesis*, which fuses two distinct yet interrelated socialisation models: the social expectation model and the social reactions

model. This theory claims that the experience of high parental expectations of perfection, combined with parental criticism when these expectations are not met, results in the development of perfectionism during childhood. This model links parental expectations and criticism to both maladaptive (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Stoeber & Otto, 2006) and adaptive (Stöber, 1998; Stoeber & Eismann, 2007) forms of perfectionism.

Rice and his colleagues (Rice, Lopez, & Vergara, 2005) explored the interactions between these models of socialisation and perfectionism in more detail. They found that adaptive perfectionism developed in the presence of high parental expectations and low parental criticism, as was expected based on theoretical accounts of perfectionism (Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991b). However, they found that maladaptive perfectionism was not so easily explained by the expected pattern of high parental expectations and high parental criticism. Maladaptive perfectionists generally reported experiencing low parental expectations of performance. Further analyses revealed a complex relationship between parental factors and perfectionism. When parental criticism was high, parental expectations did not affect the unique development of perfectionism. Rather, it was suggested that an individual's experience of chronic parental criticism, regardless of level of expectations, would result in a unique presentation of maladaptive perfectionism. This latter suggestion, however, is somewhat speculative, as the correlational nature of the data from the study did not enable the authors to fully explore the intricacies of the two facets of the model in relation to maladaptive perfectionism. While promising, it seems that the model requires more empirical exploration before a clear developmental understanding of perfectionism can be drawn from it.

1.5.4 Evidence from Genetic Research

Preliminary evidence from twin studies suggests a moderate genetic component to perfectionism, supporting the notion of parents playing a role in the development of this construct (Bachner-Melman et al., 2007; Iranzo-Tatay et al., 2015; Kamakura, Ando, Ono, & Maekawa, 2012; Moser, Slane, Alexandra Burt, & Klump, 2012; Tozzi et al., 2004; Wade & Bulik, 2007). Heritability rates of between 25% and 54% were reported by these studies, with certain factors of perfectionism appearing more genetically driven than others. Of these studies, only one (Iranzo-Tatay et al., 2015) employed a mixed gender sample, with the remaining studies focusing only on female twins thus restricting the generalisability of the findings. The mixed-gender study concluded that perfectionism exhibited moderate genetic influence in male and female adolescents.

1.5.5 Limitations of Parent-Oriented Developmental Hypotheses

As indicated by Stoeber and his colleagues (Stoeber & Childs, 2012; Stoeber et al., 2016), these three hypotheses represent the most predominant developmental theories of perfectionism to date; however, there are some limitations which they all share. First, the theories clearly focus only on the role parents play in the development of perfectionism, failing to adopt a multi-faceted systems view of development (Bronfenbrenner, 1979). As it stands, the parent-oriented developmental hypotheses of perfectionism solely reflect parent processes nested within an inner system of this model. Others within this system need to be accounted for, as was shown by a study that revealed developmental implications of adolescent musicians' perceptions of their music teacher's pressure for them to be perfect (Stoeber & Eismann, 2007). Research has also identified a role for the personality trait conscientiousness in the development of perfectionism (Stoeber, Otto, & Dalbert, 2009), again highlighting a need to consider further interactions within the microsystem. Little evidence exists showing any

consideration of the wider ecological systems on the development of perfectionism, despite the clear contextual changes characteristic of this life period. Adolescents may become more aware of and involved in wider ecological systems as their social responsibilities increase. Additionally, increases in self-consciousness during adolescence may make them more susceptible than they were during childhood to feelings of social pressure to be perfect. The current developmental literature does not account for the role of cognitive or brain development in the development of perfectionism. A more complex examination of the developmental context of adolescent life that reflects a systems model of development may help us to better understand how and why perfectionism develops in certain individuals.

A second limitation with these hypotheses lies in methodological issues present in the supporting literature. Much of the supporting research is correlational and thereby void of any evidence of the causative relationships or developmental trajectories of perfectionism. In addition, the studies are often retrospective and conducted with highly educated young adults providing hindsight and sample bias. Another issue lies in that the exploration of parental perfectionism, expectations, criticism, and styles is often based on self-reported measures. A perfectionistic young adult could hold a distorted view of their childhood experiences and present a report, which, in their opinion, fits best with their current presentation of perfectionism thereby resulting in a literature base driven by the inaccurate post hoc conclusions of a biased population.

The evidence regarding genetic versus environmental contributions to the development of perfectionism adds an interesting perspective to the discussed parental developmental models of perfectionism. For instance, while the parental perfectionism hypothesis rests on social learning theory, evidence purported to support this theory may in fact be conflating genetic effects with these environmental ones. Any

developmental hypotheses should aim to incorporate a range of developmental perspectives, so as not to present the effects of multiple factors (e.g. genes *and* modelling of parents) as being indicative of just one.

1.6 Stability and Developmental Trajectories of Perfectionism

Another developmental issue for perfectionism worth considering is that of its stability and developmental trajectories. Assumptions represented in current perfectionism theory regarding the homogeneity of perfectionism from infancy through to adulthood may be flawed. While personality was originally believed to be defined very early in life, developmental theories of personality have shown us that personality traits are not set in stone and continually develop right across the lifespan (Caspi & Roberts, 2001; Caspi, Roberts, & Shiner, 2005). If we understand perfectionism to be a personality trait, then we need to acknowledge the likelihood that it may change and develop during adolescence. If we look more broadly at other psychological constructs that were previously believed to be stable from early childhood into adulthood, we can see that some have since been shown to have a flexible quality during adolescence. For example, self-esteem was originally believed to be a stable trait throughout life, but was subsequently observed to have four distinct developmental trajectories across the adolescent period (Hirsch & DuBois, 1991; Zimmerman, Copeland, Shope, & Dielman, 1997). Self-esteem is a construct that can be greatly influenced by developmentally relevant factors during adolescence, such as increased peer evaluations when parental opinions become less focally important (Harter, 1990). Appreciating the developmental context of adolescence enabled self-esteem researchers to gain a new understanding of this concept for this age group. Examples such as this highlight the necessity of acknowledging the context of adolescent development when conceptualising

psychological constructs, an issue which may currently be overlooked in perfectionism literature.

There are only a handful of studies incorporating longitudinal designs in their research of perfectionism in adolescents (Damian, Stoeber, Negru, & Băban, 2013; Herman, Wang, Trotter, Reinke, & Ialongo, 2013; Soenens et al., 2008; Stoeber et al., 2009), making it difficult to comment on the development of perfectionism over time. The purported stability of perfectionism could be questioned as a result of two studies conducted over extended periods of adolescence. The first, a study of academically gifted Czech adolescents, compared previously identified typologies of perfectionism across a ten-year period (Portešová & Urbánek, 2013). The investigated typologies were previously defined by Parker (1997) who had performed cluster analysis on gifted American adolescents' responses to a measure of perfectionism, revealing three perfectionism types – non-perfectionists, healthy perfectionists, and dysfunctional perfectionists. Portešová and Urbánek (2013) used cohort comparison to examine whether these perfectionism typologies would be represented at three different time points across a ten-year period. The typologies were only found at their first time point (year 2000). Their analysis found that while clusters at the later time points (years 2005 and 2010) were somewhat similar to the proposed typologies, there was notable variation in perfectionism dimensions within these later clusters. Their study suggests that dimensions of perfectionism are not necessarily stable across adolescence. Similarly, a longitudinal study of perfectionism in African-American adolescent males across a seven-year period raised questions about the stability of perfectionism during adolescence (Herman et al., 2013). This study was conducted between 6th and 12th

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grade¹ and revealed four differing developmental trajectories for maladaptive perfectionism across the period. These were described as: constantly high maladaptive perfectionism, constantly low maladaptive perfectionism, increasing maladaptive perfectionism, and decreasing maladaptive perfectionism. These trajectories appear similar to the above discussed trajectories of self-esteem. The evidence of changing levels of perfectionism (i.e. increasing and decreasing maladaptive perfectionism) experienced by some individuals during adolescence again suggests that adolescent perfectionism is not necessarily always a stable construct and that this period of life may be particularly important for understanding the development of perfectionism. The findings of this study point to the potential for maladaptive perfectionism having a malleable quality during adolescence, a particularly pertinent point for clinical intervention. The specific focus of these studies on American, male, and/or gifted youth, limits the extent to which we can generalise these results. Nevertheless, they do point to adolescence as being a key developmental period of perfectionism.

1.7 Adolescent Expression of Perfectionism

When studying perfectionism during adolescence, it is worth considering the unique developmental context of this period and the resulting potential for perfectionism to be expressed in a different manner to that which is seen in earlier childhood or subsequent adulthood. Drawing on an example from closely related psychological literature pertaining to attachment styles, we can see that adolescent expression of psychological constructs can be quite different to other age groups. Attachment style was traditionally viewed as a perseverative construct from infancy through to adulthood but this assumption was challenged by Allen and Manning (2007). Reflective of the adolescent

¹ For reference: USA students typically enter the 6th grade aged 11/12 years and leave aged 12/13 years, and then enter the 12th grade aged 17/18 before graduating aged 18/19.

social context, in which, unlike younger children, adolescents have the ability to exert more choice over whom they form relationships with and place greater importance on peer relationships than previously, research reveals the role of peers as “minor” attachment figures during adolescence (Allen & Manning, 2007). Moreover, their paper suggests that the attachment system undergoes a fundamental transformation from infancy to adolescence, with adolescents experiencing fewer threats to survival compared to infants but increasingly relying on attachment figures for affect regulation. They determined that attachment in adolescence is qualitatively different to that of infancy and becomes far more complex, involving reciprocal support, altered power dynamics, gender effects, and societal expectations. Finally, they recommend reevaluating the issue of measurement, raising concerns about the appropriateness of the adult measures for capturing the adolescent expression of attachment.

Similar to this example of adolescent attachment behaviour, many of the developmental features of adolescence could lead to young people expressing perfectionism in a different manner to adults. For example, increasing academic demands become a dominant feature of Western adolescent life, with young people being made aware by society of the high importance of successfully achieving academically. Indeed, Scottish state schools adhere to an education curriculum entitled “*Curriculum for Excellence*” a name that surely reflects an overall endorsement of striving for high standards. In Western societies, qualifications obtained during adolescence can influence future opportunities, such as the ability to apply to higher education institutions. Adolescents, therefore, may be more attuned to the importance of striving for high standards in the context of academia. A perfectionism measure with items reflecting high standards (e.g. “*I must always be successful at school or work*” or “*I must work to my full potential at all times*”, see Hewitt and Flett, 1991b) may result in adolescents who in reality are not perfectionists scoring highly due to their current sensitivity to high standards in the

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specific context of academia. This issue may become less pertinent as individuals pass further into adulthood and are less frequently faced with academic assessment, meaning that such items can be interpreted on a more general basis by adults than adolescents.

On a similar note, issues of adolescent cognitive development may impact on the expression of perfectionism in this population. Until cognitive abilities have matured sufficiently, adolescents, in contrast with adults, may lack the reasoning and information processing abilities required to navigate their increasingly mature world. This may lead to them engaging in less sophisticated strategies than we would expect from an adult, such as inefficient study techniques. Again, while certain adolescents may not be perfectionists per se, specific demands (e.g. academic exams) coupled with relatively immature cognitive processes (e.g. lower information processing abilities) may lead them to engage in certain behaviours (e.g. repeatedly re-reading school materials, checking for mistakes). Such behaviour would be reflected by high endorsement of certain conceptualisations of perfectionism (e.g. *"I tend to get behind in my work because I repeat things over and over"*, see Frost et al. 1990; or *"It makes me uneasy to see an error in my work"*, see Hewitt and Flett, 1991b), again revealing a risk that current perfectionism measures may be contextually less suited to assessing perfectionism in adolescent populations than adult populations.

Adolescent expression of perfectionism may not only differ from that of adults but may also differ from that of younger children. For example, some conceptualisations of perfectionism incorporate a feature of organisation or order (Frost et al., 1990). This feature may be expressed in children through behaviours such as tidying (e.g. a child maintaining a particularly neat bedroom), playing (e.g. a fondness for games with clear rules) or artistic endeavours (e.g. neat, detailed artwork rather than unplanned messy work). Adolescents might exhibit this perfectionism feature of order through different

avenues, for example, physical appearance (e.g. applying neat make up) or studying (e.g. personally implementing a study schedule). For this reason, conceptualisations and associated measures of perfectionism during this period may need to be sensitive to a different set of thoughts and behaviours than would be suitable for younger children.

1.8 Summary

Adolescence is a unique developmental period, characterised by multiple overlapping transitions in a range of developmental domains. It is distinct from both childhood and adulthood due to these multiple transitions within the context of such significant cognitive and socioemotional development. This chapter introduced the areas of adolescent development and mental health. The multiple developmental transitions experienced during adolescence can lead to increased stress and risk of mental health problems in this population. Adolescence has been described as a potentially key time for the development of perfectionism (Flett et al., 2002). The construct appears malleable and more susceptible to change during this period than it does in adulthood (Herman et al., 2013). Moreover, perfectionism may be expressed in a unique manner during adolescence, different from both child and adult expressions of perfectionism. Clinical research and practice is moving fast, with programmes already being developed to target less healthy forms of perfectionism in adolescents (Nehmy & Wade, 2015; Wilksch, Durbridge, & Wade, 2008). It is vitally important that any such intervention is supported by strong theoretical justification. The next chapter will consider current perfectionism conceptualisations and the value these hold for adolescent research.

Chapter 2: Conceptualisation and Measurement of Perfectionism

2.1 Introduction

In Chapter 1, developmental issues in adolescent perfectionism were discussed. It was proposed that the unique developmental context of adolescences holds the potential for perfectionism to be expressed in a unique manner during this time compared to childhood or adulthood. Over the years, a number of differing conceptualisations of perfectionism have been proposed, each with a unique perspective on what precisely constitutes the construct of perfectionism. To further explore the construct of perfectionism during adolescence, it is important to first understand the historical basis of perfectionism theory and to thoroughly explore key developments in perfectionism theory over more recent years. This chapter provides an overview of influential conceptual advances in the field of perfectionism, beginning with early clinical accounts, followed by empirical advances and alternative clinical conceptualisations. It then discusses how such conceptualisations and associated measures have been incorporated into adolescent research.

2.2 Early Views of Perfectionism

In 1965, *Comprehensive Psychiatry* published a paper entitled “*Perfectionism*”, an article that attempted to merge the minimal references to perfectionism in the literature with the author’s personal experience as a clinician to provide one of the earliest dedicated publications on perfectionism. For the purpose of the paper, Hollender (1965) defined

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perfectionism as “*demanding of oneself or others a higher quality of performance than is required by the situation.*” (p.103). He pinpointed performance and aspirations for performance as the core issues in perfectionism, rather than self-evaluation and projected image. He further defined a perfectionist as someone who “*does not strive to create an image of himself as a perfect being but strives to perform in a manner that is perfect*” (p.94). In his view, a perfectionist differs from others who also exert effort towards high standards, in that the striving they engage in does not bring them the same satisfaction and enhanced self-esteem that it does for these people; they are forever feeling “*I am not good enough. I must do better*” (p.95). Hollender goes on to list various characteristics of the perfectionist: “*a painstaking worker*” (p. 94), “*usually taken for granted*” (p.94), “*may feel overburdened*” (p.94), “*alert for what is wrong and seldom focuses on what is right*” (p.95), as well as citing potential issues with time, depression, work, and relationships. With reflections on the development of perfectionism during childhood, Hollender explained perfectionism as being initially driven by a need for approval, acceptance, and love from the individual’s difficult-to-please parents and later by an effort to combat self-belittlement.

The paper criticised the common practice at the time of conflating perfectionism and obsessive-compulsive behaviours. Hollender’s argument was that perfectionism is about reaching for approval, while compulsiveness is about protecting the self against disapproval. Further, in terms of psychodynamic theory, Hollender explains perfectionism as relating to a demanding and exacting ego ideal, while compulsiveness is related to standards of a stern and relentless superego. This paper provided an overview and discussion of the oft-overlooked personality trait of perfectionism and provided clinical insight through both the author’s personal opinions and a case study of a young woman in treatment following a suicide attempt. The paper distinguishes the

perfectionist from the high achiever in terms of clinical factors, thus indicating Hollender's stance that perfectionism is a trait with a clinical nature.

2.2.1 Normal and Neurotic Perfectionism

More than a decade later, Don E. Hamachek (1978) published a paper entitled "Psychodynamics of Normal and Neurotic Perfectionism" in which he discussed what he referred to as the "*clinical mystery*" of perfectionism. The article relayed his interpretation of perfectionism in terms of satisfaction, expectations, anticipation, clarity, and emotion alongside his impression that two distinct types of the phenomenon exist. Hamachek describes 'normal perfectionists' as people who have a realistic grasp of their own abilities. This awareness of their abilities leads them to hold realistic expectations for themselves and to gain great satisfaction in the process of striving for high standards. Normal perfectionists, he claims, experience excitement – an emotional rush so to speak – from an apparent clarity about the task that lies ahead. 'Neurotic perfectionists', on the other hand, were described as people who concentrate on their self-perceived deficits, who anticipate potential failures, and who gain little to no satisfaction from the process of pursuing high standards. These neurotic perfectionists struggle with a lack of clarity around task completion which in turn can lead them to feel "*anxious, confused, and emotionally drained before a new task is even begun*" (p.28). He claimed that neurotic perfectionists experience negative cognitions as well as negative emotions. The behaviour of neurotic perfectionists, argued Hamachek, is driven by a fear of failure as opposed to a striving for success. This, in turn, leads to avoidance behaviour and being in a constant state of defensive alert.

Hamachek's paper went on to discuss a range of behavioural symptoms he believed to be linked to perfectionism including depression, a nagging "*I should*" feeling, shame and guilt feelings, face-saving behaviour, shyness and procrastination, and self-deprecation.

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It is reasonable to assume from his observations of various negative symptoms that Hamachek viewed neurotic perfectionism as being of clinical concern. This was further emphasized by his recommendations of ways to reduce neurotic perfectionism and to move perfectionists towards the “normal” end of the perfectionism continuum. Hamachek acknowledged that *“within “normal” limits, perfectionism is a specific personality characteristic that can help one become a competent and able person.”* but that *“In its neurotic extremes, perfectionism is a more generalized lifestyle that locks one into a narrow and rigid way, for doing things and perceiving the world”* (p.33).

2.2.2 The First Perfectionism Measure

David D. Burns (1980), an early student of the renowned “father” of cognitive therapy Aaron T. Beck, described a perfectionist as being someone with unreasonably or unreachably high standards, someone who instinctively and incessantly strains towards these standards, and as someone who defines their self-worth in terms of their productivity and achievement (Burns, 1980). Like Hollender (1965) he distinguishes these people from those who engage in *“the healthy pursuit of excellence”* (Burns, 1980, p34). Unlike Hamachek (1978), Burns did not describe perfectionism as having two distinct possible presentations. Burns, similar to Hamachek, identifies perfectionism as resulting in a number of negative outcomes, such a decreased productivity, health problems, poor self-control, relationship difficulties, low self-esteem, as well as a range of mental health difficulties, including, depression, anxiety, and obsessive-compulsive disorders. Comparisons of the two theorist’s pathological conceptualisations of perfectionism reveal a difference in opinion on the motivation for perfectionistic tendencies in these groups. While Hamachek described neurotic perfectionists as being motivated by a fear of failure, Burns implies the perfectionist is driven by the desire to achieve the high standard. This reveals a critical difference between Burns’ and

Hamachek's respective conceptualisations which is often overlooked in the literature. Suffice it to say that regardless of the direction of drive, overall Hamacheck views perfectionism as possessing the ability to be either pathological (neurotic) or non-pathological (normal) in nature while Burns views it as a phenomenon more pathological in nature than not. Burns identified a number of mechanisms he believed to underlie perfectionism, including all-or-nothing dichotomous thinking, overgeneralisation, and use of "should" statements, moralistic self-evaluations, and minimisation of outcome efficacy through the setting of over-ambitious goals.

Burns identified a lack of systematic research exploring perfectionism. It was with this in mind that he proceeded to adapt items from the Dysfunctional Attitudes Scale (DAS) (Weissman & Beck, 1978) to develop what may be regarded as the earliest quantitative measure of perfectionism – the Burns Perfectionism Scale (BPS) (Burns, 1980). This 10-item unidimensional measure is presented with a 5-point Likert type format of response in which respondents indicate a level of agreement with each of the statements. Completion of the BPS results in a total score between +20 and -20, with scores between 0 and 20 indicating increasing levels of perfectionism and negative scores indicating a non-perfectionistic personality. The BPS has been found to have acceptable reliability and validity, with a one-factor structure being confirmed (Broday & Sedlacek, 1988; Hewitt, Mittelstaedt, & Wollert, 1989). Of interest, two brief reports found that when two items they deemed to represent slightly healthier outlooks were removed, the internal consistency of the BPS was improved (Broday, 1988; Broday & Sedlacek, 1988). This further emphasised the idea that Burns (1980) viewed perfectionism as a phenomenon of a highly pathological nature and not as a construct which had the potential to be both pathological and non-pathological, as Hamachek (1978) did.

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Emphasising that he does not believe there to be anything inherently pathological about holding high standards, Burns suggested that people with perfectionistic tendencies could benefit from psychological treatment. His paper outlines his specific approach to treatment for perfectionists, an approach very much in line with mainstream cognitive-behavioural therapy. This, again, indicates the pathological conceptualisation of perfectionism held by Burns, but one that is more reflective of a cognitive perspective of the construct.

2.2.3 Reflections on Perfectionism

In his Distinguished Professional Contributions Award address at the American Psychological Association's 1983 meeting, Asher R. Pacht took the opportunity to voice his reflections on perfectionism. He described perfectionists as people with unrealistically high goals who experience constant frustration with both their desire to achieve these goals and their inability to do so. These individuals regard being perfect as a *"magic formula for success"* (p.387) and yet are lonely individuals who are unable to enjoy personal successes. His belief was that anyone claiming to be perfect *"almost certainly has real psychological problems"* and that *"the same is probably true of any person who wants to be perfect"* (p. 386). He furthers that, from his experiences, he believes *"perfection is not only an undesirable goal but a debilitating one as well"* (p. 386). Specifically, he alleged that the act of striving for perfection was the element of the trait that results in the psychological distress of the perfectionist.

As an interesting aside, Pacht (1984) introduces a philosophical argument which illustrates the impossibility of anyone ever achieving true perfection. He explains that it is our imperfections that make us unique and lovable people; without such imperfections, we are *"cold, sterile, and, indeed, unlovable"* (p. 386) and arguably will not successfully achieve perfection in the domain of social desirability. With this in mind,

the perfectionist faces a most distressing catch-22; they cannot be perfect without being successful in all domains but they cannot be successful in the social domain if they are perfect. Through this example, Pacht reveals that the notion held by perfectionists that perfection is attainable is logically flawed. This example alone reveals a logical impracticality of adopting a perfectionistic style and emphasises the dysfunctional nature of perfectionism.

Pacht clarified in his address that he elected to use a narrow approach in his conceptualisation of perfectionism and only uses the term *perfectionism* to describe a form of psychopathology. Evidently, Pacht held the view that perfectionism is a purely pathological phenomenon lacking the ability to be non-pathological in nature in a similar fashion to Burns (1980). Within his address, he discusses his approval of the pathological descriptions of perfectionism outlined by his peers (e.g. Burns, 1980; Hamachek, 1978). He explicitly states that he does not agree with Hamachek's use of the label 'normal perfectionism' and recommends that individuals who fall under this category should not be labelled perfectionists.

2.3 The Introduction of Empiricism

Overall, conceptualisations presented early on in the literature were derived through personal clinical experience. They tended to be predominantly pathological in focus, with some alluding to cognitive (e.g. Burns, 1980) or interpersonal (e.g. Pacht, 1984) mechanisms being a driving force. To this point though, little empirical work had been conducted to explore the conceptual framework of perfectionism. The early 1990s marked a significant period in the history of perfectionism theory with the introduction of multidimensional models and associated psychometric measures of perfectionism. The introduction of such models led to a surge in empirical perfectionism research, which was now able to utilise measurable conceptualisations for advancement of the

field. Perfectionism research expanded into fields of education, sport, and dance, yet conceptual development predominantly remained associated with clinical psychology. In this section, some of the most significant conceptual developments to perfectionism theory in the field of clinical psychology are discussed.

2.3.1 The Frost Multidimensional Perfectionism Scale (FMPS)

In 1990, somewhat of a dimensional revolution was triggered by a research group in their conceptualisation of perfectionism as a multifaceted and, consequently, multidimensional construct. Randy O. Frost and his colleagues (Frost et al., 1990) sought to develop a quantitative measure of perfectionism based on features that had previously been identified throughout the perfectionism literature as being key features of the construct. These included excessively high personal standards, excessive concern over mistakes in performance, doubting of the quality of one's performance, the role of the expectations and evaluations of one's parents, and an exaggerated emphasis on precision, order, and organisation. Items to reflect these features were drawn from a variety of pre-existing sources (including the BPS) and combined with a large number of newly developed items to create a 67-item scale. Through studies employing college samples, the team refined these items to create the Frost Multidimensional Perfectionism Scale (FMPS), a 35-item scale encompassing 6 discrete facets of perfectionism: personal standards (PS), concern over mistakes (CM), doubting over actions (DA), perceptions of parental expectations (PE), perceptions of parental criticism (PC), and organisation (O). Items consisted of individual statements reflecting facets of perfectionism and respondents were required to indicate their level of agreement with the statement on a 5-point Likert-type scale. Individual scores for each of the 6 FMPS subscales can be calculated to represent each of the 6 facets of perfectionism outlined by Frost et al, with a total score of perfectionism being obtained by combining the scores of

the first 5 facets (PS, CM, PE, PC, and DA). Higher scores on the FMPS indicate higher levels of perfectionism. Interestingly, the authors of the FMPS recommended excluding the Organisation subscale from total FMPS scores as they found this subscale to have weak inter-correlation with the other 5 subscales and weak correlation with the total score of the other subscales.

For the first time since Hamachek (1978), perfectionism was conceptualised as multidimensional and this approach was widely accepted by the academic community. The FMPS demonstrated reliability with subscales having adequate internal consistency and high correlations with other perfectionism scales (Frost et al., 1990). Using their 6-factor multidimensional model, Frost et al. (1990) found total FMPS scores, as well as CM and DA subscale scores, to correlate highly with measures of guilt and procrastination. This is in line with the description of behavioural symptoms of neurotic perfectionism outlined by Hamachek (1978). High correlations were also found with total FMPS, CM and DM scores and obsessive-compulsive symptoms. This is in line with the descriptions of perfectionism as being linked to psychopathology put forward by the likes of Burns (1980) and Pacht (1984). Subsequent research has queried the factor structure of the FMPS. For example, one study found the scale would be better represented by a 4-factor model (Stöber, 1998). Following their analysis of the FMPS, items were found to load better onto four factors: PS, O, Concern over Mistakes and Doubt (CMD; a merging of CM and D subscales), and Parental Expectations and Criticism (PEC; a merging of PE and PC subscales). Similarly, a study of the FMPS in a female adolescent sample identified a 4-factor structure rather than the original 6-factor structure (Hawkins, Watt, & Sinclair, 2006). Studies such as these may lead us to question conceptual clarity of the perfectionism model proposed by Frost et al (1990).

2.3.2 The Hewitt and Flett Multidimensional Perfectionism Scale (HFMPs)

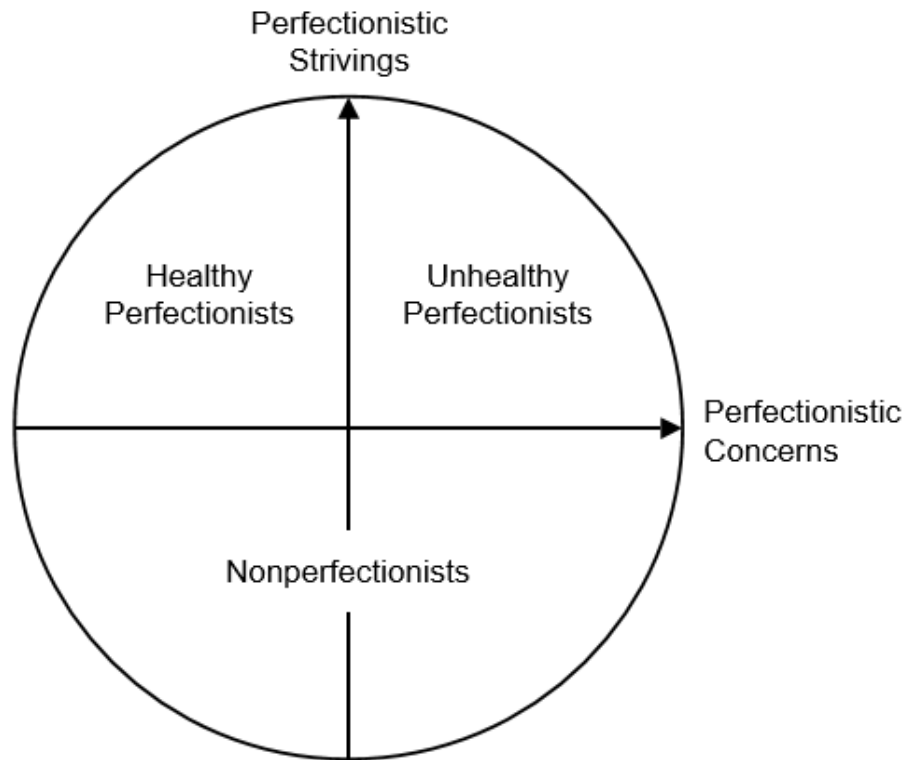
The following year, Hewitt and Flett (1991b) proposed a different multidimensional theory of perfectionism, in which they take into consideration intra- and interpersonal aspects of perfectionism. Their theory describes perfectionism as having three orientations: socially-prescribed perfectionism (SPP), self-oriented perfectionism (SOP), and other-oriented perfectionism (OOP). Each orientation differs in terms of the source and the direction of the perfectionism. SPP occurs when the individual perceives others as imposing high standards onto them (i.e. the perfectionism is an external force). SOP describes when perfectionism occurs internally (i.e., the individual expects perfection of his self). The third orientation, OOP, describes when the individual sets high standards and expectations for the performance of others (i.e. they expect other people to be perfect). Hewitt and Flett sought to develop a psychometric measure of these orientations, a measure known as the Hewitt and Flett Multidimensional Perfectionism Scale (HFMPs) (Hewitt & Flett, 1991b). Like the FMPS, this measure was developed by initially generating a large number of items based on previous literature. Specifically, they derived descriptive passages of their three proposed orientations of perfectionism from existing literature, including case studies and theoretical discussions. The final version of the HFMPs consisted of 45-items, with 15-items representing each of the three separate orientations or subscales: SPP, SOP, and OOP. Scores for each subscale are obtained by summing the scores from items in that scale, with higher scores in each subscale indicating higher levels of that type of perfectionism. This scale was initially developed with adult samples from college and clinical populations. A child and adolescent adaptation of this measure has since been developed and will be discussed further in Chapter 3.

2.4 Dimensions and Types of Perfectionism

Although at first the two multidimensional accounts of perfectionism may appear to measure slightly different concepts due to their differing explicit focus on facets or orientations, subsequent research has identified 2 common dimensions underlying the scales (Frost et al., 1993; Stoeber & Otto, 2006). The first dimension, *perfectionistic strivings* (also referred to as *personal standards perfectionism*), encompasses the tendency to strive towards high personal standards and flawlessness. The second dimension, *perfectionistic concerns* (also referred to as *evaluative concerns perfectionism*), reflects the tendency to be critical and to be concerned about mistakes and/or evaluations made by others. Moreover, perfectionistic concerns appear to be driven to some extent by the discrepancy between expectations about performance and actual performance.

These two dimensions have been described as combining to produce three groupings of people: healthy perfectionists, unhealthy perfectionists, and non-perfectionists; an approach referred to as the *tripartite theory of perfectionism* (Parker, 1997) (see Figure 1). Healthy perfectionists are high in perfectionistic strivings but low in perfectionistic concerns. Unhealthy perfectionists are high in both perfectionistic strivings *and* perfectionistic concerns. The third group, the non-perfectionists, consists of people low in perfectionistic strivings. While Stoeber and Otto (2006) preferred to define perfectionist groupings in terms of their “healthiness”, Stoeber later conceded to using the terms *adaptive perfectionism* and *maladaptive perfectionism* interchangeably with the original terms, *healthy* and *unhealthy* perfectionism (Stoeber & Childs, 2012). These terms reflecting adaptiveness or healthiness in relation to dimensions of perfectionism are now commonly used throughout perfectionism literature, despite some suggestion that perfectionism is better conceptualised as a dimensional construct and not a

Figure 1. *The Tripartite Theory of Perfectionism*



Note: Two dimensions of perfectionism – perfectionistic strivings and perfectionistic concerns – interact as shown here. Individuals can be categorised into three distinct groups: healthy perfectionists, unhealthy perfectionists, and non-perfectionists; based on these dimensions. Taken from “Positive conceptions of perfectionism: Approaches, evidence, challenges.” by J. Stoeber and K. Otto, *Personality and Social Psychology Review*, 10, p. 296. Copyright 2006 by Lawrence Erlbaum Associates, Inc.

categorical one (Broman-Fulks, Hill, & Green, 2008). This practice is perhaps most reflective of Hamachek’s (1978) description of normal and neurotic perfectionists being placed at opposite ends of a spectrum of perfectionism.

In 2010, Patrick Gaudreau and Amanda Thompson proposed a theoretically driven conceptualisation, the 2 x 2 model of dispositional perfectionism (see Figure 2). This model puts forward that the interaction between the two dimensions of perfectionism, personal standards perfectionism (PSP) and evaluative concerns perfectionism (ECP),

Figure 2. *The 2 x 2 Model of Dispositional Perfectionism*

		<u>Evaluative concerns perfectionism</u>	
		Low	High
Personal standards perfectionism	Low	Non-perfectionism (Quadrant I)	Pure evaluative concerns perfectionism (Quadrant III)
	High	Pure personal standards perfectionism (Quadrant II)	Mixed profile of perfectionism (Quadrant IV)

Note: Two dimensions of perfectionism – personal standards perfectionism and evaluative concerns perfectionism – interact as shown here. Perfectionism can be categorised into four distinct subtypes: non-perfectionism, pure evaluative concerns perfectionism, pure personal standards perfectionism, and mixed perfectionism; based on these dimensions. Taken from “Testing a 2x2 model of dispositional perfectionism.” by P. Gaudreau and A. Thompson, *Personality and Individual Differences*, 48, p. 533. Copyright 2010 by Elsevier Ltd.

differentiate subtypes of perfectionism better than the dimensions’ main effects do. Four subtypes of perfectionism were proposed: non-perfectionism (low PSP and ECP), pure evaluative concerns perfectionism (low PSP and high ECP), pure personal standards perfectionism (high PSP and low ECP), and mixed perfectionism (high PSP and ECP). This four-type conceptualisation differs from the tripartite model proposed by (Stoeber & Otto, 2006) by splitting non-perfectionism into two groups: non-perfectionism and pure evaluative concerns perfectionism. They argued that the previous tripartite conceptualisation overlooked potential outcomes by merging these two newly proposed

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subtypes of perfectionism. They explored their theory using brief versions of both the FMPS and the HFMP. Indeed, Gaudreau and Thompson (2010) found evidence that these four interaction based subtypes predicted different patterns of outcomes in areas such as academia, affective experience, and goal progression. In an examination of the 2 x 2 model in predicting depressive outcomes, Douilliez and Lefèvre (2011) did not find support for an interactive effect on depressive outcomes as hypothesised by Gaudreau and Thompson (2010) but did find similar results regarding the relevance of some subtypes from the 2 x 2 models for clinical research. A cross-cultural study of the 2 x 2 model within an academic context found that some of the model's hypotheses that were supported in European Canadians were not supported in Asian Canadians (Franche, Gaudreau, & Miranda, 2012). Stoeber (2012) commented on the 2 x 2 model, highlighting issues from Gaudreau and Thompson (2010)'s original study such as the reliance on excessive and contradictory hypotheses, its encouragement of the interpretation of statistically non-significant results, and the terminology "*distinct subtypes of perfectionism*" rather than "*distinct combinations of perfectionism dimensions*". Gaudreau (2013) responded by clarifying various aspects of the 2 x 2 model and also took the opportunity to emphasise their belief in the necessity of using neutral terms for the various subtypes of perfectionism (as opposed to the tripartite theory's use of the terms "*healthy*" and "*unhealthy*") to differentiate the subtypes from any associated outcomes.

A particularly noteworthy point about previously discussed multidimensional models of perfectionism (e.g. Frost et al, 1990; Hewitt & Flett, 1991) is that it appears that the development of their associated scales preceded the firm establishment of the conceptual frameworks. Items for these scales were generated based upon suggestions from previous literature, as well as the authors' personal clinical experiences, neither of which necessarily had any clear empirical basis, and so it could be argued that the

identified dimensions of perfectionism are reflective of dimensions of the scales, as opposed to dimensions of the construct itself. The 2 x 2 model of perfectionism (Gaudreau & Thompson, 2010), conversely, represents a theory-driven model of perfectionism; unlike the earlier multidimensional theories, this model is not reliant on the psychometric strength of a scale. It is possible that the now well established multidimensional models of Frost et al (1990) and Hewitt and Flett (1991) only capture part of the construct of perfectionism and that these models of perfectionism are incomplete conceptual accounts. It is a complex and somewhat circular issue of how best to develop conceptualisations of psychological constructs; what should come first, the theory or the measure? Nevertheless, the appearance of these measurable models led to a surge in empirical research into perfectionism and so their contributions to the literature are profound.

2.5 Clinical Perfectionism

Perfectionism has long been identified as a clinical feature of eating disorder pathology, with a review of a decade of research finding both anorexia nervosa and bulimia nervosa to be consistently characterised by perfectionism (Cassin & von Ranson, 2005). Indeed, the widely used Eating Disorders Inventory (EDI) features a unidimensional subscale comprising 6-items that purport to measure perfectionism (Garner, Olmstead, & Polivy, 1983). Perhaps unsurprisingly then, a model of clinical perfectionism nested within theoretical models of eating disorders was developed.

Clinical perfectionism (Shafran, Cooper, & Fairburn, 2002) was introduced as “*the overdependence of self-evaluation on the determined pursuit of personally demanding, self-imposed, standards in at least one highly salient domain, despite adverse consequences*”, (p778). This conceptualisation of clinical perfectionism proposed to describe a construct unique from the non-pathological multidimensional models of perfectionism and one

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that is dysfunctional in two ways. The first dysfunction lies in the clinical perfectionist's over-dependence on the achievement of personally demanding standards, which makes an individual's self-evaluation extremely vulnerable. Secondly, the expression of clinical perfectionism in some domains can lead to domain-specific dysfunction; for example, expression of high standards in weight loss can lead to the development of an eating disorder. Like many early pathological accounts of perfectionism (e.g. Burns, 1980; Hamachek, 1978; Hollender, 1965) clinical perfectionism is described as distinguishable from the functional pursuit of high standards. Shafran et al. (2002) differentiate clinical perfectionists from other high achievers by their continued pursuit of personally demanding standards even in the light of adverse consequences. The authors emphasise the dependence of an individual's self-evaluation on their ability to strive successfully towards their standards and the resultant self-criticism from perceived failure to achieve these standards. Clinical perfectionists, they argued, hold personally demanding standards only in domains of life that have personal significance for them but not in others. In addition, if they do manage to achieve their standards, they are viewed as not being sufficiently challenging and subsequently are raised, thus leading to perpetual striving. Unlike previous conceptualisations of perfectionism, this theory of clinical perfectionism intentionally goes beyond phenomenological description of the construct and identifies several core mechanisms underlying it: a morbid fear of failure, the setting of standards that embody dichotomous thinking, a need for self-control, performance evaluation, failure to meet standards, successfully meeting standards, and various external reinforcements (e.g. parental responses to behaviour). Their analysis of these elements sits within a cognitive-behavioural framework of the pathology, similar to that employed for the theoretical framework of eating disorders. Consequently, like Burns (1980), Shafran et al. (2002) recommend cognitive-behavioural strategies for addressing perfectionism.

The theory of clinical perfectionism was contested by some who believed it was incorrect to conceptualise perfectionism as one-dimensional (Hewitt, Flett, Besser, Sherry, & McGee, 2003). Shafran, Cooper, and Fairburn (2003) responded that clinical perfectionism is a clinical construct distinct from the personality orientation of multidimensional perfectionism. Subsequent research involving the Clinical Perfectionism Questionnaire (CPQ), a self-report measure of clinical perfectionism, found a 2-factor structure of the CPQ (Dickie, Surgenor, Wilson, & McDowall, 2012; Stoeber & Damian, 2014), suggesting clinical perfectionism is in fact multidimensional which added further intrigue to the debate between the two conceptualisations. The two factors of the CPQ seemingly reflect the dimensions of perfectionistic strivings and perfectionistic concerns previously identified in analysis of other perfectionism measures (Stoeber & Damian, 2014). Shafran and her colleagues later conceded to this 2-factor structure but argued that these factors still appropriately reflect key elements of their conceptualisation of clinical perfectionism – over evaluation of striving and reacting to perceived failure with self-criticism (Egan et al., 2016).

2.6 Further Measures of Perfectionism

It has been noted that the conceptualisation of perfectionism has often been closely linked with its method of measurement (Shafran et al., 2002), therefore, it would not have been practicable to discuss the main conceptual advances in this field without also discussing their associated measures. Numerous further self-report measures of perfectionism have, however, been developed and used throughout the wider perfectionism literature. These include, but are not limited to: the Neurotic Perfectionism Questionnaire (Mitzman, Slade, & Dewey, 1994)), the Positive and Negative Perfectionism Scale (Terry-Short, Owens, Slade, & Dewey, 1995) the Almost Perfect Scale-Revised (Slaney, Rice, Mobley, Trippi, & Ashby, 1995), the Perfectionism

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Inventory (Hill et al., 2004)), and subscales from the Setting Conditions for Anorexia Nervosa Scale (Slade & Dewey, 1986). Domain-specific perfectionism measures have also been developed. For example, the Multidimensional Inventory of Perfectionism in Sport (Stoeber, Otto, & Stoll, 2006) and the Sport Multidimensional Scale-2 (Gotwals & Dunn, 2009) were developed specifically for use in sport literature. Alternative methods for measuring perfectionism have also been explored. An Aiming at Perfectionism Single Category Implicit Association Test was developed as an indirect measure of the construct (De Cuyper, Pieters, Claes, Vandromme, & Hermans, 2014). While each of these measures indeed may hold value to researchers throughout the field, a discussion of each measure would not necessarily have offered additional salient information for the reader regarding the current conceptual status of perfectionism. Thus, these measures have not been considered within this chapter.

2.7 Summary of Adult Conceptualisations and Measurement

We can see a general split across time between conceptualisations of perfectionism that were driven by clinical experience and those that were driven by the development of self-report scales. Prior to 1990, perfectionism theory was mostly constructed following clinicians' personal experience of working with patients whom they perceived to be perfectionists. Support for these theories was often anecdotal with little to no empirical basis. From 1990 onwards, perfectionism theory was predominantly – although not exclusively – led by psychometric scale development, with such scales being based upon either the authors' clinical experiences or previous non-empirical accounts in the literature. This approach has been criticised by some who argue that the construct of perfectionism should be clearly defined prior to the development of scales to measure it and not the other way around (Shafran & Mansell, 2001). This questionable practice of

allowing theory to be largely influenced by the relative strengths of self-report scales may have led to acceptance of insufficient or even incorrect conceptualisations of perfectionism. Nevertheless, the contributions of those who have developed such measures and associated models cannot be understated as they led to the commencement of a more systematic approach to research of perfectionism.

Early accounts typically described perfectionism as being pathological in nature. These conceptualisations arose from clinical literature, with clinicians, such as Hollender (1965), Burns (1980), and Pacht (1984), describing perfectionism alongside clinical issues, such as depression or suicide, and providing case examples of therapeutic work with perfectionist patients. This purely pathological view of perfectionism was later revisited by Shafran et al. (2002) in their conceptualisation of clinical perfectionism, a construct distinct from other perfectionism conceptualisations in use at the time. Alternatively, perfectionism has been described as being a personality trait, which may or may not lead to psychological difficulties. This was first suggested by Hamachek (1978) and later supported by many others (Frost et al., 1990; Gaudreau & Thompson, 2010; Hewitt & Flett, 1991b; Stoeber, 2012). This “normalising” of perfectionism enabled other fields, such as education, sports, and dance, to understand perfectionism within the context of non-clinical populations. It also led to the discussion of perfectionism as holding both adaptive and maladaptive purposes. This debate as to whether perfectionism should be viewed as purely pathological in nature or as being a more general construct that may or may not lead to unhealthy outcomes continues. Therefore, within the field of clinical psychology, researchers should account for the more or less pathological perspectives of perfectionism encapsulated by the various available conceptualisations and measures, for it is possible that the adoption of one conceptualisation may lead to qualitatively different findings when compared with another.

2.8 Adolescent Perfectionism Conceptualisations and Measures

Theoretical models of perfectionism in adults has been developed and thoroughly debated in recent decades. To date, though, no specific theory of adolescent perfectionism has been proposed. Currently, all measures of perfectionism are based upon adult-derived conceptualisations. It has been acknowledged in the perfectionism literature that the use of adult measures of perfectionism in younger populations is problematic (Hewitt et al., 2011). Such measures may be inappropriate for use with young populations for reasons of validation, item appropriateness, or developmentally related qualitative differences in the construct (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). Psychometric evaluations of the FMPS – a measure initially developed in and for adult populations – in a sample of female adolescents found the intended factor structure was unsupported in this younger population with a 4-factor structure (parental expectations and criticism, organisation, personal standards, and concern over mistakes and doubts) to be preferable for this age group (Hawkins et al., 2006). The HFMPs was also originally constructed in an adult sample before being validated through a series of studies using young adults (aged 21 years and over) and clinical adult samples. The HFMPs was never validated for use in younger populations. Instead, Flett, Hewitt, Boucher, Davidson, and Munro (2000) adapted the HFMPs into what they deemed to be a child and adolescent appropriate perfectionism measure, the Child-Adolescent Perfectionism Scale (CAPS).

2.8.1 The Child-Adolescent Perfectionism Scale (CAPS)

The most widely used measure developed specifically for use with younger populations was the Child and Adolescent Perfectionism Scale (CAPS) (Flett et al., 2000), a 22-item

self-report scale with a proposed 2-factor structure. Unlike its predecessor, the HFMPs, the CAPS consists of only two subscales: self-oriented perfectionism (SOP) and socially-prescribed perfectionism (SPP). In their unpublished manuscript, Flett et al. (2000) described the CAPS as reliable and valid for use with children and adolescents yet they provided no clear definition of this population. This is in contrast with recommendations highlighted earlier in this chapter regarding the need for clear lower age-limits for comprehension, validity, and reliability of the measure. The CAPS was later renamed the Child-Adolescent Perfectionism Scale (CAPS) in an updated and comprehensive published report of the scale's development (Flett et al., 2016). This later paper reported the scale as having a Grade 3 reading level, meaning the language is comprehensible for 8-9 year olds. Reasonable support for the internal consistency and temporal stability of the CAPS is somewhat undermined by some items loading onto both factors (Castro et al., 2004; Flett et al., 2016; Flett et al., 2000). Flett and his colleagues (2016; 2000) claimed this did not affect the structural integrity of the CAPS. If this is the case, then perhaps this indicates something even more intriguing: dimensions of perfectionism may overlap in younger populations in a way they do not in adult populations, indicating a differing construction to that of adult-perfectionism.

While support does exist for the proposed 2-factor structure of the CAPS (Bento, Pereira, Saraiva, & Macedo, 2014; Flett et al., 2016; Sironic & Reeve, 2015), psychometric evaluations of the CAPS employing more sophisticated statistical techniques have suggested the scale, in fact, has a 3-factor structure. A study of 11-12-year-old children found a better fit with a 3-factor structure using only 14 of the original 22 items from the CAPS (McCreary, Joiner, Schmidt, & Ialongo, 2004). While the SPP factor from Flett et al. (2000) original analysis remained, the other factor, SOP, split into two factors: SOP-Strivings and SOP-Criticism. A separate study of 15-16 year old adolescents re-evaluated the CAPS, also identifying a similar 14-item, 3-factor structure comprising of SPP, SOP-

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Striving, and SOP-Criticism (O'Connor, Dixon, & Rasmussen, 2009); this structure shared 11 items with the McCreary et al. (2004) model. These psychometric studies reveal that the CAPS, a measure intended for use with adolescent populations, has questionable structural stability across the adolescent population, raising questions about the current conceptualisation and measurement of perfectionism during adolescence.

Rice and Preusser (2002) raised the same concern with regard to conceptualisations and measurement of perfectionism in children. In a sample of 9-11-year-old children, they developed the Adaptive/Maladaptive Perfectionism Scale (AMPS). Items for the AMPS were developed based upon historical accounts of perfectionism (Adler, 1956; Hamachek, 1978), including dimensions of concern about mistakes, self-esteem, personal standards, organisation, satisfaction with accomplishments, need for control, anxiety, procrastination, and self- or social-motivation. The final scale was found to represent four factors: sensitivity to mistakes, contingent self-esteem, compulsiveness, and need for admiration. Sensitivity to mistakes and compulsiveness have been said to directly tap into perfectionism, while the remaining two factors, contingent self-esteem and need for admiration, more reflect themes implicated in the development of perfectionism (Flett & Hewitt, 2014). The AMPS differs from the CAPS in its coverage of developmental factors in addition to perfectionism rather than simply focusing on the construct itself. While this amalgamation of construct and developmental factors may be of use in therapeutic settings (providing a contextual picture of a patient's perfectionism), it may impede clear analysis of the construct itself in research. The AMPS is claimed to be suitable for use with participants aged 9-18 years, despite initially being developed in a young group of 9-11 year olds. Its psychometric properties have been less thoroughly explored than those of the CAPS, which has been used far more extensively throughout adolescent literature.

Given the suggestion of a distinct yet related concept of clinical perfectionism and the evidenced increase in mental health issues during adolescence, it is clearly of interest to explore clinical perfectionism in adolescent populations. No measure of clinical perfectionism (a construct proposed to tap into elements of perfectionism that are more salient for clinical populations) has been developed specifically for younger populations. While the Clinical Perfectionism Measure (CPQ) has not been validated for younger populations yet, a recent evaluation in an adult sample assessed it as having a US Grade 4 reading level, meaning that individuals aged 9-10 years and over should be able to comprehend the language of this scale (Egan et al., 2016). It may be of value to our understanding of mental health problems during adolescence to explore this construct using the CPQ in adolescent populations, as has been done (albeit to a questionable suitability) with non-clinical conceptualisations of perfectionism.

2.9 Summary

While developmental theories of perfectionism are somewhat limited, evidence from adolescent literature highlights a potential instability of the construct in comparison to adult conceptualisations and shows a variety of developmental trajectories, suggesting that perfectionism may hold a malleable quality during this developmental period. Adolescent perfectionism has yet to be sufficiently conceptualised. Overall, literature assessing the construct in this population relies on the use of conceptualisations and measures developed in and for adults. The practice of 'downloading' these measures to younger populations has been identified as potentially problematic as it risks oversight of developmentally related qualitative differences in the construct (Hewitt et al., 2011). Further, it does not address recommendations of self-report measures being specifically developed for discrete age groups within childhood and adolescence (U.S. Department of Health and Human Services FDA Center for Drug Evaluation and Research, U.S.

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Department of Health and Human Services FDA Center for Biologics Evaluation and Research, & U.S. Department of Health and Human Services FDA Center for Devices and Radiological Health, 2006), rather it conflates the perfectionism of childhood and adolescence, ignoring the potential for developmentally-relevant expressions of the construct. With the complexities of perfectionism conceptualisations having been introduced and their representation in adolescent research explored, the next chapter in this thesis will move on to examine literature illustrating the intricate relationships between various perfectionism facets, mental health, and treatment outcomes in adolescent populations.

Chapter 3: Perfectionism, Mental Health, and Treatment in Adolescent Clinical Populations

3.1 Introduction

The first chapter of this thesis briefly introduced literature highlighting the role of perfectionism in adolescent mental health (Affrunti & Woodruff-Borden, 2014; Morris & Lomax, 2014). Chapter 2 illustrated that the construction of perfectionism is debatable and that researchers should account for varying perfectionism conceptualisations in their exploration of adolescent mental health literature. In Chapter 3, a more critical stance to the adolescent perfectionism mental health literature is adopted. First, a brief synthesis is provided of general findings from the adolescent literature regarding the relationships between perfectionism, mental health, and treatment. Then a systematic review exploring these relationships within adolescent clinical literature is reported.

Perfectionism has been indicated as a possible factor in mental distress, with empirical literature relating perfectionism to a range of disorders including depression, anxiety, eating disorders, obsessive-compulsive disorder (OCD), and suicidal behaviour in adult populations (Shafran & Mansell, 2001). It can interfere with the therapeutic process and have a negative impact on treatment outcomes for depression in adults regardless of treatment modality (Blatt, 1995; Blatt et al., 1995; Blatt et al., 1998), with similar effects being observed in treatments for adults with OCD (Chik, Whittal, & O'Neill, 2007), and eating disorders (Sutandar-Pinnock et al., 2003). In response to these findings,

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psychological interventions specifically targeting perfectionism within adult clinical populations are being developed (Lloyd, Schmidt, Khondoker, & Tchanturia, 2014)

In adolescent literature, emerging evidence suggests similar trends to those observed in the adult literature. In terms of perfectionistic dimensions and types, a similar pattern is seen. Perfectionistic strivings are associated with more positive psychological processes, adjustment, and well-being, while perfectionistic concerns are associated with more negative processes and outcomes, psychological maladjustment, and an increased likelihood of psychological disorder. Furthermore, adaptive adolescent perfectionists may even be resilient to mental illness as indicated by higher levels of subjective wellbeing and psychological adjustment compared to non-perfectionists (Stoeber et al., 2016; Stoeber & Otto, 2006). Empirical evidence reveals links between perfectionism and various mental health disorders in adolescents, including depression (Castro et al., 2004; Hewitt et al., 2002; Huggins, Davis, Rooney, & Kane, 2008; O'Connor, Rasmussen, & Hawton, 2010; Soenens et al., 2008; Soreni et al., 2014; Wang, Yuen, & Slaney, 2009), anxiety (Essau, Leung, Conradt, Cheng, & Wong, 2008; Hewitt et al., 2002; O'Connor et al., 2010), dysfunctional eating attitudes and eating disorders (Aila Gustafsson, Edlund, Kjellin, & Norring, 2009; Bento et al., 2010; Eddy et al., 2007; Haase, Prapavessis, & Glynn Owens, 2002; Kirsh, McVey, Tweed, & Katzman, 2007; McVey, Pepler, Davis, Flett, & Abdolell, 2002; Miller-Day & Marks, 2006; Nilsson, Sundbom, & Hagglof, 2008; Phillips et al., 2010), self-injurious and suicidal behaviours and ideation (Boergers, Spirito, & Donaldson, 1998; Donaldson, Spirito, & Farnett, 2000; Hewitt, Caelian, Chen, & Flett, 2014; Hewitt, Newton, Flett, & Callander, 1997), and OCD (Libby, Reynolds, Derisley, & Clark, 2004).

Two recent reviews of children and young people assessed the literature to determine the role of perfectionism in mental health problems. Morris and Lomax (2014) provided

a broad overview of perfectionism and mental health problems in under-eighteens. Their review incorporated literature from clinical, general, and niche (e.g. gifted students) studies and spanned the full period of childhood and adolescence, revealing a broad perspective of the topic in youth. Associations between perfectionism and depression, anxiety, eating disorders, and OCD were briefly synthesized before these selected papers were divided into three issues for individual discussion: assessment, development, and treatment of perfectionism. Following their review, Morris and Lomax (2014) commented that the relationship between perfectionism and mental health problems in young people may be mediated by a third factor and that future research should investigate this possibility. They commented that a clear synthesis of the literature was prevented due to the variety of measures employed by perfectionism research – a point they felt was particularly notable within eating disorder literature. They further commented that of the perfectionism measures that were used, validations and factor analyses by independent authors were rare and concluded that research assessing perfectionism was at risk of bias because of this. Overall, they highlighted a concern about the child and adolescent perfectionism literature lagging behind the adult literature, in terms of both quantity and quality.

Another more focused review by Affrunti and Woodruff-Borden (2014) synthesized studies of perfectionism in paediatric anxiety and depressive disorders. Similar to Morris and Lomax (2014), this review combined results across the full span of childhood and adolescence and additionally included adult literature where they found the child literature lacking. The paper provides a brief overview of perfectionism definitions, some perfectionism measures, and research pertaining to parenting and heredity theories of the development of perfectionism before discussing literature linking paediatric perfectionism and depression, suicidality, anxiety, and treatment of these disorders. Additionally, they suggest some potential mediators and moderators between

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perfectionism and paediatric anxiety and depressive disorders, including temperament, effortful control, executive function, and intolerance of uncertainty. Their review culminated in a proposed framework for the development of clinical depression and anxiety in youth populations, indicating that perfectionism may be an underlying process contributing broadly to this development.

The broad inclusion criteria of children *and* adolescents in these recent reviews (Affrunti & Woodruff-Borden, 2014; Morris & Lomax, 2014) reveals a lack of consideration for adolescent-specific presentations of perfectionism that may exist. Further, they fail to account for potential differences in expression and role of perfectionism in general populations compared to clinical populations. Rather, they combine research of clinical groups with research of individual differences in psychological risk. This work is of benefit to helping us understand risk and resilience in the general population but is less informative for our understanding of how perfectionism presents and of the role it plays in those with clinically significant psychological disorders. An understanding of how perfectionism presents specifically in clinical adolescent populations would add to our knowledge for this particular population and remove risk of conflating

3.2 Research Objectives

This systematic review aimed to (a) explore the relationship between perfectionism and mental illness in adolescent clinical populations, and (b) determine the impact of perfectionism on the treatment of adolescent mental illness. To ensure the review is of clear value to clinical practice, only research assessing clinical samples – those that have been recruited from clinical treatment sites and diagnosed with a mental health disorder – are included in the review. Through strict assessment of the quality of the literature, an overview of how perfectionism, mental illness, and treatment interact during adolescence is provided.

3.3 Method

This systematic review was conducted in accordance with PRISMA guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009). An initial search for other potential reviews on the topic of perfectionism in adolescence was conducted using the Cochrane Database of Systematic Reviews (CDSR) and the Database of Abstracts of Reviews of Effects (DARE). No reviews specifically addressing perfectionism in adolescent clinical populations were found.

3.3.1 Population of Interest

A consideration made in constructing this review was whether to include both non-clinical and clinical research or not. Morris and Lomax's (2014) review includes studies with samples taken from non-clinical and niche populations, thus combining research of individual differences with that of clinical presentations of perfectionism. In light of the Shafran et al. (2002) proposal of a separate clinical perfectionism model for adults, it is argued that it is important to distinguish findings obtained from adolescent clinical populations and not to assume that we can transpose findings from healthy adolescent populations to the clinical adolescent population. With perfectionism being a recognized setback for effective therapy in clinical populations, the clinical focus of Affrunti and Woodruff-Borden (2014) paper is a strength that benefits both clinical research and the development of effective therapies for clinical populations. The current review also focused on clinical research for this reason but included a broader range of psychological disorders due to the transdiagnostic nature of perfectionism (Egan, Wade, & Shafran, 2011). Focusing on research of clinical adolescent populations only should help to identify core features of perfectionism most clearly relevant to clinical adolescent research and practice, thus ensuring the review is of full benefit to the clinical adolescent

literature and aids the development of effective therapeutic work with vulnerable clinical adolescent populations.

3.3.2 Literature Search Strategies

Systematic searches were conducted during April 2015 of three databases: PsycARTICLES, PubMed, and Web of Science. Databases were searched using a combination of truncated terms relevant to the review including “perfect*” (for perfectionism) and “adolescen*”, “teen*”, “pubert*”, and “youth” (for adolescence). Boolean techniques were employed to combine these terms. No terms were used in the initial database search to identify clinical articles because the terminology required to capture all possible articles would have been unwieldy and would risk missing relevant research. Database searches screened articles in their entirety for search terms, rather than just titles and abstracts, to prevent premature exclusion of relevant articles.

3.3.3 Eligibility Criteria

A search for articles exploring the relationship between perfectionism and mental illness and/or treatment in the adolescent clinical population was conducted. Further specific criteria were set for inclusion in this review. Articles had to (a) be original primary research articles published in peer-reviewed journals (case studies were excluded due to issues with generalizability), (b) be published in 1990 or later (to account for the developments in psychometric measurement of perfectionism following the introduction of multidimensional conceptualizations), (c) employ adolescent samples (defined as the age range = 10-20 years or mean age = 12-18 years if range not reported), (d) use quantitative methods for measuring perfectionism during adolescence, (e) assess perfectionism as a core variable of interest, (f) recruit samples from clinical populations (individuals who had a clinical diagnosis of mental illness and were recruited from clinical sites). Papers were excluded for failure to meet any of these criteria.

3.3.4 Quality Assessment of Studies

Taking recommendations from the Centre for Reviews and Dissemination alongside this review's aims, criteria were devised to assess methodological and reporting quality relating to the following issues: (1) study hypotheses, (2) sampling technique, (3) response rates and bias, (4) use of control groups and/or confound control, (5) clinical diagnosis process, (6) measurement of perfectionism, (7) statistical analysis, and (8) statistical power. The Scottish Intercollegiate Guidance Network (SIGN, 2008) rating system was used to assess quality of these 9 criteria as follows:

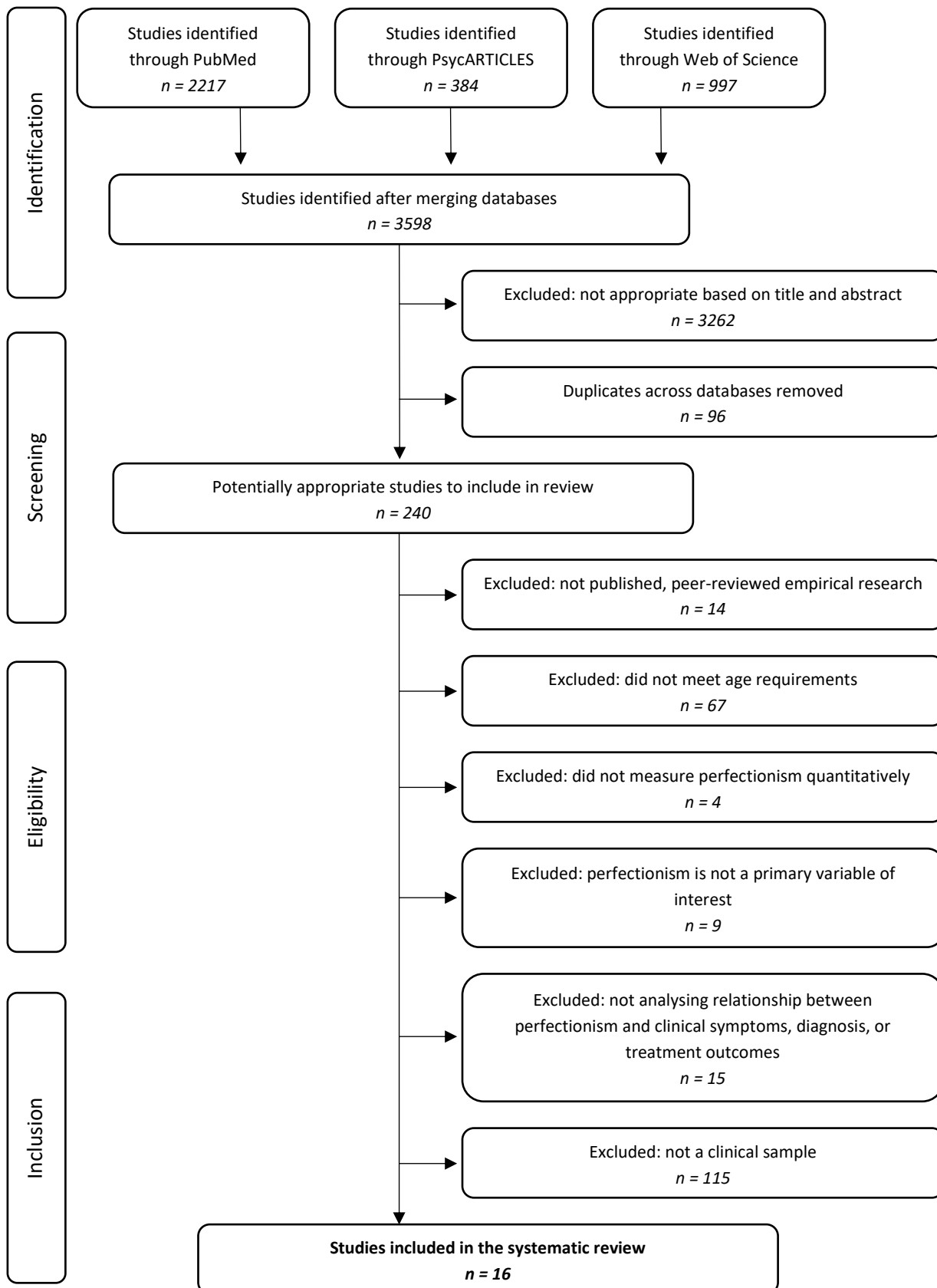
- Well covered / Strong feature (2 points)
- Adequately covered / Adequate feature (1 point)
- Poorly covered/ Poor feature/ Not addressed/Not reported (0 points)

3.4 Results

3.4.1 Search Results

The initial search strategy yielded a total of 3598 publications (2217 from PubMed, 384 from PsycARTICLES, and 997 from Web of Science). Of these, 3262 were eliminated through screening the titles and abstracts. Duplicates across databases (n=96) were removed. Full papers were obtained for the remaining 240 articles. These articles underwent a thorough hand search being included or excluded based on the above eligibility criteria. Fourteen papers failed to meet the publishing criteria, 67 did not meet age requirements, 4 did not measure perfectionism using quantitative methods, 9 did not include perfectionism as a core variable of interest, 15 did not explore the relationship between perfectionism and the mental illness, diagnosis, or treatment outcomes, and 115 did not use a clinical sample. Following this process, a final sample of 16 papers were identified for inclusion in the review (see Figure 3).

Figure 3. Screening and selection process for systematic review sample.



3.4.2 Overview of Sample Characteristics

Detailed information was collated from all 16 papers using a standardized assessment form with main study characteristics being summarized (see Table 1). Sample papers were published between 1997 and 2014. Across the sample, there were 1638 participants, of which, 476 (29.1%) were male and 1162 (70.9%) were female. Studies took place in 6 different countries: United States of America (n=5); United Kingdom (n=4); Canada (n=4); Germany, Israel, and Spain (all n=1). Ages of samples ranged from 11 to 19 years with sample sizes ranging from 25 to 439 participants.

Samples were recruited from hospital emergency departments, paediatric departments, in-, out-, and day-patient psychiatric adolescent units, specialized treatment centres, and university affiliated clinics. Samples were recruited from populations of adolescents who experienced eating disorders (n=7), suicide attempts (generally defined as any self-inflicted injury with self-destructive intent regardless of fatality risk; n=3), various non-delineated psychiatric disorders (n=2), depressive disorders (n=2), and OCD, anxiety disorders, or chronic fatigue syndrome (all n=1). The studies had various aims including measuring levels of perfectionism, determining if perfectionism is a distinguishing factor between study and control groups, understanding relationships between perfectionism and mental illness, studying perfectionism in the context of comorbid clinical disorders, and exploring the impact of perfectionism on treatment outcomes.

3.4.3 Overall Quality of Papers

The quality evaluation was performed and audited by the thesis supervisor to ensure objectivity and accuracy of the criteria in its application. Criteria was further refined until agreement between the two assessors reached 100%. Scores from the quality assessment are presented in Table 2.

Table 1. *Study characteristics of systematic review sample papers.*

Authors / Country	Sample size / Population recruited from	Test sample characteristics:		Perfectionism scale	Scale modification	Study objectives
		Gender	Age (years)			
Boegers <i>et al.</i> (1998) USA	120 Suicide Attempters	22 (18.3%) male, 98 (81.7%) female	Range = 12-17; M = 15.1	CAPS	None	Determine reasons for suicide attempts and examine relationships between these reasons and psychological functioning.
Bühren <i>et al.</i> (2012) Germany	55 (AN : 28; Control : 27) Anorexia Nervosa and General	55 (100%) female	AN: Range = 12.2-17.8; M = 15.6 (SD = 1.5) Control: Range = 12.3-18.8; M = 15.0 (SD = 1.7)	EDI-P	None	Explore cognitive flexibility (including perfectionism) in adolescent AN patients before and after weight recovery.
Cassidy <i>et al.</i> (1999) UK	25 Anorexia Nervosa and Bulimia Nervosa	1 (4%) male, 24 (96%) female	Range = 13-17; M = 15.6	EDI-P	None	Explore relationship between eating attitudes, obsessional symptoms, depressive symptoms and family functioning in eating disordered adolescents. The role of perfectionism as a risk factor in the development of eating disorders and OCD is discussed.

Castro et al. (2004)	184 (AN: 113; Control: 71)	184 (100%) female	Range = 11-19; AN: M = 15.3 (SD = 1.7) Control: M = 14.6 (SD = 2.1)	CAPS	Spanish translation	Assess dimensions of perfectionism in adolescents with AN in comparison to the general population. Validate a Spanish version of two measures of perfectionism.
Spain		Anorexia Nervosa and General				
Donaldson et al. (2000)	68 Suicide Attempters	17 (25%) male, 51 (75%) female	Range = 11-17; M = 15.0 (SD = 1.43)	CAPS	None	Examine the relationship of two cognitive variables – depressive cognitions and perfectionism – to the hopelessness experienced by adolescent suicide attempters.
USA						
Enns et al. (2003)	78 Hospitalised for suicide ideation or behaviour	59 (75.6%) male, 19 (24.4%) female	M = 15.4 (SD = 1.4)	CAPS	None	Examine the relationship between personality dimensions of perfectionism and self-criticism and the outcome of treatment of adolescents hospitalized for suicidal ideation or behaviour.
Canada						

Freudenstein et al. (2012)	100	53 (53%) male, 47 (47%) female	Range = 12-19; M = 16.57 (SD = 2.08)	CAPS	None	Investigate the relationship between 2 psychological profiles: (a) the intrapersonal profile, involving self-critical depression, SOP and narcissism, and (b) the interpersonal profile, involving dependent depression and SPP, and the association of these 2 profiles with suicidal behaviour among adolescent inpatients.
Israel	Inpatient unit for various psychological disorders					
Hewitt et al. (2014)	55	14 (25.5%) male, 41 (74.5%) female	Range = 13-19; M = 15.53 (SD = 1.43)	CAPS	None	Evaluate the role of perfectionism in predicting suicidality in adolescent psychiatric patients diagnosed with depression after considering other predictors. Examine the diathesis-stress model of perfectionism and suicide.
Canada	Depressive disorders					
Hewitt et al. (1997)	66	33 (50%) male, 33 (50%) female	M = 15.39 (SD = 1.60)	CAPS	None	Examine the relationship between dimensions of perfectionism and suicide ideation in an adolescent psychiatric sample
Canada	Various psychological disorders					

Jacobs et al. (2009)	439	202 (46%) male, 237 (54%) female	Range = 12-17; M = 14.6 (SD = 1.5)	DAS-P	None	Explore the effect of perfectionism on acute treatment outcomes in a randomized controlled trial of clinically depressed adolescents enrolled in the Treatment for Adolescents with Depression Study (TADS) who received cognitive behaviour therapy (CBT), fluoxetine, a combination of CBT and FLX, or pill placebo.
USA	Major depressive disorder					
Kirsh et al. (2007)	75	75 (100%) female	Range = 12-14; M = 13.36 (SD = 0.76)	CAPS	None	Compare psychosocial variables relevant to early adolescent development in adolescent females seeking treatment for an eating disorder with those of healthy age-matched controls.
Canada	(Eating Disorder: 25; Low Risk Control: 25; High Risk Control: 25) Eating disorders (mostly anorexia nervosa) and General					

Libby et al. (2004)	118	OCD: 12 (43%) male, Anxiety: 16 (57%) female	Range = 11-18; OCD: M = 14.08 (SD = 1.10)	FMPS	Modified to reflect present rather than past tense	Assess cognitive appraisals in adolescents with OCD by comparing them with those of both clinical and non-clinical control groups.
UK		OCD and Anxiety and General	Anxiety: 6 (21%) male, 22 (79%) female; Non-Clinical: 31 (50%) male, 31 (50%) female	Anxious: M = 14.09 (SD = 1.10) Non-Clinical: M = 14.08 (SD = 1.08)		
Lloyd et al. (2012)	63	23 (36.5%) male, 40 (63.5%) female	Range = 11-18	CAPS	None	Gain preliminary evidence about the efficacy of a telephone-based guided self-help intervention, based on cognitive-behavioural principles, aimed at reducing fatigue and improving school attendance in adolescents with CFS. Influence of perfectionism in this process was monitored.
UK		Chronic Fatigue Syndrome (CFS)				

Phillips et al. (2010)	33	33 (100%) female	M = 15.72 (SD = 1.49)	CAPS	None	Prospectively examine whether perfectionism measured at admission predicted length of time to recovery among underweight adolescents hospitalized for an eating disorder.
USA	Hospitalised due to eating disorder					
Serpell et al. (2006)	49	3 (6.1%) male, 46 (93.9%) female	Range = 11-18; M = 15.2 (SD = 1.6)	M HFMPs	None	Describe frequency and severity of OCD symptoms and obsessive–compulsive personality (OCP) traits, and explore the relationships between AN, OCD symptoms and OCP traits in young people.
UK	Anorexia Nervosa					
Wiederman & Pryor (1998)	110	110 (100%) female	Range = 12-17; M = 15.43 (SD = 1.36)	EDI-P	None	Investigate possible relationships between number of substances ever taken and clinical characteristics frequently exhibited with eating disorders.
USA	Anorexia Nervosa and Bulimia Nervosa					

Note: CAPS: Child and Adolescent Perfectionism Scale. DAS-P: Dysfunctional Attitudes Scale-Perfectionism. EDI-P: Eating Disorder Inventory-Perfectionism. FMPS: Frost Multidimensional Perfectionism Scale. HFMPs: Hewitt and Flett Multidimensional Perfectionism Scale.

Table 2. *Quality assessment scores for systematic review samples studies.*

Authors	Reporting study aims	Sampling technique	Reporting response rates and bias	Control for confound variables	Approach to clinical diagnosis	Measurement of Perfectionism	Appropriate statistical analysis	Statistical power	Total quality score for paper
Boegers et al. (1998)	2	1	0	1	2	2	2	1	11
Bühren et al. (2012)	1	1	1	2	2	1	1	2	11
Cassidy et al. (1999)	0	1	1	2	2	1	1	0	8
Castro et al. (2004)	1	0	0	0	1	2	1	1	6
Donaldson et al. (2000)	2	1	1	0	1	2	2	1	10
Enns et al. (2003)	2	1	1	0	2	2	2	2	12
Freudenstein et al. (2012)	1	1	2	2	2	2	2	1	13
Hewitt et al. (2014)	2	1	0	2	2	2	2	1	12
Hewitt et al. (1997)	1	1	0	1	1	2	2	1	9
Jacobs et al. (2009)	2	2	0	2	2	1	2	1	12

Kirsh et al. (2007)	1	0	0	2	2	2	2	1	10
Libby et al. (2004)	1	0	0	2	1	1	2	1	8
Lloyd et al. (2012)	1	1	1	0	1	2	2	1	9
Phillips et al. (2010)	2	1	2	0	2	2	2	0	11
Serpell et al. (2006)	1	1	0	0	1	1	2	0	6
Wiederman & Pryor (1998)	1	1	0	0	1	1	2	1	7

Note: 2 = Well covered/strong feature; 1 = Adequately covered/adequate feature; 0 = Poorly covered/poor feature/not addressed/not reported.

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The review sample papers ranged in quality with issues often arising from poor reporting. While many adequately reported interest in exploration of relationships between perfectionism and clinical variables, only 6 papers explicitly stated distinct, directional hypotheses; therefore, the majority of the studies reported no prior predictions regarding what relationship was expected and consequently readers were not able to assess the appropriateness of the rest of the studies' methodological techniques in relation to study hypotheses. Most papers also failed to report response rates or account for variability between those who did and did not agree to participate in the study. Only 2 papers covered this point well, while 5 addressed this adequately, and the remaining 9 papers failed to address this issue at all, making it difficult to evaluate possible non-response error.

Overall, the studies had adequate sampling techniques, typically employing systematic recruitment strategies. Seven papers controlled well for confound biases by use of either a control group or multiple confound controls. Only 2 of the remaining 9 papers attempted any confound control while the rest failed to attempt either of these techniques and so may be at risk of bias.

All papers recruited from clinical sites and reported how clinical diagnoses of samples had been made. A diagnosis could be determined by any of a range of standardized approaches including clinical interview by qualified professional, self-report psychometric measures, or diagnostic criteria stipulated by official diagnostic manuals. All papers in this review had at least adequate clinical diagnosis technique with the use of single (n=7) or multiple (n=9) diagnostic approaches.

To determine overall quality of papers, total scores were calculated with set scores representing the following qualities: extremely poor quality (0-4 marks), poor quality (5-8), adequate quality (9-12), and good quality (13-16). By this system, only 1 paper

was assessed as having overall 'good' quality (Freudenstein et al., 2012). Nine papers were rated as having overall 'adequate' quality (Boergers et al., 1998; Bühren et al., 2012; Donaldson et al., 2000; Enns, Cox, & Inayatulla, 2003; Hewitt et al., 2014; Hewitt et al., 1997; Jacobs et al., 2009; Kirsh et al., 2007; Lloyd, Chalder, Sallis, & Rimes, 2012; Phillips et al., 2010). The remaining 5 papers demonstrated 'poor' quality (Cassidy, Allsopp, & Williams, 1999; Castro et al., 2004; Libby et al., 2004; Serpell, Hirani, Willoughby, Neiderman, & Lask, 2006; Wiederman & Pryor, 1998).

3.4.4 Perfectionism Scales across Sample

A total of 6 different measures of perfectionism were used across the sample including: the Child and Adolescent Perfectionism Scale (CAPS) (Flett et al., 2000), the Eating Disorder Inventory-Perfectionism subscale (EDI-P) (Garner et al., 1983), the Dysfunctional Attitudes Scale-Perfectionism subscale (DAS-P) (Weissman & Beck, 1978), the Frost Multidimensional Perfectionism Scale (FMPS) (Frost et al., 1990), and the Hewitt and Flett Multidimensional Perfectionism Scale (HFMPs) (Hewitt & Flett, 1991b). Two of the studies modified their chosen scales from the original format to suit the study needs; the CAPS was translated to Spanish for one study (Castro et al., 2004) and the FMPS items were modified to reflect present rather than past tense in another (Libby et al., 2004).

3.4.4.1 Child-Adolescent Perfectionism Scale (CAPS)

The CAPS, a 22-item self-report scale with a proposed 2-factor structure (SOP and SPP), is the only perfectionism measure developed for use with youths (Flett et al., 2016; Flett et al., 2000). This scale is a modified version of the HFMPs, which was originally developed in adult samples. Reasonable support for its reliability and validity is somewhat hindered by some items loading onto both factors (Castro et al., 2004; Flett et al., 2000). Further studies have questioned the initial proposed factor structure, with a

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study of early adolescence (11-12 years old) finding a 14-item, 3 factor structure to be a better fit (McCreary et al., 2004) and a study of mid-adolescence (15-16 year olds) finding a more discriminate 11-item, 3 factor structure to fit better (O'Connor et al., 2009). Both of these latter studies identified the SPP factor but found evidence that the SOP factor split into two factors: SOP-Strivings and SOP-Criticism. The CAPS was used by 10 of the studies included in this review.

3.4.4.2 Dysfunctional Attitudes Scale – Perfectionism subscale (DAS-P)

The DAS, a 40-item self-report scale with a proposed 2-factor structure, measures attitudes and beliefs understood to underlie clinical depression (Weissman & Beck, 1978). This scale was developed in and is widely used throughout adult research. The DAS has been shown to have good internal consistency ($\alpha=.88$) when examined in general adolescent samples (Garber, Weiss, & Shanley, 1993), with the perfectionism subscale, DAS-P, exhibiting excellent internal consistency ($\alpha=.91$) in a large adolescent clinical sample (Rogers et al., 2009). The DAS-P was used by one of the studies included in this review.

3.4.4.3 Eating Disorder Inventory – Perfectionism subscale (EDI-P)

The EDI is a 64-item self-report scale intended to measure behavioural and psychological aspects of eating disorders, including anorexia nervosa (AN), bulimia nervosa (BN) and EDs-not otherwise specified (ED-NOS). The scale comprises 8-subscales representing core features of eating disorders, one of which is perfectionism, described as “excessive personal expectations for superior achievement” (p.18, Garner et al., 1983). The developed one-dimensional perfectionism subscale (EDI-P) is made up of 6 items. The EDI was developed for use with adults; support for EDI-P psychometric properties is mixed for adolescent populations. The EDI-P was found to be unreliable in male

adolescents (Shore & Porter, 1990) and a subsequent paper concluded that in non-clinical adolescent populations, the EDI was a non-sensitive measure with a lack of factorial integrity (Schoemaker, van Strien, & van der Staak, 1994). Another study conducted over a 3-year period found EDI-P to exhibit acceptable reliability in female adolescents recruited from the general population (McCarthy, Simmons, Smith, Tomlinson, & Hill, 2002). The EDI-P was used by 3 of the studies included in this review.

3.4.4.4 Frost Multidimensional Perfectionism Scale (FMPS)

The FMPS, a 35-item self-report scale, encompasses 6 discrete facets of perfectionism: personal standards (PS), concern over mistakes (CM), doubting over actions (DA), perceptions of parental expectations (PE), perceptions of parental criticism (PC), and organization (O). Individual scores for each subscale can be calculated to represent each of these 6 facets of perfectionism, with a total score of perfectionism being obtained by summing scores of 5 facets (PS, CM, PE, PC, and DA). The FMPS was originally developed in adult populations and demonstrated reliability, with subscales internal consistency ranging from .77 to .93 (Frost et al., 1990). A study of the FMPS's psychometric properties in a female adolescent sample identified a 4-factor structure rather than the original 6-factor structure (Hawkins et al., 2006). The FMPS was used by one of the studies included in this review.

3.4.4.5 Hewitt-Flett Multidimensional Perfectionism Scale (HFMP)

The HFMP, a 45-item self-report scale, was designed to measure three types of perfectionism: SOP, SPP, and other-oriented perfectionism (OOP; requiring others to be perfect). The HFMP was developed in both clinical and non-clinical adult populations. While the authors did provide evidence of adequate reliability and validity for the HFMP in adult samples (Hewitt & Flett, 1991a, 1991b), the subsequent introduction of the CAPS

meant that psychometric properties of this scale in adolescent samples have not been explored. The HFMPs was used by one of the studies included in this review.

3.4.5 Perfectionism and Adolescent Mental Health

The assessed literature explored the relationship between perfectionism and four types of mental illnesses – eating disorders, suicidal behaviour and ideation, depression, and OCD – as well as exploring the role of perfectionism within comorbid disorders. Due to the differing nature of each of these disorders and their symptomatology, the results are outlined below within five sections.

3.4.5.1 Eating Disorders

Perfectionism Compared to Non-Eating Disorder Adolescents

Using the CAPS, SOP was found to be higher in adolescents with an eating disorder than those without (Kirsh et al., 2007); however, this paper employed poor sampling methods and failed to detail the response rates in their study. Also of note, the eating disorder group in the study consisted predominantly of girls with a diagnosis of AN-restricting type (n = 22). Another study using the CAPS found adolescents with a diagnosis of AN to have higher SOP scores than healthy controls (Castro et al., 2004); however, the overall quality of this study was particularly low due to problems with sampling, bias, and control. Consequently, both of these studies are limited in their generalizability. Castro et al.'s (2004) study found no difference for SPP but did find a subgroup of the AN group to have significantly higher SOP than the control group. Cassidy et al. (1999) found eating disorder groups to be significantly higher on the EDI-P than psychiatric control groups but, again, this paper was rated overall as being of poor quality with a particular deficit in statistical power meaning this finding should be interpreted with caution.

Eating Disorder Severity

One study found that while perfectionism subscale scores on HFMPs in an adolescent AN sample were comparable to adult populations, no significant correlation existed between AN and HFMPs subscales in this younger sample (Serpell et al., 2006). This study had poor overall quality, only exhibiting good quality in the appropriateness of its statistical technique and poor quality in its reporting of response rates, accounting for confound bias, and statistical power.

Neurocognitive Deficits (Symptom of Eating Disorders).

Bühren et al. (2012) explored behavioural traits associated with set-shifting abilities in female adolescents with AN. The study found perfectionism measured by the EDI-P was associated with increased reaction times (RTs) during shift trials after a multimodal weight rehabilitation program. In contrast to adult research (Roberts, Tchanturia, Stahl, Southgate, & Treasure, 2007), this study did not find significant deficits in set-shifting abilities in an AN sample. Rather, it found adolescent AN patients exhibited what was described by the authors as a perfectionistic cognitive style characterized by increased RTs and improved accuracy. This study exhibited overall adequate quality and was only one of two studies to exhibit good statistical power.

Substance Misuse

In a study of adolescent girls with diagnoses of AN and BN, Wiederman and Pryor (1998) found no relationship between perfectionism measured by the EDI-P and the number of substances ever abused. There was no reporting in this paper, however, of response rates and the study failed to employ either a control group or confound controls and so the finding could be biased.

3.4.5.2 Suicidal Behaviour and Ideation

Suicidal Behaviour

In a study of psychiatric inpatients with various psychological disorders, Freudenstein et al. (2012) explored the associations between suicidal behaviour of adolescents and two psychological profiles: (a) the intrapersonal profile: involving self-critical depression, SOP, and narcissism; and (b) the interpersonal profile: involving dependent depression and SPP. Severe suicidal behaviour was related more consistently to the components of the interpersonal profile (i.e. dependent depression and SPP). Specifically, highly suicidal adolescents were more inclined towards SPP than low-suicidal adolescents were. This was the highest quality paper included in this review (with 5 out of 8 quality criteria points being well covered and the remaining 3 being adequately covered) and so these findings are likely valid.

Suicidal Ideation

Adolescent psychiatric inpatients were studied to reveal SPP, measured by CAPS, significantly correlated with suicide ideation (Hewitt et al., 1997). Another higher quality study of suicide attempters, also using CAPS, found this relationship as well (Enns et al., 2003). SPP accounted for unique variance in suicidal ideation after accounting for SOP, gender, hopelessness, and age (Hewitt et al., 1997). Higher perfectionism scores, measured by DAS-P, were correlated with more severe suicidal ideation scores in a 12-week longitudinal study of adolescents with major depressive disorder (MDD) (Jacobs et al., 2009). Interestingly, a later study by Hewitt and his colleagues (Hewitt et al., 2014) failed to replicate the findings of their earlier study. This paper did not find evidence of a relationship between SPP and suicide ideation. The quality of this more recent paper was higher than that of Hewitt et al. (1997) with improvements in control for confound

variables and approach to clinical diagnosis. Overall, the papers reporting results associated with suicide ideation were of adequate-good quality.

Suicide Potential

Hewitt et al. (2014) found SPP, measured by CAPS, was positively related to suicide potential, measured by the Child-Adolescent Suicide Potential Scale (CASPI) (Pfeffer, Jiang, & Kakuma, 2000), in adolescent patients with depressive disorders. They found no such relationship between SOP and suicide potential. Hierarchical regression analyses found SPP to account for 6% of unique variance in levels of suicide potential after controlling for depression and hopelessness. No relationship was found between SOP and suicide potential. This paper was good quality with particular steps being taken to prevent Type I error through confound control.

Reason for Suicide Attempt

SPP, measured by CAPS, was found to be higher in adolescents who express death as a reason for their suicide attempt (Boergers et al., 1998). Subsequent analysis in this study found high levels of SPP were predictive of death being a primary reason for suicide attempts in adolescents. While this paper failed to adequately report response rates and risk of bias, all other quality criteria points were adequately or well covered.

Hopelessness (Symptom of Suicidal Behaviour and Ideation)

Hopelessness was found to be correlated with SOP and SPP, measured by CAPS, in female adolescent psychiatric inpatients, but not male inpatients (Hewitt et al., 1997). Other studies of suicide attempters also using CAPS found only SPP, not SOP, to be significantly related to hopelessness, this time across both genders (Donaldson et al., 2000; Enns et al., 2003). One study found that despite its relationship to hopelessness, SPP was less important than depression in explaining the hopelessness experienced by these

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adolescents (Donaldson et al., 2000). The papers reporting these findings were all of adequate quality.

Interaction with Daily Hassles

In a test of the perfectionism-diathesis-stress model, Hewitt et al. (2014) found a significant interaction between SPP and daily hassles to predict 9% of unique variance in suicide potential of depressed adolescents. This effect held for medium ($p < .05$) and high ($p < .01$) levels of hassles but not for low levels. That is to say, as levels of SPP increase in adolescents experiencing medium to high levels of daily hassles, their suicide potential also increases.

3.4.5.3 Depression

Perfectionism, measured by DAS-P, was found to positively relate to severity of MDD at all 3 study time points in a 12-week longitudinal study of treatments for depression (Jacobs et al., 2009). Furthermore, perfectionism was found to have predictive value with higher scores being related to consistently elevated depression over the course of the study. Overall, this paper had adequate quality, being awarded a mark of poor quality only for its failure to clearly report response rates. Freudenstein et al. (2012), using CAPS, did not find a significant relationship between SOP and self-critical depression within an intrapersonal profile. Within an interpersonal profile, however, SPP positively correlated with dependent depression. This paper exhibited the highest overall quality in the sample papers.

3.4.5.4 Obsessive Compulsive Disorder (OCD)

Cognitive appraisals in adolescents with OCD were compared to those of adolescents with anxiety disorders and non-clinical adolescents (Libby et al., 2004). Significant differences between the groups were only found for Concern over Mistakes (CM) and Parental Expectations (PE) subscales of the FMPS. The OCD group scored higher on CM

than the non-clinical group but not the anxious group. The non-clinical group scored higher on PE than the OCD group but did not differ significantly from the anxious group. Personal Standards (PS) and Organization (O) subscales of the FMPS had low correlations with the measure of OCD used in this study – the Leyton Obsessional Inventory-Child Version (Berg, Rapoport, & Flament, 1986). Regression analysis failed to show evidence of CM being a predictor of OCD symptoms. The study exhibited poor overall quality only covering issues of confound control and statistical analysis well. Poor quality in sampling technique and reporting of response-rates and bias raises concerns about the generalizability of the findings.

3.4.5.5 Perfectionism within Comorbid Clinical Disorders.

The study by Serpell et al. (2006) of OCD symptoms and Obsessive Compulsive Personality (OCP) traits in adolescents with AN found no significant correlation between OCD subscales and HFMPs subscales. Significant positive relationships were found between SOP and measures of personality disorder. Cassidy et al. (1999) considered perfectionism, measured by EDI-P, to be a feature of obsessional symptomology. They found the main difference between eating disorder patients and psychiatric controls to be in terms of obsessional symptomology; in particular, they observed higher perfectionism scores in the eating disorder group than the control group. While the authors did not analyse a direct link between eating disorders and OCD in their paper, they did suggest that the high levels of perfectionism observed in the eating disorder group might relate to an obsessional thinking style, which may predispose adolescents to both eating disorders and OCD. Both of the papers relating to these results had overall poor quality, therefore these findings need replication.

3.4.6 Perfectionism and Adolescent Treatment Outcomes

3.4.6.1 Eating Disorders

Phillips et al.'s (2010) prospective study of girls hospitalized for an eating disorder examined the ability of CAPS perfectionism at admission to predict length of time to recovery, which is defined as the time taken to reach 85% of ideal body weight (IBW). Perfectionism was found to predict time to recovery, with higher levels of perfectionism at admission resulting in longer time to recovery. Of note, neither of the CAPS subscales independently predicted the outcome variable. While this study was of adequate quality, it was underpowered and potential confounds were not adequately controlled, increasing the risk of Type I error.

3.4.6.2 Suicidal Behaviour and Ideation

In adolescents hospitalized for suicidal ideation or behaviour, perfectionism (CAPS) was not found to predict symptoms of depression, hopelessness, and suicidal ideation at recovery point (Enns et al., 2003). Interestingly, SOP was found to have a significant inverse relationship with hopelessness at recovery point. The authors claimed they expected this because they view SOP as a component of adaptive behaviour, something they expected to increase as treatment progresses. This effect, however, was not directly explored. Perfectionism was not associated with re-hospitalization. This study was rated as being of adequate quality.

3.4.6.3 Depression

High baseline perfectionism, measured by the DAS-P, was found to predict poorer treatment outcomes for major depressive disorder in a large scale, adequate quality RCT, regardless of treatment group (Jacobs et al., 2009). All treatment options, interestingly, did result in decreased perfectionism levels.

3.4.6.4 Chronic Fatigue Syndrome

An efficacy study of a telephone-based guided self-help intervention aimed at reducing fatigue and improving school attendance in adolescents suffering from chronic fatigue syndrome (CFS) found higher baseline CAPS perfectionism to be associated with lower school attendance following intervention (Lloyd et al., 2012). The quality of this study was deemed adequate overall.

3.5 Discussion

This systematic review article (a) explored the relationships between perfectionism and mental illness in adolescent clinical populations and (b) determined the impact of perfectionism on the treatment of adolescent mental illness. Systematic searches of 3 databases identified 16 papers for inclusion covering a range of mental health issues including eating disorders, suicide, depression, OCD, and CFS. The relationship between perfectionism and treatment outcomes for four psychological issues was explored.

3.5.1 Perfectionism and Adolescent Mental Illness

This review found strong, but not unequivocal, evidence for higher perfectionism, specifically CAPS-SOP, in adolescents with eating disorders, with this relationship particularly marked in AN. Considerable evidence exists for an association between CAPS-SPP and predictors of suicidality including suicidal behaviour and ideation, thinking styles, death as primary motivation, suicide *potential* in depressed adolescents, and hopelessness, in which CAPS-SOP may also play a role. Of these 7 studies of suicidal adolescents, 6 employed the CAPS to measure perfectionism, thus enabling a comparison of results within the same theoretical model of perfectionism. It should be noted, however, that the original 22-item, 2-factor structure proposed by the authors of the CAPS was adopted in all these papers; results were not considered in line with suggested 3-factor structures (e.g. McCreary et al, 2004; O'Connor et al, 2009). Perfectionism

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measured by the DAS-P was found to have both a longitudinal relationship with and predictive validity for MDD in adolescents (Jacobs et al., 2009). Another study found CAPS-SPP was positively related to dependent depression (Freudenstein et al., 2012). No clear pattern for the role of perfectionism in OCD could be found.

Overall, the clinical literature suggests some role for perfectionism in the experience of adolescent mental illness, yet the results are mixed. Differing types of perfectionism are elevated in eating disorder and suicidal populations. Some types of perfectionism may hold predictive qualities for suicidal and depressive experiences. Certain facets of perfectionism present at different levels in OCD populations compared to the general population but the level is not necessarily different to other clinical groups. One clear finding that has emerged here is that perfectionism does not relate in a homogenous way to all types of mental illness during adolescence. Researchers and clinicians may need to appreciate the differing relationships between specific presentations and elements of perfectionism and mental illnesses experienced by adolescents to aid the development of care programs for adolescent patients.

3.5.2 Perfectionism in Treatment Outcomes

One study of suicidal adolescents found no evidence that perfectionism was related to treatment outcomes (Enns et al., 2003). Interestingly, they did find an inverse relationship between SOP and hopelessness at recovery point, which the authors explained as being expected since they considered SOP to be an adaptive behaviour, something that was encouraged during treatment.

Three other studies identified apparent relationships between perfectionism and treatment outcomes for eating disorders, MDD, and CFS. Perfectionism, measured by CAPS at admission, significantly predicted time to recovery in adolescent girls who had been hospitalised with an eating disorder, with higher perfectionism predicting longer

time to recovery (Phillips et al., 2010). A large RCT assessing treatments for adolescent depression found that high baseline perfectionism, measured by DAS-P, predicted poorer outcomes regardless of treatment type (Jacobs et al., 2009). In a study assessing a telephone-based psychological intervention for CFS in adolescents, high baseline CAPS perfectionism was found to predict poorer treatment outcomes (Lloyd et al., 2012). In general, these studies of adequate quality show that perfectionism may impact negatively on treatment outcomes for adolescent clinical groups, a particularly pertinent point for clinicians working with these populations.

3.5.3 Limitations of Included Studies

Several common limitations across the literature were highlighted by the quality assessment in this review. Only 1 study employed robust sampling techniques (Jacobs et al., 2009) with the rest relying on systematic or convenience sampling methods. Poor reporting of response rates means that we cannot determine whether the majority of samples used in this research were truly representative of wider adolescent clinical populations. Furthermore, studies frequently failed to recruit a control group or account for confounding factors within their samples. Only 2 studies reported power analyses (Bühren et al., 2012; Enns et al., 2003). Issues such as these highlight a lack of scientific rigor in research technique and reporting within this field.

A noteworthy limitation was the inconsistency in how perfectionism was measured. Six measures with different conceptual models were used across the review sample meaning a meta-analysis was not feasible. It is difficult to draw any overarching conclusions because of differences between these measures and underlying constructs. Moreover, of the 6 measures, only the CAPS was initially developed for adolescent samples with the remaining being developed with adult populations. Even then, the CAPS is adapted from the HFMPs (originally developed in and for use with adult

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populations) without consideration for the potential for perfectionism to present qualitatively differently during adolescence (Herman et al., 2013). No perfectionism measure currently used in the literature reflects adolescent-derived conceptualizations of perfectionism. It is imperative for the advancement of the field that a developmentally informed model of adolescent perfectionism is developed for use with clinical adolescent populations.

3.5.4 Review Method

While a robust methodology was employed in this systematic review, limitations should be acknowledged. The lack of agreement over how to define adolescence within the literature led to setting boundaries defined by chronological age. The specific age restrictions set for inclusion to this review may have resulted in excluding potentially relevant literature. Nevertheless, it was deemed necessary to stipulate this age range to separate adolescent literature from child literature for reasons discussed earlier in this chapter. Future reviews may want to consider other factors (e.g. cognitive, social, or physical factors) as preferable markers of adolescence or to re-evaluate the age parameters set here.

A particular strength of the literature search methods employed in this review was the use of broad search terms coupled with thorough hand-searches of full articles. This enabled the identification of all relevant literature regardless of publication site. The literature search was conducted by the lead researcher, which could have led to biased paper selection or oversight during the process. By devising a clear systematic approach prior to the search, bias and oversight were minimized. Quality assessment of the papers in this review was confirmed through assessments conducted separately by two of the authors.

3.5.5 Future Research

This review suggests that different elements of perfectionism are relevant to different adolescent clinical groups. For instance, SOP appears more relevant to eating disorders but SPP appears more relevant to suicide. Even within eating disorder research, samples tend to consist predominantly of individuals with anorexia nervosa. Research focusing on individuals with other eating disorders (e.g. bulimia nervosa) could paint a different picture for the role of perfectionism within eating disorder groups. Focused research on discrete adolescent clinical populations would enrich our understanding of when and why perfectionism is important for specific adolescent clinical populations.

Intriguing results revealing the negative impact of perfectionism on adolescent treatment outcomes require further exploration. Future research should explore whether there are specific processes within treatment that are interacting with perfectionism to result in these poor outcomes and to determine whether perfectionism is a mediating variable or an intrinsic part of psychopathology during adolescence. This would help inform clinical practice and the development of psychological interventions for perfectionism in adolescent clinical populations.

Current research typically examines perfectionism as a whole personality construct, rather than examining specific perfectionistic processes such as perfectionistic cognitions or perfectionistic behaviours, and how they interact with mental illness or treatment outcomes. Future work should look below the surface to identify specific processes and underlying mechanisms of perfectionism (e.g. cognitive or behavioural elements) and should use this deeper understanding to inform both research and clinical practice. Suggestions have been made about the potential for symptom reduction across a range of clinical disorders through specific targeting of perfectionism (Bieling, Israeli, & Antony, 2004; Shafran et al., 2002) but this cannot be done effectively with adolescents

until perfectionism in this age-group is understood at a deeper level. For the advancement of the field, we need a measurable conceptualization of adolescent perfectionism that is developmentally sensitive and empirically and theoretically robust.

3.6 Conclusions

This chapter reviewed the adolescent clinical literature to understand the relationship between perfectionism, mental illness, and treatment in adolescent clinical populations. The literature indicates that perfectionism plays diverse and generally adverse roles in adolescent suicidal behaviour and ideation, eating disorders, and depression. Adolescent perfectionism can have a negative impact on treatment outcomes for eating disorders, depression, and CFS. This review shows that perfectionism plays a similar yet not identical role in mental illness during adolescence as it does in adulthood and can have similar negative consequences for treatments.

Currently, there exists no gold-standard conceptualisation or measure of perfectionism in adolescence and many different scales are in use throughout the literature. The most commonly used measure appears to be the CAPS (Flett et al., 2016; Flett et al., 2000), a modified version of an adult-derived measure. In the next chapter, the conceptual basis of this scale will be evaluated in an adolescent sample alongside another measure with potential relevance to clinical research, the Clinical Perfectionism Questionnaire (Shafran et al., 2002). The identified factor structures will then be used to explore how these robust measures of two different conceptual models of perfectionism relate to different mental health disorders in adolescents.

Chapter 4: A Survey of Adolescent Perfectionism and Mental Health

5.1 Introduction

The study reported in this chapter has two main aims. The first is to explore the factor structure of measures of perfectionism and clinical perfectionism, when used in a general population of adolescents. The second is to use data modelling techniques to examine the relationship between perfectionism and measures of mental health. This study adds a quantitative methodological focus to the thesis to explore current perfectionism conceptualisations and adolescent mental health.

Chapter 3 reviewed the literature on the role for perfectionism in adolescent mental illness but, as highlighted, the use of varying models of perfectionism across studies impedes the ability of researchers and clinicians to draw conclusions regarding this relationship. Results are related to the specific model or measures of perfectionism employed by each study, meaning that a robust synthesis of findings across clinical adolescent literature is not yet possible, preventing progression in this field.

The most commonly employed model of perfectionism in adolescent literature is the multidimensional model of perfectionism measured by the Child-Adolescent Perfectionism Scale (CAPS) (Flett et al., 2016; Flett et al., 2000). Three competing factor models of the CAPS have been proposed, representing either 2-factors (self-oriented perfectionism, SOP; and socially-prescribed perfectionism, SPP) by 22 items (Flett et al., 2016) or 3-factors (SOP-striving, SOPS; SOP-criticism, SOPC; and SPP) by 14-items

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(McCreary et al., 2004; O'Connor et al., 2009). Flett et al. (2016) commented on weaknesses they perceived in studies reporting 3-factor models. They criticized McCreary et al. (2004) for rewording five of the items and, more significantly, for altering the response scale from 5-points to 4-points, which they argued may lead to participants having difficulty distinguishing between “*sort of true*” and “*a little true*” options. With regard to the O'Connor et al. (2009) paper, they criticized the removal of negatively worded items and items that cross-loaded on factors. They also disagreed with the O'Connor et al. (2009) interpretation of the third factor as SOPC. Overall, Flett et al. (2016) argued for the retention of all 22 items in a 2-factor model because of general support across the literature for this scale, because of their opinion that reverse scored items were necessary for assessment purposes, and because of their conviction that SOP is a unidimensional entity.

Despite its introduction to adult literature over a decade ago, no adolescent literature has yet robustly explored the factor structure of the Shafran et al. (2002) model of clinical perfectionism, measured by the Clinical Perfectionism Questionnaire (CPQ). Originally proposed by the authors as a unidimensional construct, the CPQ has subsequently been found in adult populations to represent a 2-factor model (perfectionistic strivings and perfectionistic concerns) using 10 or 12 items of the original scale (Dickie et al., 2012; Stoeber & Damian, 2014). Items 7 and 8 were found to have complex cross-loadings on both CPQ factors and so can be removed to improve model fit. With growing interest in the nature of perfectionism in relation to adolescent mental health, an evaluation of the CPQ in the adolescent population would add to the literature.

These two scales propose to measure two conceptually different presentations of perfectionism, with the latter representative of a pathological construct rather than a trait that may present in more or less healthy manners. While the CAPS has been widely

used in adolescent literature, questions remain about the most fitting factor model for this scale. Concerns raised by Flett et al. (2016) regarding shortened, 3-factor models need to be addressed, including questions about the interpretation of a factor purported to represent SOPC. The CPQ remains unexplored in adolescent populations and a factor analysis of this scale in the adolescent population may provide evidence for its utility in this younger population.

Perfectionism has been described as transdiagnostic (Egan et al., 2011). Indeed, a model of its broad contribution to the development of paediatric depression and anxiety has been suggested (Affrunti & Woodruff-Borden, 2014). While the literature has related perfectionism to multiple mental health conditions in adolescents, Affrunti and Woodruff-Borden (2014) present the only model synthesising its broad contribution to the development of more than one mental health condition. As discussed in Chapter 3, eating disorders are also frequently related to perfectionism in adolescents. The varied use of perfectionism models across the clinical literature and the discrete focus on individual disorders inhibits the ability to clearly synthesize findings about the relationship between perfectionism and multiple mental health conditions. An examination of multiple adolescent mental health conditions using robust models of perfectionism and clinical perfectionism could provide evidence regarding the proposed transdiagnostic nature of this in the adolescent population.

This chapter reports the exploration and identification of the best fitting factor structure of both the CAPS and the CPQ in a general adolescent population. Robust exploratory and confirmatory factor analysis techniques were used to obtain the model with best fit for each scale in the current data set, with the aim of retaining as many of the original items as statistically justified (in respect of Flett et al. (2016) recommendations). The relationship of these identified perfectionism and clinical perfectionism factors to risk of

three mental health problems in adolescents – depression, anxiety, and eating disorders – were also explored, providing an overview of the identified models' role in risk of mental health problems in a non-clinical adolescent population.

5.2 Research Objectives

There were two main objectives in this study. First, to identify the factor structures of the CAPS and the CPQ in the general adolescent population. Second, to determine how these obtained factor structures of perfectionism relate to risk of depression, anxiety, and eating disorders in this population.

5.3 Method

5.3.1 Design

A cross-sectional questionnaire-based study was conducted to collect data representing individual differences in levels of perfectionism and risk of depression, anxiety, and eating disorders in a general sample of adolescents. This quantitative psychometric approach was employed to enable an examination of measures of perfectionism and clinical perfectionism. To ensure a robust examination of the factor model of each scale, this study used a two-step approach, utilizing both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) in the assessment of factor structures. Obtained models were used to explore the relative relationship of each element of perfectionism to risk of psychopathology in adolescents.

5.3.2 Participants

Participants were 507 adolescent volunteers (272 females and 233 males), ranging in age from 12.24 years to 15.50 years ($M=13.70$, $SD=.84$). All participants were enrolled in 1st, 2nd, or 3rd year of secondary school education in a large urban city in Scotland.

From the originally accessed sample, this final study sample represented a response rate of 94%. The sample was predominantly Caucasian (88.4%), but was also representative of Black (1.0%), Asian (5.9%), multi-ethnic (3.9%), and other ethnic groups (0.6%). Within the sample, 1.2% self-identified as having a disability and 5.5% reported having a diagnosed mental health disorder. Based on responses to the Family Affluence Scale-II (Currie, Elton, Todd, & Platt, 1997), 66.2% of the sample had high socioeconomic status (SES), 28.3% had medium SES, and 3.1% had low SES. Participants indicated an intent, following secondary education, to attend university (58.5%), attend college (9.0%), seek employment (6.5%), begin a trade apprenticeship (2.6%), or begin youth training (0.6%), with the remainder being undecided at the time of study.

5.3.2.1 Inclusion/Exclusion

The study operated on a policy of inclusion, meaning that so long as volunteers were at least 11 years old, they were able to participate. For special circumstances, such as limited language or educational skill, a verbal communication of the questionnaires would have been offered so that all volunteers over the age of 11 years could participate. This was not required and all participating students were able to complete the study independently. No further exclusion criteria were employed in this study.

5.3.3 Measures

To enable a large-scale cross-sectional study, a questionnaire-based paper survey employing standardized psychometric measures was utilized (see Appendix A). The survey collected basic demographic variables and included validated measures of socioeconomic status, perfectionism, and risk of psychopathology, along with other psychometric measures not reported here.

5.3.3.1 Socioeconomic Status

Common measures of socioeconomic status (SES) in adult research may not be appropriate for use in adolescent research because adolescents may not be able to accurately report such typical indicators of SES as parental occupation. The Family Affluence Scale II (FAS II), a 4-item scale, was employed in this study to determine SES of adolescent participants (Currie et al., 1997). This scale assesses SES through items relating to indicators of SES that are easily identifiable by adolescents, including: number of cars owned by the family, shared or own bedroom occupation, holidays taken by family, and technology in the home. Composite scores ranging from 0-9 can be used to classify adolescents as having low (0-2), medium (3-5), or high (6-9) SES (Boyce, Torsheim, Currie, & Zambon, 2006). Studies have shown that FAS-II reduces likelihood of non-response compared to other measures of SES with very high completion rates (Boudreau & Poulin, 2009; Liu et al., 2012). It has low internal reliability (Cronbach's $\alpha = 0.58$), but reasonable test-retest reliability ($ICC > 0.75$), moderate external validity ($r = 0.48-0.51, p < 0.001$), and adequate construct validity (Liu et al., 2012).

5.3.3.2 Multidimensional Perfectionism

The Child-Adolescent Perfectionism Scale (Flett et al., 2016; Flett et al., 2000), a 22-item self-report scale with a proposed 2-factor structure (SOP and SPP), was adapted from Hewitt and Flett's Multidimensional Perfectionism Scale (Hewitt & Flett, 1991b)). Reasonable support for its reliability and validity is somewhat hindered by some items loading onto both factors (Castro et al., 2004; Flett et al., 2000). Further psychometric studies have questioned the initial proposed factor structure, with a study of early adolescence (11-12 years old) finding a 14-item, 3 factor structure to be a better fit (McCreary et al., 2004) and a study of mid-adolescence (15-16 year olds) finding a more discriminate 11-item, 3 factor structure to fit better (O'Connor et al., 2009). Both of these

latter studies identified the SPP factor but found evidence that the SOP factor split into two factors: SOP-Strivings (SOPS) and SOP-Criticism (SOPC). Using the 3-factor structure identified in the current study, the subscales of the CAPS were all found to have acceptable reliability in the current sample (SOPS $\alpha = .780$; SOPC $\alpha = .747$; SPP $\alpha = .862$).

5.3.3.3 Clinical Perfectionism

The Clinical Perfectionism Questionnaire (CPQ) is a 12 item measure of clinical perfectionism defined as “the overdependence of self-evaluation on the determined pursuit of personally demanding, self-imposed, standards in at least one highly salient domain, despite adverse consequences”, (Shafran et al., 2002, p778). Respondents indicate level of frequency of each item using a 4-point scale ranging from “Not at all” to “All of the time”. While clinical perfectionism was initially described by the authors as a one-dimensional construct, different from multidimensional conceptualisations of perfectionism, subsequent studies of the CPQ have found the measure to have a 2-factor structure, with one factor assessing perfectionistic strivings (PS) and the other assessing perfectionistic concerns (PC) (Dickie et al., 2012; Egan et al., 2016; Stoeber & Damian, 2014). In general populations, CPQ has acceptable internal consistency and discriminative and incremental validity, while in clinical populations, it has acceptable internal consistency and construct validity, with the ability to distinguish between eating disorder and non-clinical groups (Egan et al., 2016). Using the 2-factor structure identified in the current study, the subscales of the CPQ were found to have questionable reliability in the current adolescent sample (PS $\alpha = .654$; PC $\alpha = .676$). The reading level of this measure has been assessed as a US grade 4 level (student age range 9–10 years) making it appropriate for completion by adolescents (Egan et al., 2016). An error in the current study’s questionnaire booklet resulted in Item 10 (“Over the past month, do you think that other people would have thought of you as a “perfectionist”?”) being non-

viable for use in this study and so the current study used an 11-item version of the CPQ, omitting item 10 from analysis.

5.3.3.4 Risk of Depression, Anxiety, or Eating Disorder

The Hospital Anxiety and Depression Scale (HADS) is a 14-item scale originally developed for the detection of anxiety and depression in outpatient settings (Zigmond & Snaith, 1983). It consists of two subscales, anxiety (HADS-A) and depression (HADS-D), which are both deemed valid measures of the severity of these emotional disorders. Participants respond to items such as *“I feel tense or ‘wound up’”* (HADS-A) or *“I still enjoy the things I used to enjoy”* (HADS-D) by indicating how frequently they have felt that way over the past week, using one of 4 frequency response options. A review of 747 studies found that most factor analyses of this scale revealed a 2-factor solution as proposed by the authors. Cronbach’s alpha for HADS-A ranged from .68 to .93 (mean = .83) and for HADS-D ranged from .67 to .90 (mean = .82) across the review sample. Both subscales demonstrated an optimal balance between sensitivity and specificity when case-ness was defined as a score of 8 or above, achieving similar results as the General Health Questionnaire (GHQ). Furthermore, the HADS correlated well with other related questionnaires (Bjellanda, Dahlb, Haugc, & Neckelmann, 2002). A study of adolescents in both general and clinical populations found it had adequate test-retest reliability suggesting both subscales tap well into emotional distress in adolescents. The 2-factor structure held in this younger population, with only one item, *“I can sit at ease and feel relaxed”* being suggested as loading better onto the depression subscale than the anxiety subscale as had been found in studies of adult populations (Moorey et al., 1991). Both the HADS-A and HADS-D subscales exhibited good discriminant validity for anxiety and depressive disorders. Recommended higher cut-offs of 10 for depression and 12 for anxiety in screening settings minimised the probability of false positives, while the lower

cut-offs of 7 (HADS-D) and 9 (HADS-A) in clinical settings minimised false negatives (White, Leach, Sims, Atkinson, & Cottrell, 1999). In the current study sample, HADS-A had good reliability ($\alpha = .809$) but HADS-D had lower reliability ($\alpha = .621$).

The Eating Attitudes Test (EAT), a 40-item self-report scale, proposed to measure anorexia nervosa symptomology (Garner & Garfinkel, 1979). Factor analysis of this original scale produced a briefer version, the EAT-26, comprising 26-items reflecting 3 factors, dieting (13-items reflecting avoidance of fattening foods and preoccupation with being thinner), bulimia and food preoccupation (6-items reflecting thoughts about food, as well as those indicating bulimia), and oral control (7-items reflecting self-control of eating and perceived pressure from others to gain weight). Items are presented with a 6-point response scale to indicate frequency. The three lower responses (Never, Rarely, Sometimes) are scored as 0, with the three higher responses (Often, Usually, Always) being scored 1, 2, and 3 respectively. An overall EAT-26 score is calculated by summing items across all three factors, with scores over 20 indicating risk of disorder. Bulimic and restrictor AN-subtypes differ in their scores on the second and third factors of EAT-26 but not on overall EAT-26 scores (Garner, Olmstead, Bohr, & Garfinkel, 1982). A “referral index” can be produced for respondents by combining EAT-26 scores with behavioural questions about eating symptoms and weight loss and a calculation of the individual’s body mass index (BMI). These additional criteria were not explored in the current study and so a referral index was not calculated for respondents. The Eating Attitudes Tests have demonstrated good internal consistency and test-retest reliability in adolescent samples (Banasiak, Wertheim, Koerner, & Voudouris, 2001; Pereira et al., 2008). Cronbach’s alpha was calculated in the current study showing EAT-26 to have good reliability ($\alpha = .898$) for the current adolescent sample.

5.3.4 Ethical Considerations

5.3.4.1 Ethical Approval

This study was designed and completed in line with the British Psychological Society's Code of Ethics and Conduct (2009) and Code of Human Research Ethics (2014). A level 2/3 ethics application was submitted to and approved following minor amendments by the University of Edinburgh, School of Health in Social Science Ethics Board (see Appendix B). A request for approval and access to local schools was made to and granted by the local authority (see Appendix C). Final approval, access, and procedural issues were negotiated with the Support Team² in line with the school's requirements for student protection.

5.3.4.2 Consent and Withdrawal

Initial consent for student participation in the study was granted by the school's Pupil Support department following consideration of the study characteristics. Parents/guardians were provided with information sheets one week prior to study commencement to give them the opportunity to consider the study, discuss it with their child, and to respond to our consent request. Forms were provided for parents/guardians to opt-out of the study on behalf of their child, which were returned to the child's Key Adult³, who in turn would inform the researcher and relevant staff that the child was not to participate in the study. Consent forms for participants ensured they

² Support Teams have traditionally been known as Guidance Departments in the Scottish education system.

³ In Scotland, many schools now individually assign young people a *Key Adult*, a member of staff who works within the school's Support Team to oversee the young person's progress, achievement, and wellbeing. Students at the participating school meet with their Key Adult three times per week, making them a regular point of contact.

had understood the information sheet, were aware of the research process regarding confidentiality and withdrawal, and consented to participate in the study.

5.3.4.3 Confidentiality

Participants were not required to record their name on their responses booklets; instead, each booklet was assigned a numerical identifier to ensure confidentiality. Participants were required to submit their response booklet themselves so that no other person could view their responses. To circumvent inclusion of responses provided due to peer-pressure, participants were informed they could do any of the following to prevent their responses from being used in the study: (1) leaving any items they did not want to answer blank, (2) writing a note on their booklet to indicate they did not want their responses included, (3) indicating on the consent form that they did not consent to their responses being included in the study.

5.3.4.4 Safe Guarding Participants

Both the researcher and her supervisor hold Enhanced PVG Scheme Disclosure certificates through employment in the National Health Service, which would safeguard vulnerable individuals such as the adolescent participants in this study. At the request of the local authority, however, the researcher was not physically present during the study, with employed school staff supervising the study period instead.

Participants' Key Adults were asked to assess the suitability of the questionnaires for individual students. Any student deemed unable to participate (e.g. special educational needs), was not required to complete the study; however, they were offered the opportunity to complete the questionnaire booklet so that they would not be stigmatized. This could have been done utilising existing measures that were in place for students' additional needs or through a verbal communication of the questionnaire booklet by the Support Team or researcher.

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It was not anticipated that the study would cause any distress to participants; however, should this have happened, participants were informed that they could stop completing the questionnaire booklet and withdraw their consent at any point. Debrief sheets reminded participants of supportive systems within their school (e.g. Support Teams) and outside of school (e.g. general practitioner, family members) with whom they could discuss any issues arising from this study (see Appendix D). These debrief sheets also included contact information for confidential support services (e.g. ChildLine).

5.3.5 Procedure

Access to participants was granted by the local authority and Head of School. Information sheets and consent forms for the study were sent to parents/guardians (see Appendix E) one week prior to the study commencement, utilizing an opt-out consent scheme. The school's guidance department was also informed about the study and of the dates on which it would be conducted.

Supervising staff were provided with written instructions regarding the study procedure. Prior to the study, students received an information sheet (see Appendix F). Written informed consent was obtained from each participant prior to study commencement. Participants completed a hard format questionnaire booklet individually during one class period (approximately 50 minutes). On completion of the questionnaire booklet, participants placed it in a sealed ballot box that was later collected by the researcher. Staff were requested not to interfere with or offer support for the completion of the questionnaires and were requested to ensure reasonable privacy was assured for the participants during the study session.

5.3.6 Analysis

Preliminary, descriptive, and reliability analyses throughout this chapter were performed using SPSS software. Factor analyses and path analyses were performed

using MPlus software (Muthén & Muthén, 1998-2012) using the maximum likelihood method of extraction and oblique rotation method (GEOMIN). Factor structure of the CAPS and the CPQ was assessed through three stages of factor analysis with the current data set. For this purpose, the data ($n = 507$) was randomly split using the split-half method in SPSS to create two subsamples: subsample A – used for exploratory factor analyses – and subsample B – used for confirmatory factor analyses.

Exploratory factor analysis (EFA) was used to identify the lowest factor structure with acceptable fit for each measure in the current data set (i.e. subsample A). Eigenvalues (≥ 1.0) and parallel analysis (performed in MPlus) were used initially to identify the potential number of factors. Next, multiple fit indices were used to assess fit of these models (see '*Model Fit Indices*' below for details). Items with a factor loading equal to or greater than 0.4 on any factor were deemed to have loaded sufficiently to warrant being retained in the model (Costello & Osborne, 2005). Items that failed to reach this level of loading on any factor were removed from the model at this point. In the case of items loading on to more than one factor (i.e. cross-loading) items were assigned to the factor on which they loaded highest. In the case of very similar loadings on multiple factors (e.g. < 0.05 difference between the loading values), such items were removed from the model to improve fit. In the case of the removal of insufficient- or cross-loading items, another EFA was run to obtain the model of best fit for any reduced item set. The lowest-factor model with acceptable fit was identified and carried through to the next stage of analysis.

Confirmatory factor analysis (CFA) was used to assess the fit of the identified model from EFA in a new data set (i.e. subsample B). The same criteria for item loading, removal, and retention were followed as in the previous stage of analysis. Further, modification indices (MIs) that would result in a significant change to the model's chi square fit index

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were requested in CFAs by setting a cut-off value of 3.84 (Brown, 2015). Suggested MIs were incorporated in a theoretically justified manner (e.g. allowing item correlation within factors but not between factors) until the model achieved acceptable fit. Sequential assessment of fit of a series of modified models was performed beginning with the model identified through EFA and ending with the first model to achieve acceptable fit. The fit of these final models for both the CAPS and CPQ with the current data were then compared to the fit of other models previously identified in the literature. The same model fit indices that were used in the previous stages of analysis were used for these comparisons. For the CAPS, the final model was compared with 2-factor 22-item and 3-factor 14-items models previously outlined (Flett et al., 2016; McCreary et al., 2004; O'Connor et al., 2009). For the CPQ, the final model was compared to a 1-factor 12-item model originally proposed by Shafran et al. (2002) and a 2-factor 10-item model identified by others (Dickie et al., 2012; Stoeber & Damian, 2014). The optimal model following these comparisons was selected for use in all subsequent analysis in this chapter.

Path analysis by structural equation modelling was used to examine the relationships between perfectionism, clinical perfectionism, risk of depression, anxiety, and eating disorders, and demographic variables in the original full data set. A-priori calculations indicated that a minimum sample size of 107 participants would be required to detect medium effect sizes in these analyses and so the current sample was of adequate size. First, the relationships between all experimental variables (i.e. perfectionism, clinical perfectionism, and mental health risk) and demographic variables (i.e. gender, SES, and age) were examined through independent t-tests and Pearson's correlation in SPSS. Path models were used in MPlus to specify and test relationships between study variables and demographics. This was performed fit in three steps, each building on the previous. Step 1 explored the paths from all factors of perfectionism and clinical perfectionism to

mental health risk. Step 2 assessed model fit and parameter estimates following the removal of non-significant paths identified in Step 1. Step 3 incorporated gender and SES as moderators of perfectionism, clinical perfectionism, or mental health risk in accordance with suggested relationships from the preliminary analysis. Model fit was assessed in accordance with the same fit indices used in the previous EFA and CFA.

5.3.6.1 Model Fit Indices

Model fit was assessed using multiple indicators: chi-square (χ^2), the comparative fit index (CFI) (Bentler, 1990), Tucker-Lewis Index (TLI) (Tucker & Lewis, 1973), the root-mean-square error of approximation (RMSEA) (Browne & Cudeck, 1993), and the standardized root-mean square residual (SRMR) (Joreskog & Sorbom, 1981). Chi-square was evaluated relative to degrees of freedom (χ^2/df), with values lower than 2 indicating good model fit (Mueller, 1996). CFI and TLI values greater than .90 were considered to indicate acceptable fit with values greater than .95 indicating good fit (Bentler, 1990; Hu & Bentler, 1999). RMSEA and SMRM values less than .08 indicate acceptable fit and values equal or less than .05 indicate good fit (Browne & Cudeck, 1993).

5.4 Results

5.4.1 Missing Data

An assessment of missing data revealed missing data points throughout the data set. Little's MCAR test indicated the values were not missing completely a random ($\chi^2 = 22624.538$, $df = 22174$, $p < 0.05$) and so rather than replacing missing values and risk biasing parameter estimates, listwise deletion was used to remove incomplete cases for each analysis.

5.4.2 Exploratory Factor Analyses

5.4.2.1 CAPS

Evaluation of eigenvalues greater than 1, indicated as many as 5 potential factors but parallel analysis suggested 3 factors may be sufficient. Fit indices indicated a 4-factor solution being the lowest number of factors with good ($\chi^2/df = 1.755$, CFI = 0.943, TLI = 0.912, SRMR = 0.037) or acceptable (RMSEA = 0.057) fit, with lower factor models having poor fit. Item 9 was removed from the model due to not sufficiently loading on any factor. Factor 3 was overall deemed unnecessary as no items sufficiently loaded onto it. Four items loaded positively on this factor, three of which were the reverse scored items (3, 9, 18), suggesting that Factor 3 was representative of the negative-wording of these items rather than a perfectionism factor. Indeed, these items have previously been identified as problematic in the literature (McCreary et al., 2004; O'Connor et al., 2009) and so they were removed from the model before running the EFA a second time.

A second EFA was performed with reverse scored items (3, 9, and 18) removed. Evaluation of eigenvalues greater than 1 this time indicated 4 potential factors (see Table 3) with parallel analysis suggesting 2 factors may be sufficient. Fit indices indicated a 3-factor solution being the lowest number of factors with good ($\chi^2/df = 1.856$, CFI = 0.945, TLI = 0.920, SRMR = 0.030) or acceptable (RMSEA = 0.060) fit, with lower factor models having poor fit (see Table 4). The obtained pattern matrix for this model is displayed in Table 5. All items loaded sufficiently on at least one factor to warrant being retained. This analysis suggests a 3-factor model of the CAPS having the best fit for the current data set. Some cross-loading was not uncommon but items 17 and 19 were removed from the model due to very similar loadings on more than one factor (i.e. <0.05 difference). The remaining 17 items were assigned to factors for CAPS-Model-1 as

follows: Factor 1 – items 1, 2, 4, 6, and 7; Factor 2 – items 5, 8, 10, 12, 13, 15, 21; and Factor 3 – items 11, 14, 16, 20, 22.

Table 3. *Eigenvalues of factor solutions for 19 CAPS items.*

Model	Number of Parameters	χ^2	df	p-value	Eigenvalue
1-factor	57	756.043	152	0.0000	6.762
2-factor	75	309.517	134	0.0000	2.706
3-factor	92	217.172	117	0.0000	1.175
4-factor	108	161.966	101	0.0001	1.006

Table 4. *Fit indices for factor solutions of 19 CAPS items*

Model	χ^2/df	CFI	TLI	RMSEA	SRMR
1 Factor	4.974	0.669	0.627	0.130	0.113
2 Factors	2.310	0.904	0.877	0.075	0.047
3 Factors	1.856	0.945	0.920	0.060	0.037
4 Factors	1.604	0.967	0.943	0.051	0.030

Table 5. Pattern matrix for 3-factor model of 19 CAPS items.

Item	Factor 1	Factor 2	Factor 3
1. I try to be perfect in everything I do.	0.829	0.025	0.394
2. I want to be the best at everything I do.	0.739	0.064	0.401
4. I feel that I have to do my best all the time.	0.631	0.295	0.443
6. I always try for the top score on a test.	0.490	-0.023	0.247
7. It really bothers me if I don't do my best all the time.	0.677	0.167	0.571
5. There are people in my life who expect me to be perfect.	0.186	0.663	0.346
8. My family expects me to be perfect.	0.161	0.631	0.339
10. People expect more from me than I am able to give.	0.034	0.611	0.329
12. Other people think that I have failed if I do not do my very best all the time.	0.065	0.698	0.358
13. Other people always expect me to be perfect.	0.144	0.816	0.505
15. People around me expect me to be great at everything.	0.199	0.689	0.584
21. I feel that people ask too much of me.	0.062	0.681	0.500
11. I get mad at myself when I make a mistake.	0.418	0.225	0.593
14. I get upset if there is even one mistake in my work.	0.439	0.239	0.693
16. When I do something, it has to be perfect.	0.513	0.278	0.656
20. Even when I pass, I feel that I have failed if I didn't get one of the highest marks in the class.	0.347	0.411	0.718
22. I can't stand to be less than perfect.	0.381	0.412	0.757
19. I am always expected to do better than others.	0.244	0.562	0.525
17. My teachers expect my work to be perfect.	0.181	0.415	0.461

Note: Items with a factor loading equal to or greater than 0.4 are indicated in bold.

5.4.2.2 CPQ

Evaluation of eigenvalues greater than 1, indicated as many as 3 potential factors (see Table 6) but parallel analysis suggested 2 factors may be sufficient. Fit indices indicated

a 2-factor solution being the lowest number of factors with good ($\chi^2/df = 1.752$, SRMR = 0.040) or acceptable (CFI = 0.945, TLI = 0.911, RMSEA = 0.056) fit, with lower factor models having poor fit (see Table 7). The obtained pattern matrix for this model is displayed in Table 8. Items 2, 3, and 8 were removed from the model at this point due to not sufficiently loading on either factor. Item 7 loaded similarly on both factors (i.e. <0.05 difference) and so was removed from the model to improve fit. The remaining 7 items were assigned to factors for CPQ-Model-1 as follows: Factor 1 – Items 4, 5, and 12; and Factor 2 – Items 1, 6, 9, and 11.

Table 6. *Eigenvalues of factor solutions for 11 CPQ items.*

Model	Number of Parameters	χ^2	df	p-value	Eigenvalue
1-factor	33	158.973	44	0.0000	3.221
2-factor	43	59.566	34	0.0043	1.582
3-factor	52	35.658	25	0.0769	1.056

Table 7. *Fit indices for factor solutions of 11 CPQ items.*

Model	χ^2/df	CFI	TLI	RMSEA	SRMR
1 Factor	3.613	0.752	0.690	0.105	0.079
2 Factors	1.752	0.945	0.911	0.056	0.040
3 Factors	1.414	0.977	0.949	0.043	0.031

Table 8. Pattern matrix for 2-factor model of 11 CPQ items.

Item	Factor 1	Factor 2
4. Over the past month, have you felt a failure as a person because you have not succeeded in meeting your goals?	0.822	0.278
5. Over the past month, have you been afraid that you might not reach your standards?	0.623	0.362
7. Over the past month, have you judged yourself on the basis of your ability to achieve high standards?	0.537	0.573
12. Over the past month, have you avoided any tests of your performance (at meeting your goals) in case you failed?	0.498	0.067
1. Over the past month, have you pushed yourself really hard to meet your goals?	-0.078	0.525
6. Over the past month, have you raised your standards because you thought they were too easy?	0.173	0.538
9. Over the past month, have you <u>repeatedly</u> checked how well you are doing at meeting your standards (for example, by comparing your performance with that of others)?	0.412	0.623
11. Over the past month, have you kept trying to meet your standards, even if this has meant that you have missed out on things?	0.286	0.553
2. Over the past month, have you tended to focus on what you have achieved, rather than on what you have not achieved?	0.164	-0.029
3. Over the past month, have you been told that your standards are too high?	0.281	0.375
8. Over the past month, have you done just enough to get by?	-0.395	-0.207

Note: Items with a factor loading equal to or greater than 0.4 are indicated in bold.

5.4.3 Confirmatory Factor Analyses

5.4.3.1 CAPS

Using CAPS-Model-1 as a starting point, a series of modified models (incorporating theoretically justified MI) were tested until a model with acceptable fit was identified. The final CAPS model had acceptable fit according to all fit indices ($\chi^2/df = 1.851$, CFI = 0.944, TLI = 0.928, RMSEA = 0.060, SRMR = 0.053). First and final model fit indices are presented in Table 9. Factors of this final model appeared to similarly reflect factors of SOPS, SOPC, SPP previously identified in the literature (McCreary et al., 2004; O'Connor et al., 2009)) and so are referred to as such in this chapter. Standardised parameter estimates are presented in Table 10. Model parameters were all significant ($p < 0.001$) and explained substantial amounts of item variance ($R^2 = .274$ to $.660$). SOPC appeared to correlate highly with both SOPS and SPP factors, while SOPS and SPP correlate moderately (see Table 11).

Table 9. *Fit indices for CAPS models evaluated through CFA.*

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
CAPS-Model-1	315.992	116	2.724	0.875	0.854	0.086	0.065
Final CAPS Model	196.192	106	1.851	0.944	0.928	0.060	0.053

Table 10. *Standardized parameter estimates for CAPS 3-factor 17-item model.*

Item	SOP-S	SPP	SOP-C	R ²
1. I try to be perfect in everything I do.	.624			.389
2. I want to be the best at everything I do.	.514			.274
4. I feel that I have to do my best all the time.	.654			.428
6. I always try for the top score on a test.	.512			.262
7. It really bothers me if I don't do my best all the time.	.677			.458
5. There are people in my life who expect me to be perfect.		.741		.550
8. My family expects me to be perfect.		.634		.402
10. People expect more from me than I am able to give.		.660		.436
12. Other people think that I have failed if I do not do my very best all the time.		.660		.435
13. Other people always expect me to be perfect.		.794		.631
15. People around me expect me to be great at everything.		.813		.660
21. I feel that people ask too much of me.		.639		.408
11. I get mad at myself when I make a mistake.			.603	.363
14. I get upset if there is even one mistake in my work.			.640	.410
16. When I do something, it has to be perfect.			.723	.523
20. Even when I pass, I feel that I have failed if I didn't get one of the highest marks in the class.			.557	.310
22. I can't stand to be less than perfect.			.736	.542

Note: For all values, $p < 0.001$

Table 11. *Standardized correlation estimates between CAPS factors.*

	SOP-S	SPP	SOP-C
SOP-S	1.000		
SPP	.454	1.000	
SOP-C	.723	.796	1.000

Note: For all values, $p < 0.001$

5.4.3.2 CPQ

CPQ-Model-1 had poor fit with only two fit indices indicating acceptable fit (CFI = 0.926, SRMR = 0.054) and the remaining three indicating poor fit ($\chi^2/df = 3.04$, TLI = 0.880, RMSEA = 0.091). Incorporating theoretically justified MIs resulted in CPQ-Model-2, which exhibited acceptable ($\chi^2/df = 1.987$, TLI = 0.942, RMSEA = 0.063) to good fit (CFI = 0.944, SRMR = 0.042). Fit indices are displayed in Table 12. The factors identified in this final model appeared to reflect PS and PC and so are referred to as such in this chapter. Standardized parameter estimates are presented in Table 13. Model parameters were all significant ($p < 0.001$) and explained substantial amounts of item variance ($R^2 = .212$ to $.861$) except item 12 ($R^2 = .059$, $p = 0.065$). Removing this item did not improve the overall model and so it was retained. The standardized correlation estimate between factors was .566 ($p < 0.001$).

Table 12. *Fit indices for CPQ models evaluated through CFA.*

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
CPQ- Model-1	39.561	13	3.04	0.926	0.880	0.091	0.054
CPQ- Model-2	23.848	12	1.987	0.967	0.942	0.063	0.042

Table 13. *Standardized parameter estimates for CPQ 2-factor 7-item model.*

Item	PC	PS	R ²
4	.672		.451*
5	.928		.861*
12	.243		.059
1		.473	.224*
6		.460	.212*
9		.736	.542*
11		.655	.429*

Note: * $p < 0.001$

5.4.4 Comparison to Previously Identified Models

5.4.4.1 CAPS

The fit of the CAPS model identified in this study was compared to that of three previously identified models of the CAPS (Flett et al., 2016; McCreary et al., 2004; O'Connor et al., 2009) for the current data set. Items were assigned to load on to either

SPP, SOP, SOP-S, SOP-C, according to each of the four models (see Table 14). Fit indices are presented in Table 15. The Flett et al. (2016) model had poor fit according to all fit indices. The O'Connor et al. (2009) model had poor fit according to two indicators and acceptable fit according to three indicators. The McCreary et al. (2004) model had acceptable fit according to all fit indices. The 17-item model identified in the current study provided marginally better fit with the current data than the McCreary et al. (2004) model did and, in keeping with the scale authors' recommendation (Flett et al., 2016), retained more of the original CAPS items compared to the previous models' fewer 14 items, and therefore was used for subsequent analysis in this chapter.

Table 14. *CAPS Items and their subscales as assigned by each model.*

CAPS Item	Flett Model	McCreary Model	O'Connor Model	Current Model
1. I try to be perfect in everything I do.	SOP	SOPS	SOPS	SOPS
2. I want to be the best at everything I do.	SOP	SOPS	SOPS	SOPS
3. My parents don't always expect me to be perfect in everything I do.	SPP	-	-	-
4. I feel that I have to do my best all the time.	SOP	SOPS	-	SOPS
5. There are people in my life who expect me to be perfect.	SPP	SPP	SPP	SPP
6. I always try for the top score on a test.	SOP	SOPS	SOPS	SOPS
7. It really bothers me if I don't do my best all the time.	SOP	-	-	SOPS
8. My family expects me to be perfect.	SPP	SPP	SPP	SPP
9. I don't always try to be the best.	SOP	-	-	-

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CAPS Item	Flett Model	McCreary Model	O'Connor Model	Current Model
10. People expect more from me than I am able to give.	SPP	SPP	SPP	SPP
11. I get mad at myself when I make a mistake.	SOP	SOPC	SOPC	SOPC
12. Other people think that I have failed if I do not do my very best all the time.	SPP	-	SPP	SPP
13. Other people always expect me to be perfect.	SPP	SPP	SPP	SPP
14. I get upset if there is even one mistake in my work.	SOP	SOPC	SOPC	SOPC
15. People around me expect me to be great at everything.	SPP	SPP	-	SPP
16. When I do something, it has to be perfect.	SOP	-	-	SOPC
17. My teachers expect my work to be perfect.	SPP	SPP	SPP	-
18. I do not have to be the best at everything I do.	SOP	-	-	-
19. I am always expected to do better than others.	SPP	SPP	-	-
20. Even when I pass, I feel that I have failed if I didn't get one of the highest marks in the class.	SOP	-	SOPC	SOPC
21. I feel that people ask too much of me.	SPP	SPP	SPP	SPP
22. I can't stand to be less than perfect.	SOP	-	SOPC	SOPC

Note: SOP = self-oriented perfectionism; SPP = socially-prescribed perfectionism; SOPS = SOP-striving; and SOPC = SOP-criticism.

Table 15. *Fit indices for competing CAPS models.*

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
Flett	596.767	208	2.869	0.794	0.771	0.090	0.080
McCreary	145.406	74	1.965	0.938	0.924	0.064	0.056
O'Connor	180.919	74	2.445	0.907	0.886	0.078	0.056
CAPS-Model-4	196.181	106	1.851	0.944	0.928	0.060	0.053

Note: CAPS-Model-4 = 17-item model identified in current study.

5.4.4.2 CPQ

The fit of the final CPQ model identified in the previous stage of analysis (2-factor 7-item model) was compared to that of two previously identified models of the CPQ, the 1-factor 12-item (Shafran et al., 2002) and 2-factor 10-item, (Dickie et al., 2012; Stoeber & Damian, 2014) for the current data set. Items were assigned to load on to either clinical perfectionism (CP), PS, or PC according to each identified model (see Table 16). Fit indices for each model are presented in Table 17. The 1-factor 12-item model of the CPQ exhibited poor fit according to all fit indices. The 2-factor 10-item model exhibited poor fit according to all fit indices apart from SRMR, which indicated acceptable fit (SRMR = 0.077). The 2-factor 7-item model identified in this chapter provided acceptable ($\chi^2/df = 1.987$, TLI = 0.942, RMSEA = 0.063) to good fit (CFI = 0.944, SRMR = 0.042) and so is used in all future analyses in this chapter.

Table 16. *CPQ Items and their subscales as assigned by each model.*

CPQ Item	1-factor 12-item	2-factor 10-item	CPQ- Model-2
1. Over the past month, have you pushed yourself really hard to meet your goals?	CP	PS	PS
2. Over the past month, have you tended to focus on what you have achieved, rather than on what you have not achieved?	CP	PC	-
3. Over the past month, have you been told that your standards are too high?	CP	PS	-
4. Over the past month, have you felt a failure as a person because you have not succeeded in meeting your goals?	CP	PC	PC
5. Over the past month, have you been afraid that you might not reach your standards?	CP	PC	PC
6. Over the past month, have you raised your standards because you thought they were too easy?	CP	PS	PS
7. Over the past month, have you judged yourself on the basis of your ability to achieve high standards?	CP	-	-
8. Over the past month, have you done just enough to get by?	CP	-	-
9. Over the past month, have you <u>repeatedly</u> checked how well you are doing at meeting your standards (for example, by comparing your performance with that of others)?	CP	PS	PS
10. Over the past month, do you think that other people would have thought of you as a “perfectionist”?	CP	PS	-
11. Over the past month, have you kept trying to meet your standards, even if this has meant that you have missed out on things?	CP	PS	PS
12. Over the past month, have you avoided any tests of your performance (at meeting your goals) in case you failed?	CP	PC	PC

Note: CP = clinical perfectionism; PS = perfectionistic strivings; PC = perfectionistic concerns.

Table 17. *Fit indices for competing CPQ models.*

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
1-factor 12-item	199.940	44	4.544	0.732	0.666	0.120	0.085
2-factor 10-item	96.022	26	3.693	0.845	0.786	0.105	0.077
CPQ-Model-2	23.848	12	1.987	0.967	0.942	0.063	0.042

5.4.3 Relationship to Risk of Mental Illness

5.4.3.1 Preliminary Analyses and Descriptive Statistics

EAT-26 data was non-normally distributed with skewness of 1.781 (SE = .118) and kurtosis of 3.064 (SE = .236). The median score for EAT-26 was 7. In accordance with clinical cut offs for screening purposes, suggested by previous literature (White et al., 1999), 31.2% of the sample were at risk of having an anxiety disorder, 9.1% were at risk of having depression, and 15.2% were at risk of having an eating disorder. SOPS and PS appear to have small to moderate correlations with risk of anxiety and eating disorder, but no significant relationship with depression. SOPC, SPP, and PC all had moderate significant correlations with risk for all three illnesses: depression, anxiety, and eating disorders. Descriptive statistics and correlations for all perfectionism, clinical perfectionism, and mental health risk variables and are presented in Table 18.

5.4.3.2 Confound Variables

Preliminary analysis of gender, age, and SES found some small but significant relationships between these demographic variables and study variables. Independent samples t-tests revealed that boys scored significantly lower than girls on measures of PC ($t(491) = -3.782, p < 0.001$), anxiety ($t(463) = -6.304, p < 0.001$), and eating disorder risk ($t(421) = -4.734, p < 0.001$). Pearson's correlations revealed low positive correlations between age and SOPS ($r(491) = .119, p < 0.01$) suggesting as adolescents

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grow older, levels of SOPS increase. Low negative correlations were found between measures of SES and PC ($r(442) = -.105, p < 0.05$), anxiety ($r(417) = -.103, p < 0.05$), and depression ($r(411) = -.147, p < 0.01$), suggesting that as SES increases, PC, anxiety, and depression decrease.

Table 18. *Descriptive statistics, Cronbach's alpha and correlations of study variables.*

Variable	1	2	3	4	5	6	7	8
1. SOPS	1							
2. SOPC	0.551*	1						
3. SPP	0.282*	0.576*	1					
4. PS	0.483*	0.428*	0.232*	1				
5. PC	0.261*	0.531*	0.473*	0.304*	1			
6. HADS-D	-0.060	0.284*	0.368*	-0.021	0.359*	1		
7. HADS-A	0.169*	0.411*	0.451*	0.219*	0.541*	0.410*	1	
8. EAT-26	0.122*	0.377*	0.363**	0.294*	0.458*	0.345*	0.451*	1
M	17.92	11.84	17.04	9.74	5.97	5.23	10.11	11.05
SD	3.820	4.428	6.081	2.443	2.164	3.121	4.208	11.697
Skewness	-.447	.622	.411	.164	.574	0.609	.0204	1.781
Kurtosis	-.075	-.070	-.317	-.418	-.415	-0.044	-0.438	3.064
Cronbach's Alpha	.780	.747	.862	.654	.676	.621	.809	.898

Note: * $p < 0.01$

5.4.3.3 Path Analysis Models

Path analysis was used to explore three stages of model specification. Model specifications are presented in Table 19. Model fit indices are presented in Table 20. Standardized parameter estimates for variables relating to mental health risk are presented in Table 21. **Stage 1.** Model 1A revealed non-significant paths from SPP and PS to depression risk. Model 1B revealed non-significant paths from SOPS, SOPC, and PS to anxiety risk. Model 1C revealed non-significant paths from SPP and SOPC to eating disorder risk. **Stage 2.** Model 2A exhibited acceptable fit according to most fit indices, with moderate positive relationships between SOPC and PC variables and depression risk. SOPS exhibited a moderate negative relationship with depression risk. Model 2B had good fit according to all fit indices, with SPP having a low positive relationship and PC having a moderate positive relationship with anxiety risk. Model 2C had acceptable fit according to all indices, with moderate positive relationships between PS and risk and PC and risk of eating disorder. SOPS had a moderate negative relationship with eating disorder risk. **Stage 3.** Relationships between study variables and demographic variables as suggested by the preliminary analyses were now specified in the models. Model 3A model had acceptable-poor fit according to fit indices, with standardized parameter estimates indicating that SES had a small negative relationship to depression risk but no significant relationship with PC. Model 3B had good fit with standardized parameter estimates suggest gender also plays a role in the model, with girls being more at risk of anxiety than boys ($B = .183, p < 0.001$). Model 3C had acceptable fit with standardized parameter estimates suggesting a role for gender, with girls being more at risk of eating disorders than boys ($B = .127, p < 0.05$).

Table 19. *Model specifications for path analysis.*

Name	Specifications
Model 1A	Depression risk regressed on all perfectionism factors.
Model 1B	Anxiety risk regressed on all perfectionism factors.
Model 1C	Eating disorder risk regressed on all perfectionism factors.
Model 2A	Depression risk regressed on SOPS, SOPC, and PC.
Model 2B	Anxiety risk regressed on SPP and PC.
Model 2C	Eating disorder risk regressed on SOPS, PS, and PC.
Model 3A	Model 2A. Plus: depression risk regressed on SES; and PC regressed on gender.
Model 3B	Model 2B. Plus: anxiety risk regressed on gender; and PC regressed on gender.
Model 3C	Model 2C. Plus eating disorder risk regressed on gender, PC regressed on gender; and PC regressed on SES.

Table 20. *Fit indices for path analysis models.*

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
2A	351.689	158	2.226	.922	.907	.053	.057
2B	211.630	110	1.924	.964	.956	.045	.045
2C	980.859	543	1.806	.930	.910	.044	.051
3A	423.805	196	2.162	.901	.884	.055	.061
3B	241.842	125	1.935	.960	.951	.046	.046
3C	1057.059	616	1.716	.925	.905	.044	.054

5.4.3.4 Contribution of Perfectionism Factors to Depression, Anxiety, and Eating Disorders

Models 3A, 3B, and 3C were selected as the final models showing the contributions of perfectionism factors to each mental health disorder. Standardised parameter estimates for these models are presented in Table 21. Model 3A (see Figure 4) showed that SOPC and PC both moderately and positively contributed to depression, with SES also having a small positive contribution to depression. SOPS had a moderate, negative contribution to depression. Model 3B (see Figure 5) showed that SPP had a small-moderate positive contribution and PC had a moderate positive contribution to anxiety. Gender had a small positive contribution to anxiety, with girls being more at risk than boys. Model 3C (see Figure 6) showed PC and PS to have moderate, positive contributions to eating disorders. SOPs had a small-moderate negative contribution to eating disorders. Gender had a small, positive contribution to eating disorders, with girls being more at risk than boys.

Table 21. Standardized parameter estimates for model variables relating to mental health risk by model.

Model	SOPS	SOPC	SPP	PS	PC	Gender	SES
2A	-.575***	.504**	-	-	.440***	-	-
2B	-	-	.174**	-	.578***	-	-
2C	-.300**	-	-	.346**	.479***	-	-
3A	-.518***	.472**	-	-	.415***	-	-.125*
3B	-	-	.201**	-	.523***	.183***	-
3C	-.251**	-	-	.327**	.447***	.127*	-

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Figure 4. Model 3A – Relationship between SOPS, SOPC, PC, Gender, and SES and Depression in Adolescents

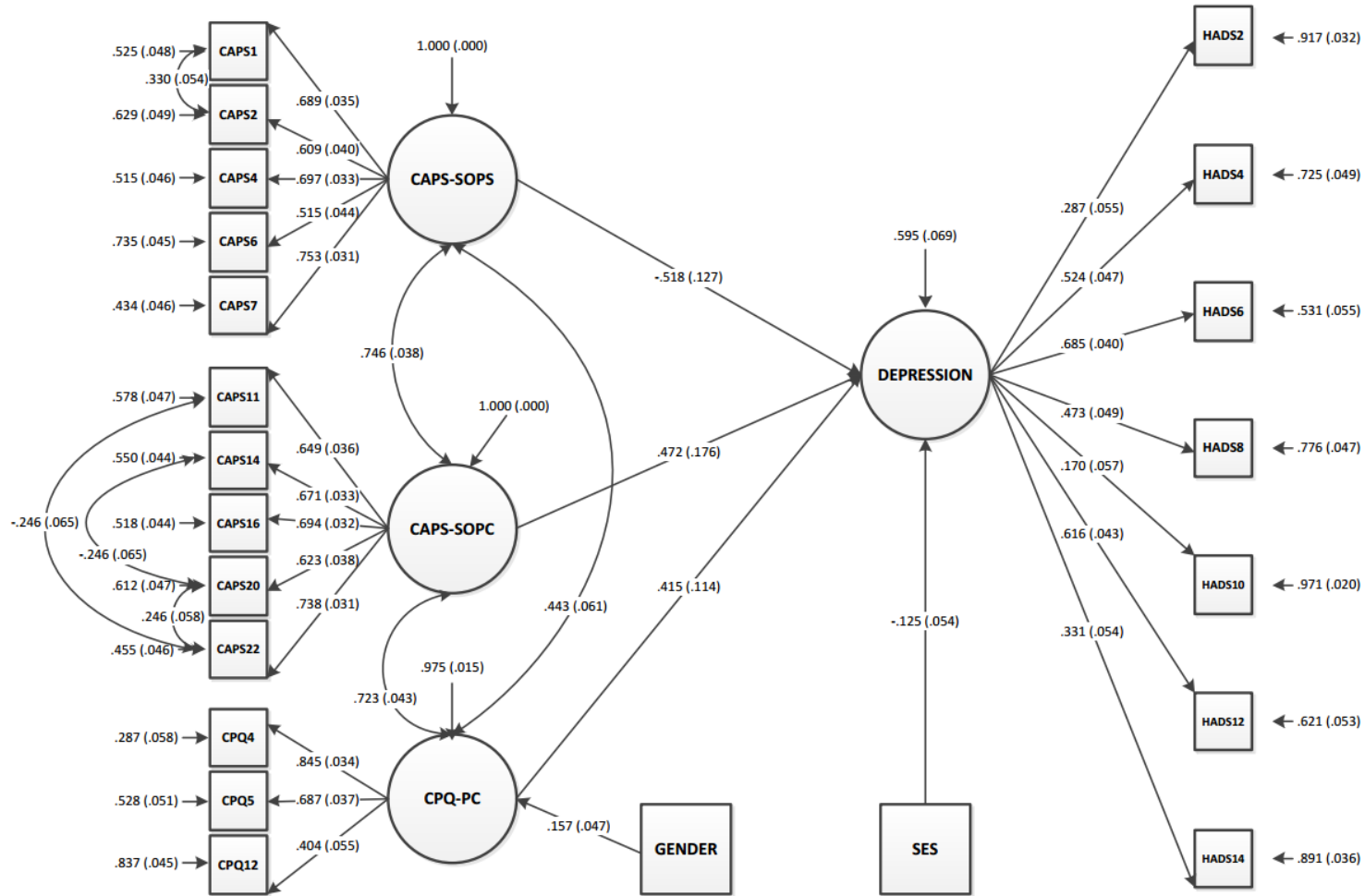


Figure 5. Model 3B – Relationship between SPP, PC, and Anxiety in Adolescents

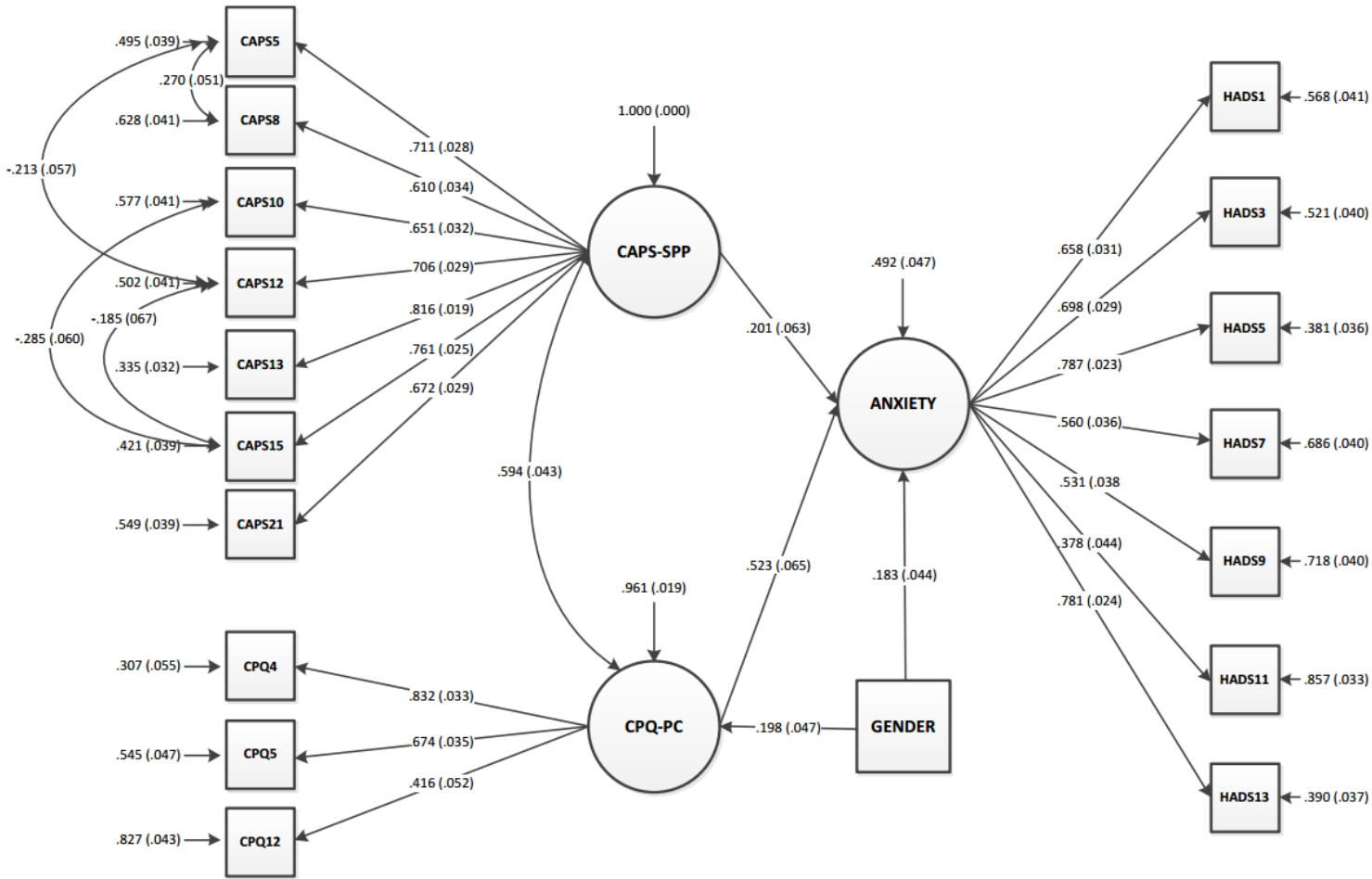
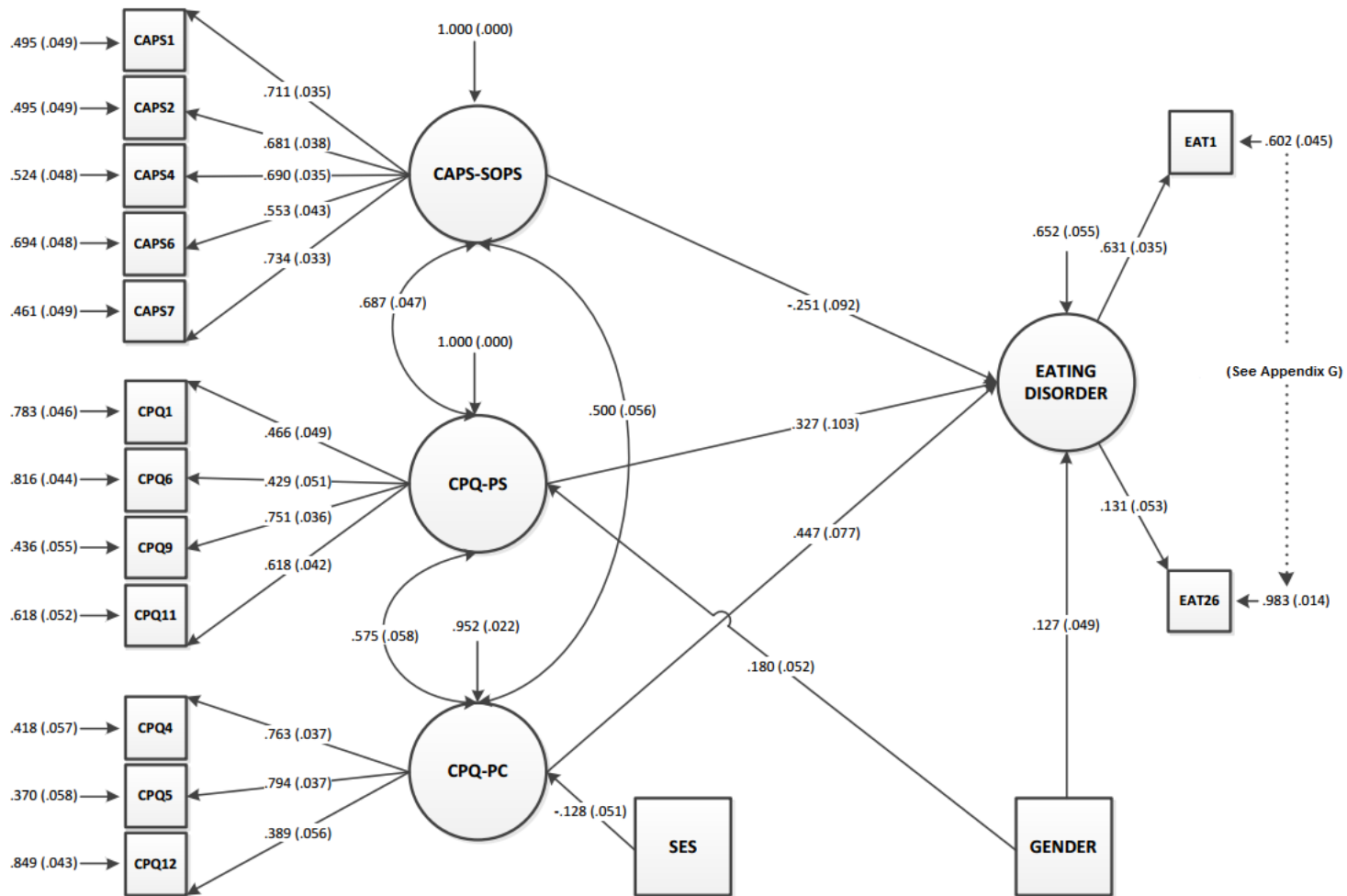


Figure 6. Model 3C – Relationship between SOPS, PS, PC, and Eating Disorders in Adolescents



5.5 Discussion

This study explored the factor structure of measures of perfectionism and clinical perfectionism in the general adolescent population. The relationships between perfectionism and three mental health conditions – depression, anxiety, and eating disorders – was then explored.

5.5.1 Factor Structure of CAPS

The CAPS was identified as having a 3-factor solution, comprising SOPS, SOPC, and SPP. The identified 3-factor model incorporates 17 of the original 22 CAPS items. The CPQ was found to have a 2-factor solution, representing perfectionistic strivings and perfectionistic concerns, following reduction to a 7-item scale. The identification of a 3-factor model of the CAPS is in line with what has been found in other similarly robust statistical assessments of this measure (McCreary et al., 2004; O'Connor et al., 2009)), with SOPS, SOPC, and SPP being reflected by the factors. Similar to both of the other 3-factor models, the originally proposed SOP factor split into two distinct yet related factors of SOPS and SOPC. This is in contrast with the Flett et al. (2016) view of SOP as unidimensional. The current study managed to retain 17 of the original 22 CAPS items, more than had been retained in either of the previous 3-factor models. The only item retained in the current study that had not previously been retained by either McCreary et al. (2004) or O'Connor et al. (2009) was item 16 (“*When I do something, it has to be perfect*”). While an EFA of the CAPS in the current data set did find this item to load moderately onto both SOPS and SOPC (perhaps a justification for its removal from other factor models), it loaded higher on SOPC. This result led to item 16 being assigned to SOPC for the CFA. The results of the CFA found item 16 did load significantly onto SOPC with a substantial amount of the item variance being explained by this model.

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On the face of it, SOP may appear unidimensional in that it is said to capture perfectionism originating from the self rather than pressure from others, yet examination of the content of CAPS-SOP items does seem to reveal a different picture. Some items, captured by CAPS-SOPS, reflect a reasonable desire to perform and achieve in a high manner, while others, captured by CAPS-SOPC, seem to describe self-directed criticism and concern for imperfect behaviour. This latter category of item encapsulates negative responses to mistake making and an overemphasis on the individual's desire to be perfect. It differs from SOPS in that the items reflect an excessive need to be perfect rather than a desire to merely strive towards perfection. As has been evidenced in this and previous research (McCreary et al., 2004; O'Connor et al., 2009), robust factor analyses of the CAPS reveal that these items are indeed better represented as fitting two related yet distinct factors. In response to Flett et al. (2016), this study suggests that the name for SOPC does seem justified as the items that loaded onto this factor in the current study all reflect self-critical responses to less than perfect behaviour. It might be that the SOP subscale of this measure is more sensitive to higher order perfectionism dimensions than the authors anticipated, resulting in the SOPS and SOPC factors identified in this study. Alternatively, it might represent an interesting conceptual finding about SOPS in early to mid-adolescence. The finding could suggest that the internal drive for perfectionism and self-criticism for imperfection are distinct entities during this developmental period, a point which future research should consider.

5.5.2 Factor Structure of CPQ

This study represents the first factor analysis of the CPQ in an adolescent population. Similar to current consensus in adult literature, the CPQ was found to represent two factors reflecting perfectionistic strivings and perfectionistic concerns but in this adolescent sample, four items were removed to obtain acceptable fit. Item 2 (*Over the*

past month, have you tended to focus on what you have achieved, rather than on what you have not achieved?"), item 3 (*"Over the past month, have you been told that your standards are too high?"*) and item 8 (*"Over the past month, have you done just enough to get by?"*) failed to meet the criteria regarding minimum loading for either factor. Items 2 and 8 are reverse scored, which may have led to their loading issues in the factor analysis (Netemeyer, Bearden, & Sharma, 2003). Consideration of the wording of each CPQ item may explain why item 3 may have failed to load sufficiently in this study. Compared to the rest of the CPQ items, item 3 does not simply question the participants' own experience of their perfectionism but instead asks them to identify whether others have commented on their perfectionism. The only similarly convoluted item in the CPQ is item 10 (*"Over the past month, do you think that other people would have thought of you as a "perfectionist"?"*). These items rely on participants being able to interpret other people's thoughts about them, rather than participants' own reports of their perfectionistic tendencies. Such perspective taking develops during adolescence in line with cognitive development (Van der Graaff et al., 2014) and so younger adolescents may struggle with this item. Unfortunately, item 10 data was not viable for inclusion in this study and remains to be explored in adolescent populations. Both items 3 and 10 could be influenced by the developmental issue of increased levels of self-consciousness in adolescents compared to adults (Coleman, 2011; Elkind, 1967), which could lead the adolescent to being more sensitive to others' perceptions of them and responding differently to these two items than to the rest of the non-interpersonal items of the CPQ.

5.5.3 Reverse Scored Items in CAPS and CPQ

In both the CAPS and CPQ, all reverse scored items had to be removed due to insufficient or complex cross-loading on factors. This is in contradiction to the suggestion that reverse scored items are necessary for the assessment of perfectionism in young people

(Flett et al., 2016). While the use of reverse scored items may appear useful for monitoring participants' engagement with the scale, it has been noted that reverse scored items often produce unexpected factor loadings (Netemeyer et al., 2003). Further, the development of reverse scored items can lead to miscomprehension (Swain, Weathers, & Niedrich, 2008). Such items may be overly complex or may misrepresent negation of the factor. To reduce the risk of misinterpretation by adolescents, it may be necessary for the CAPS and CPQ to remove reverse scored items, forgoing any small benefit for the improved structural integrity of the scales through the creation of a more developmentally sensitive measure of clinical perfectionism in adolescents. Reverse scoring in such a small scale may indeed be unnecessary (Bagozzi & Baumgartner, 1994; Green & Vithala, 1970) and worth reconsidering for the factorial integrity of the CPQ in adolescent populations.

5.5.4 Models of Perfectionism and Mental Health

Analyses of relationships between perfectionism and clinical perfectionism and self-report measures of depression, anxiety, and eating disorders revealed the complex nature of these constructs for adolescent psychopathology. Through sequential refinement of models, three clear models were identified that revealed significant contributions of different perfectionism factors to each mental health disorder in this general adolescent sample. The impact of demographic variables such as gender and socioeconomic status (SES) were included in the analysis, revealing the ways in which these variables can significantly contribute to the model of perfectionism and mental health problem.

Despite a significant correlation between SPP and depression revealed through preliminary analysis, subsequent path analysis did not find a significant role for SPP in depression risk for adolescents. This is in contrast to previous research that has linked

SPP to adolescent depression (Hewitt et al., 2002; Huggins et al., 2008; Soenens et al., 2008; Soreni et al., 2014). The current study suggests that when evaluated within a developmental framework incorporating covariance between perfectionism and clinical perfectionism factors, SPP does not significantly contribute to depression in this sample, as was previously suggested. This highlights the strength of using more complex modelling techniques to fully understand a framework of perfectionism factors rather than studying them as unrelated entities. SOPC was found to significantly contribute to self-reports of depression in this study. This finding is in line with previous literature finding significant correlations between SOPC and depressive scores in adolescents (McCreary et al., 2004). Conversely, SOPS was negatively related to depression, perhaps indicating a protective element of SOPS, with those who exhibit higher SOPS being at less risk of developing depression. This would be in line with suggestions of striving being linked to greater subjective well-being and psychological adjustment (Stoeber et al., 2016). The finding from this model of SOPS and SOPC contributing in opposite manners to depression in adolescents is particularly interesting. Findings in previous literature have been inconsistent regarding the role of SOP in adolescent depression (Affrunti & Woodruff-Borden, 2014) hindering a clear understanding of this construct's relationship to this disorder. Notably, most of the research considers SOP to be a unidimensional construct, which may have weakened the research. By adopting a multidimensional view in the current study, opposing roles of SOPS and SOPC have been revealed. This divergent view of SOP is in contrast with the argument put forward by Flett et al. (2016). CPQ-PC was also found to significantly contribute to self-reports of depression in this study. Literature employing the CPQ is sparse and while CPQ-PC has not been specifically linked to depression in other literature, it has been found to significantly correlate with negative affect, a symptom of depression, in adults (Egan et al., 2011). Thus, this finding makes an original contribution to the literature. SES of adolescents appeared to have a

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low negative relationship with depression in this model, indicating that those with lower SES were more at risk of depression. This is in line with current findings in research of an inverse relationship between SES and adolescent depression (McLaughlin, Costello, Leblanc, Sampson, & Kessler, 2012; Reiss, 2013).

Despite theoretical arguments for the role of perfectionism in anxiety (Flett, Coulter, Hewitt, & Nepon, 2011), comparatively less concrete evidence exists regarding the relationship between perfectionism and anxiety in adolescents. SPP was found to have a small, positive relationship with anxiety. Research examining SPP and anxiety in adolescents is lacking but current finding is generally in agreement with the literature (Essau et al., 2008; Hewitt et al., 2002). CPQ-PC was found to be moderately related to anxiety in the current study. No literature has yet explored PC through use of the CPQ in studies of anxiety, however, with its emphasis on self-criticism and worry, the role of this factor appears theoretically justified. Previous work has suggested a role for SOP in adolescent anxiety, however, the influence may be activated or moderated by stress (Essau et al., 2008; Hewitt et al., 2002). Neither SOPS or SOPC, the two factors of SOP, were found to significantly relate to the measure of anxiety in path analysis in the current study. This is in contrast with previous literature finding SOPC was correlated with anxiety symptoms in adolescents (McCreary et al., 2004). While the current study and that of McCreary et al (2004) were similar in their use of a multidimensional model of SOP, the two study samples were culturally different. McCreary et al (2004) explored this relationship in a sample of African-Americans while the current sample was predominantly white Scottish. The cultural differences between these two groups may have resulted in the contrasting findings regarding the relationship between SOPC and anxiety. The model also found girls to be significantly more likely to be anxious than boys. This finding is in line with current literature regarding gender differences in adolescent anxiety (Bender, Reinholdt-Dunne, Esbjørn, & Pons, 2012).

Previous research has found SOP to be elevated in female adolescents seeking treatment for an eating disorder (Kirsh et al., 2007) and those at risk of developing one (McVey et al., 2002) but such research employed a unidimensional model of SOP. In contrast, using the identified 3-factor CAPS model, the current study found SOPS to be negatively related to eating disorder risk in adolescents and found no significant role of SOPC. Instead, both factors of the CPQ, perfectionistic strivings and perfectionistic concerns, exhibited positive relationships with self-reports of eating disorder in this study. While SOPS and CPQ-PS may share the mechanism of striving, CPQ-PS taps into a manner of perfectionistic strivings that is more dysfunctional and therefore more related to clinical distress (Egan et al., 2016). The final model presented in this study demonstrates an interesting distinction between clinical and non-clinical perfectionism in relation to eating disorders, despite an association between the latent variables. Clinical perfectionism is purported to hold more salient meaning for clinical populations and indeed was developed through extension of a cognitive-behavioural perspective of eating disorders (Shafran et al., 2002). It is a unique measure of perfectionism in that it is described as inherently more pathological and representative of an unhealthy disposition than multidimensional perfectionism (Shafran et al., 2003). The findings in this current study support this argument. The models in this study also found girls to be at greater risk of eating disorders than boys. This finding is in line with current research reporting higher eating disorder symptoms in adolescent girls compared to adolescent boys (Forsen Mantilla, Bergsten, & Birgegard, 2014; Micali, Ploubidis, De Stavola, Simonoff, & Treasure, 2014).

Following model refinement, only one factor of perfectionism, CPQ-PC, appeared in models for all three mental health conditions. The complex modelling analyses showed this measure of perfectionistic concerns to have a moderate positive contribution to depression, anxiety, and eating disorders in this general adolescent population. The

authors of the CPQ originally indicated that this measure had most relevance for clinical populations and the current study has now shown it to hold significance for three distinct mental health conditions in adolescents. This is a particularly important finding for the development of universal prevention programmes aimed at reducing unhealthy perfectionism in adolescents, such as those reported by Nehmy and Wade (2015) and Wilksch et al. (2008). In light of this finding, these programmes should aim to target CPQ-PC perfectionism to reduce broad risk of adolescents developing these three mental health conditions.

5.5.5 Limitations

A limitation of this study is its homogeneity of culture. The sample consisted of state school educated, predominantly Caucasian adolescents, two-thirds of whom had high socio-economic status. Cultural comparisons in the field of perfectionism are limited but the emerging evidence does appear to suggest culturally related differences in perfectionism and so the fit of the current model should be validated in alternative cultures. That being said, the structure is similar to that of McCreary et al. (2004), a study employing an African American sample, suggesting this factor structure may hold cross-culturally.

A further limitation that has already been noted is the non-viability of CPQ item 10 data in this study, meaning a factor analysis of the full 12-item scale remains to be conducted. It could be argued, however, that questioning the participant's identity as a "*perfectionist*" may undermine the conceptual basis of the CPQ. "*Perfectionist*" is not an uncommon term to hear in everyday conversation and individuals may place a meaning on this word, which differs from the conceptualisation held by the authors of the CPQ. Therefore, a response to item 10 may reflect the participant's identification with the term "*perfectionist*" as *they* understand it, not as the author understands it. While a definition

of perfectionism is provided at the beginning of the scale, there is no guarantee that the participant correctly internalised this meaning or considered it by the time they reached the tenth item, meaning item 10 may not tap into the same construct that the rest of the scale is attempting to. While this concern was not explored in the current study, it does pose interesting questions for future research – do adolescents' (or even adults') own understanding of perfectionism match that held by the perfectionism field? Additionally, should self-report scales use language that directly reflects the name of the construct of interest or should they aim to tap into the construct through other language?

5.5.6 Suggestions for Future Research

In combination with previous research, this study provides strong evidence of a 3-factor model of the CAPS, with SOP being better represented as two factors, SOPS and SOPC. Thus far, this finding has only been robustly evaluated in early to mid-adolescent populations. Future research should explore at what point SOPS and SOPC combine to become the unidimensional SOP seen in adult populations. Emerging adulthood may represent an ideal time to explore the potential amalgamation of these two factors into SOP, the orientation stipulated in adult perfectionism research.

The CPQ is designed to measure clinical perfectionism, a pathological construct with potentially greater relevance for clinical research. The current study sample is representative of the general adolescent population. The CPQ, therefore, has not yet been robustly examined in the clinical adolescent population. Previous research examining the CPQ properties in general and clinical populations found that the CPQ was able to distinguish between eating disorder and control groups (Egan et al., 2016). Future research could use the 2-factor reduced model of the CPQ identified in the current study to explore this same effect in adolescent clinical populations.

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From the analyses in this study, SOPS was identified as having a moderate inverse relationship with both depression and eating disorders in adolescence. SOPS and SOPC appear to play unique roles in adolescent mental health and so future research must not conflate the two by using a unidimensional measure of SOP in studies of adolescent mental health. Additionally, CPQ-PC was identified as being the only factor that positively related to all three mental health conditions. These findings need to be incorporated into future research, with these distinct adolescent-appropriate factor models of perfectionism being adopted rather than adult-derived factor models (e.g. 2-factor CAPS model). The transdiagnostic risk presented by CPQ-PC is particularly relevant for universal preventative programmes, as is the potential protective element of SOPS for mental health problems. To maximise their efficacy and reduce broad risk of mental health problems, these programmes for adolescents should refer to the findings of this study in their design.

5.6 Conclusions

In spite of arguments put forward regarding a 2-factor structure for the CAPS (Flett et al., 2016), the current study supports other findings in the literature, providing further robust evidence for a 3-factor structure of the CAPS. This 3-factor model suggests that SOP is expressed differently in adolescents compared to adults. Additionally, it provides evidence of this structure in 12-16 year olds, bridging the age gap between the two previous factor studies. Consequently, a body of evidence now exists for a 3-factor structure of the CAPS from 11 through to 16 years of age.

For the first time, evidence for a developmentally informed factor structure of the CPQ in adolescents has been identified. The CPQ was found to have a 2-factor solution comprising 7-items, reflecting perfectionistic strivings and perfectionistic concerns. Several items required to be removed for the CPQ to have acceptable fit with an

adolescent data set. To address this issue, it may be necessary for an adolescent-specific measure of clinical perfectionism to be designed, incorporating developmentally sensitive items. Further, this could involve the removal of complex items that may be at risk of misinterpretation by adolescent or that may be biased by adolescents' increased self-consciousness in comparison to adults.

Inclusion of all CAPS and CPQ factors in the analysis of risk for three different mental health disorders within the same sample is an added strength of this study. While the different factors of perfectionism appear to contribute different amounts to these mental health conditions, perfectionistic concerns, as measured by the CPQ, appears transdiagnostic, moderately contributing to depression, anxiety, *and* eating disorders in adolescents. Increased SOPS appears to relate to decreased risk of depression and eating disorders in adolescents and so may represent a protective perfectionism factor in the context of adolescent mental health.

Chapter 5: Clinician Perspectives on Perfectionism in Adolescent Clinical Populations

5.1 Introduction

So far, this thesis has studied adolescent perfectionism in line with previously defined conceptualisations of perfectionism. Chapter 4 revealed the multiple facets of multidimensional and clinical perfectionism to have varied roles in adolescent mental health disorders. A subscale of the Clinical Perfectionism Questionnaire (CPQ) (Shafran et al., 2002) appeared to have a transdiagnostic role in adolescent mental health. Unfortunately, several issues with the suitability of the CPQ for use with adolescent participants were raised and it was questioned whether this or the more commonly used Child-Adolescent Perfectionism Scale (CAPS) (Flett et al., 2016; Flett et al., 2000) were adequately capturing the complete construct of adolescent perfectionism. In the current chapter, a qualitative approach is taken to determine how clinicians working with adolescent perfectionists perceive this construct.

Clinical settings offer a wealth of opportunity for theoretical development, particularly in the context of patient groups often characterised by high levels of perfectionism, such as eating disorder populations (Fairburn, Cooper, & Shafran, 2003; Garner et al., 1982; Garner et al., 1983; Shafran et al., 2002). Clinician perspectives of perfectionism in such populations are highly valuable in informing us of currently held conceptualisations of perfectionism in the therapeutic setting and how perfectionism presents in practice.

Furthermore, an assessment of these perspectives may provide a framework for future assessment of perfectionism in the therapeutic setting by highlighting clinical assumptions and methods of treatment for perfectionistic young people.

5.2 Research Objectives

The study reported in this chapter constituted a preparatory step in a more extensive study of perfectionism in adolescent clinical populations. In this study, clinicians based within a Child and Adolescent Mental Health Service (CAMHS) in Scotland participated in a discussion about their clinical perspectives of perfectionism. The study served three purposes: first to orientate myself to the clinical environment, secondly to identify perceptions of perfectionism currently held by clinicians, and thirdly to assess if and how these clinicians addressed perfectionism in adolescent therapeutic settings.

5.3 Method

5.3.1 Design

CAMHS clinicians operate within interdisciplinary teams, with colleagues from a range of professional backgrounds working together to provide multifaceted health care for children and young people. In practice, this allows formulation and treatment approaches to be agreed upon by consensus. With the intention of mirroring this clinical setting, this study employed focus group methodology (Merton, Fiske, & Kendall, 1956; Merton & Kendall, 1946). Focus groups provide an opportunity to capture group-interactions that may be missed by other methodologies, such as, individual interviews or questionnaires. The method potentially provides a richer data set, further insight into the topic, and higher ecological validity than other approaches (Morgan, 2013; Willig, 2013). In line with the methodology, a group of colleagues were invited to participate in

a discussion of their professional experience of perfectionism in adolescent clinical settings (Powell & Single, 1996)

5.3.2 Epistemological Position

As a new employee of CAMHS, I acknowledged my relative naivety to practices and opinions in the service. As one of the aims of this study was to help orientate me to the clinical environment, I adopted a social constructionist position. Social constructionism encourages a critical stance towards taken-for-granted information. The social constructionist acknowledges that information is dependent on subjective realities and that researchers and participants construct realities and definitions through the interactions in the study (Burr, 2015). This approach was particularly suitable for this study as it encouraged me to be aware of my own biases and influences on the data and to tentatively approach the data in the knowledge of its subjective validity. This also helped encouraged me not to enforce preconceived notions of the topics of interest that may have developed at previous stages of my doctoral studies on the data during the collection and analysis stages.

5.3.3 Participants

CAMHS clinicians based within NHS Lothian were invited to participate in a discursive meeting based around topics of adolescent perfectionism. Five clinicians opted to participate but one was excluded due to prior experience in perfectionism research with the research supervisors. The final sample consisted of four participants with extensive experience working within CAMHS, particularly with adolescent eating disorder patients. The participants came from different professional backgrounds – clinical psychology, community psychiatric nursing, occupational therapy, and dietetics – representing differing epistemological standpoints in relation to the care of clinical populations. Individuals who engaged with this research were invited to attend a

subsequent, free of charge, Continuing Professional Development (CPD) course about perfectionism.

5.3.4 Structure and Discussion Points

The group was asked to engage in a discussion about their perspectives of perfectionism in their work with adolescent eating disorder patients. The following discussion schedule was used to help structure the focus group and to address the key points of interest.

Conceptualisation:

- What meaning do you give to the terms “perfectionism” and “perfectionist”?
- What would lead you to describe a patient as a perfectionist?

Terminology:

- In what way do young people tend to describe what we may call “perfectionistic tendencies”?
- If at all, how do you discuss perfectionism with young people?

Presentation in Adolescent Eating Disorder Population:

- How do you perceive perfectionism presenting in young people with eating disorders?
- Do you feel perfectionism in young people with eating disorders differs from other patient groups you have worked with?

Therapy:

- Do you observe perfectionism playing a role within the therapeutic process? – If so, how?
- Do you directly address perfectionism during therapy? – If so, how?

The group was encouraged to freely discuss any issues they felt would best explain their experiences of perfectionism within this population and their therapeutic work with these individuals, and to use the above discussion points for structure.

5.3.5 Recording

A digital voice recorder (Olympus WS-811) was used to record the discussion. The recording was then transcribed to create a written record of the discussion. An independent note-taker was also present to record qualitative or non-verbal aspects of the discussion.

5.3.6 Ethics

Ethical approval for this study was granted by the Department of Clinical and Health Psychology Ethics Research Panel, University of Edinburgh (see Appendix H). Informed written consent (see Appendix I) was obtained from all participants prior to study commencement. The recording and transcription of the study were stored securely in password protected electronic files. Participants were instructed to respect the confidentiality of their patients by ensuring no patient-identifiable information was discussed during the course of the study. As an additional security measure, any patient-identifiable information would have been altered in the transcription of the discussion. This was not necessary in the current study as no such information was discussed.

5.3.7 Procedure

The focus group was conducted at CAMHS, Royal Edinburgh Hospital. Participants were encouraged to openly discuss their experiences and perceptions of perfectionism within their work with adolescents who were seeking treatment for clinical distress at CAMHS, making use of the discussion points. I moderated this discussion, ensuring the

participants stayed on topic. The focus group lasted approximately 40 minutes and was recorded through audio recording and note taking.

5.3.8 Analysis

An inductive thematic analysis (Braun & Clarke, 2006) of the data was performed using NVivo 10 software (NVivo, 2012). The transcript was initially coded line-by-line for themes. These themes then underwent a second stage of coding during which analogous themes were collapsed into one another. A third stage of coding grouped themes into hierarchical relationships. Throughout the analysis process, emerging themes and relationships were compared against theoretical concepts discussed in existing perfectionism literature. Discussions with my supervisors also aided the crystallization process in this study. In vivo coding was used to ensure the themes reflected the language introduced by the participants. The results of this analysis are outlined in this section.

5.4 Results

5.4.1 Focus Group Dynamic

The group appeared comfortable in each other's company and open to engaging in a loosely structured discussion. The participants in this study were all familiar with perfectionism terminology and were comfortable sharing their own perceptions of this concept and how it presents in the population of interest within the group discussion. Consensus was often reached amongst the participants on perceptions and experiences of perfectionism, however, one participant did explain that she had a more limited understanding of perfectionism due to the differing nature of her job as a dietitian. While the other three participants were able to provide plentiful examples of their interactions with young people, this fourth participant explained that her perceptions were limited

to dietary elements of eating disorders and lacked the interpersonal perspectives gained by the other participants through their therapeutic work. Regardless, all participants were able to contribute to the conversation, often exhibiting interdisciplinary work through their shared involvement with individual young people. While the data of this study does reflect the language and definitions provided by the group, it is worth noting that the language often appears to reflect psychological terminology. This could be due to the dominant voice of one participant, a clinical psychologist with strong research engagement, introducing psychological language that was subsequently adopted by the other participants.

5.4.2 Identified Themes

This section outlines the themes that were identified from the data following thematic analysis. Terminology used is reflective of that introduced by the participants and was not imposed by myself. Of note, these themes are descriptive in nature, arising directly from the data, and not intended to represent a profound theoretical analysis of the topic.

5.4.2.1 Types of Perfectionists

The focus group described two types of adolescent perfectionists, those that manage to be healthy and those that lack awareness of how perfectionism may impact on their life and end up needing clinical support. The first type was described by Participant 3 as such:

"...if your perfectionism isn't causing any difficulty in your functioning and actually you are achieving and being successful then that's fine. That's when you can be perfectionist."

The participants explained that it is the other type of perfectionist that they encounter in their clinical work, those young people whose perfectionism related to and affected their psychological health problems. Participant 3 explained:

"...folks we see, often their perfectionism is impacting on their functioning and their health".

This type of adolescent was described as representing *"...the more extreme end..."* (Participant 1) of perfectionism and as being in need of gaining awareness of and control over their perfectionism.

5.4.2.2 Features of Clinical Adolescent Perfectionism

The focus group participants identified a number of key features of perfectionism which they see through their clinical work with adolescents with eating disorders. These are outlined below.

Behaviour is Goal/Target Driven

One of the most frequently used descriptors for perfectionism was that of the individual who sets and is driven by targets or goals. They were described as being discontent with failure to reach a set target. Participant 1 described them as such:

"...somebody who sets themselves particularly kind of high targets and is not particularly happy unless they feel they complete those."

The adolescents' behaviour was described as strongly goal oriented. Further, they were perceived by the participants as craving these goals, with their behaviour being driven by the intense desire to reach an intended target. The individual was viewed as having great difficulty in knowing how to behave when not being driven by a goal.

"...they really, really struggle in not having that goal or that thing to aim towards and that target." (Participant 1).

Some of these perfectionists were perceived as being unaware that their frequent target setting might be considered unusual. Participants explained that the adolescent will often set targets without consideration for the reality of whether they will be able to meet the target. This was suggested as possibly being due to setting targets which were

beyond their ability or because of a failure to consider additional factors which may impact on reaching the goal. An example of one young person doing this was given by Participant 2:

“So...she has her life drawn out for the next 10-15 years of studying...em...and that’s her motivation. Even though there’s no particular job at the end of it in terms of how she’s going to fund it.”

Excessive Standards and Expectations for Self

Adolescent perfectionists were described as holding not just high but *excessively* high standards and expectations for themselves which the participants often viewed as being unrealistic. Participants explained that these standards exceeded clinicians’ expectations of what should realistically be achievable by the adolescent.

“... sometimes it’s just over and beyond what you’d expect somebody, a young person, to give their attention and time to...” (Participant 4).

Participants stated their view that the young person’s expectations of what they can do often left little room for less than perfect behaviour. They explained that less than 100% success in reaching targets was not considered good enough by the young person even though other individuals may be satisfied with this less than 100% performance.

Participant 3 explains:

“You see young people sort of who even 95-98% is not good enough, it’s got to be absolutely just right.”

These excessively high standards and expectations are viewed by the participants as coming from the adolescents themselves rather than an external source or another person.

Dichotomous Perspectives and Behaviours

Perfectionism in this population was described by the participants as resulting in very dichotomous perspectives and behaviours. With regards to dichotomous *perspectives*, the participants perceived the adolescent perfectionists as believing that they must achieve all they intend to, or else, they have achieved nothing. This feature was described repeatedly in the focus group as “all-or-nothing” thoughts. Participants expressed their view that these adolescents view anything other than complete success in achieving their goals or reaching their standards as failure. They said these adolescents cannot perceive less than perfect behaviour (e.g. 95% success) as having any value; it is a failure because they did not reach their intended goal. They were perceived by the participants as becoming consumed by a small lack of success (the 5%) rather than acknowledging the significant successful achievement (the 95%). The participants explained they felt this reveals an inability in these adolescents to perceive very good (but not perfect) behaviour as being of any value.

The participants explained their view that dichotomous perspectives lead onto the phenomenon of dichotomous behaviour. The all-or-nothing thinking style was described as potentially having a self-destructive result; if the adolescent believes they will not completely succeed in reaching an intended goal, standard, or expectation, the adolescent perfectionist may choose instead to purposely fail.

“There’s so many people I’m working with they’ve kind of, it’s been so all-or-nothing that they’ve chosen the “nothing” route...” (Participant 3).

The act of purposely failing was perceived by participants as being a more tolerable option for the adolescent than risking the potential for missing a success by a little. The adolescent perfectionist was described as being unable to tolerate experiencing the so called grey-area of performance (anywhere between complete success and complete failure) and was seen by participants to choose one of what they perceive to be only two

possible options for their behaviour. A common example of this behaviour in adolescent perfectionists was provided by Participant 3:

"I've had a young person who was like that but because she couldn't achieve it she wouldn't try, so it was really, sort of, all-or-nothing...umm...so she left school."

Precision

Another key feature described in the focus group was that of precision, accuracy, and detail. Participants described these young people as exhibiting very precise behaviours. Furthermore, they were described as requiring or even craving precision, accuracy and a great amount of detail from the environment and people around them. The level of precision and attention to detail exhibited by these adolescents was viewed as atypical by the participants and described as beyond a level which could be expected. Participant 4 described her observation of this element of perfectionism in the young person's completion of an eating diary:

"...it's kept so...so accurately and so perfectly...em...and uniform on every page in a kind of...I want the detail but sometimes it's just over and beyond what you'd expect somebody – a young person – to give their attention and time to and recording what they've had to eat and drink."
(Participant 4).

In the context of an eating disorder, this desire for detail was described as being noticeable in the adolescent's detailed knowledge of food calorific content. Even when attempting to develop healthier eating behaviours, the participants explained they saw these young people continuing to behave in very precise ways.

"I think there are young people who would like to weigh everything out to get it absolutely right and they're the young people who often would become much more...em...involved with...you know an eating plan and getting it...keeping to the letter of the eating plan..." (Participant 4).

High Levels of Productivity/Drive

Adolescent perfectionists were described as having very high levels of productivity and a disdain for being less productive. Participants expressed their view that the adolescents' constant drive to be productive meant that these individuals rarely relaxed and were in a perpetual state of productivity.

"...the young people who, like, can't relax, can't have any downtime, they've got...constantly got to be productive and got to be trying to achieve something..." (Participant 1).

Participants explained that even once the individual gained insight into how dysfunctional this level of productivity was, they still appeared incapable of not being productive. As Participant 3 explained:

"... often they have insight into that, that that's a kind of unrealistic expectation, but it's like "I can't help myself. I still...I know rationally that's...I'm putting loads of pressure on myself to get...to...to...to achieve that, but...umm..." – you know – "...but I still have to". It's kind of like a drive. "I've still got to do that"."

5.4.2.3 Construction of Perfectionism in Specific Areas of Life

Despite participants stating a view that perfectionism was a universal construct experienced across all areas of the young person's life, the thematic analysis seemed to reveal that specific features of perfectionism may be more intensely experienced in certain areas and less so in others. Three key areas of the young person's life were identified as exhibiting differing presentations of perfectionism.

Academia

Clinicians repeatedly described examples of adolescent perfectionism in academia as being about a desire to achieve set goals and excessively high expectations. This area was said by participants to be very important to perfectionistic adolescents because it is clearly characterised by specific goal driven activities (e.g. sitting examinations) in which

the adolescent can achieve success. Interestingly, it should be noted that this desire to achieve the excessively high standards was viewed by participants as relating to the specific goals (e.g. examination grade) while ignoring the wider implications of this behaviour (e.g. consequences of subsequent career path). A common example cited in the focus group was that of adolescents aiming to obtain a medical degree (specific goal) but failing to consider the more significant implications of a career in medicine (wider implication of behaviour).

Participant 2: *“Medicine is a very popular career choice, isn’t it? It’s very...all about the five As.”*

Participant 1: *“Actually, I don’t think half of them even know what a medic does on a day to day basis. It’s about the achievement.””*

Participant 2: *“Yeah, because it’s difficult to get in to and you have to achieve five ‘A’s in first sitting and...I have got one young person who wants to do it just so she’s achieved it. It’s not about being a medic, it’s just about saying she’s, she’s achieved her medical degree.””*

Self-Presentation

Self-presentation – an area identified through analysis as encompassing physical appearance and character, as well as environment of adolescents – was described as being influenced by the precision elements of perfectionism. For example, a discussion about appearance:

Participant 3: *“When I think back of the girls that I really think of as perfectionists, there’s something about the way they carry themselves as well. Quite sort of stiff and, kind of, precise, and kind of umm...”*

Participant 2: *“Polite.”*

Participant 3: *"- yeah, polite, yes."*

Participant 1: *"Everything's matching sometimes."*

Participant 2: *"Yeah, hair and make-up done perfectly."*

Reflections on inpatient bedrooms revealed a perceived preference for neatness and coordination, again highlighting the precision element of perfectionism:

"And just going back to what you were saying, inpatients that you'd see, their room is immaculate, everything would be...not in an OCD form, but like, just everything would be immaculate. Everything would either be completely pink or all matching, everything being in its place..."
(Participant 2).

Participants described written tasks completed during therapy as further highlighting adolescent perfectionism in terms of presentation; accuracy, coordination, neatness, and precision were all said to be emphasized in the written work of these young people.

Social

The participants described a tendency of their patients to socially isolate themselves. They explained that, in their view, this behaviour may reveal social success to be of lower importance to these adolescents.

Participant 1: *"It feels as though the social stuff's not high priority. It's more the achievement stuff isn't it? The school grades..."*

Participant 3: *"The social stuff often suffers because of -"*

Participant 2: *"Yeah because they don't generally do much."*

Participant 3: *"- the other areas of their life. "Got to spend all night studying". Say no to going out to parties or anything because it's not as important."*

A contradictory view from the group was that these young people were very concerned with social status and may even view perfectionism as being a part of their own identity. Participants stated that these adolescents were concerned about how others viewed them in relation to their perfectionism.

“...that identity as well. Being a perfectionist and people do expect me to be like this. So, if I wasn’t what would the people think?” (Participant 2).

5.4.2.4 Developmental Considerations

The participants touched on a couple of their perspectives on the development of perfectionism in their patient group. Some areas of discussion are outlined below.

Personality Trait

In reference to the adolescent perfectionist, clinicians described perfectionism as being *“...their sort of personality, their nature...”* (Participant 3). The participants described viewing perfectionism as a stable, fixed trait. They also expressed that because of this they did not think that perfectionism could be changed.

“I don’t think you change that, kind of, within them.” (Participant 3).

It should be noted that these opinions were explained as being fuelled by reports from adolescents’ parents that the perfectionism is of this form. The participants did concede therefore that they cannot be sure about the trait nature of adolescent perfectionism because they themselves did not know the adolescent prior to their clinical care.

“...it’s hard to know because we don’t know them pre-illness to what level of, kind of, perfectionist...” (Participant 2).

Internally Driven

The focus group described the perfectionism as being driven by internal forces as opposed to external forces.

"...it's their own internal, unrealistic kind of expectation they're driving..." (Participant 2).

Defence Mechanism

Another suggestion by the group was that perfectionism develops in a young person as a sort of defence mechanism, enabling them to avoid areas of life that they find intimidating. Participant 1 explained:

"...I think it's also a bit of a defence mechanism because it means that she can focus on other...doesn't have to focus on other elements of life which she feels more scared about."

Family Influence

Participants explicitly stated that they did not feel perfectionism developed as a consequence of the adolescent's relationship with their parents. Despite this, the focus group discussion did indicate a high level of perfectionism and high-achievement in the parents of these adolescents. Participant 2 described one adolescent's mother:

"We had a parent of a young person in the inpatient unit and she had to be the perfect mum. So, she had to be here every single minute of every single day, where there was visiting hours and even out with those because she had to be the perfect mum. And wouldn't tolerate us encouraging her to just take a couple of hours off, you know? Actually, this is about being a good enough parent. She couldn't tolerate it."

5.4.2.5 Impact of Perfectionism

Eating disorder

Perfectionism was seen by the participants as playing into various aspects of adolescents' experience of an eating disorder, including elements of dieting and weight management. This was seen by the participants to continue into the therapeutic experiences for these patients, such as interpretation of therapeutic tasks such as eating diaries and eating plans, for example:

“...they’re the young people who often would become much more...em...involved with...you know, an eating plan and getting it...keeping to the letter of the eating plan...” (Participant 4).

The participants described perfectionism as being characteristic of anorexia nervosa in adolescent patients but not necessarily of other eating disorders, such as bulimia nervosa. In fact, the group had difficulty in determining whether certain presentations were more representative of perfectionism or the eating disorder itself. They described the ED as having a detrimental effect on perfectionistic behaviours and stated a view that starvation during the experience of an ED causes an individual to become even more perfectionistic.

“It’s made worse by starvation isn’t it?” (Participant 1).

Emotion

Many negative emotional aspects were brought up in the discussion of adolescent perfectionism. Core emotions that were seen by the participants to be experienced by these individuals as a result of perfectionism were sadness, distress, frustration, and fear. No positive affect resulting from perfectionism was described by the participants. Further, the participants themselves discussed feeling mean for making the adolescent perfectionists engage in therapeutic activities that would lead to the above mentioned negative emotions due to their perfectionistic temperament. An example provided in the discussion was clinicians refusing to detail a precise amount of weight the young person must gain leading to the young person feeling distressed because of their inability to tolerate non-precise goals.

“...if you’re beginning to try to get them to cut down things like their activity levels and they find that very, very distressing. Or something as well in the work that you’re doing, if you are purposely vague, they can’t tolerate that. I know that sounds mean.” (Participant 1).

Time

Time was described as being both positively and negatively impacted by perfectionism. On the one hand, adolescent perfectionists were described as very efficient and often having a desire to act according to strict timelines, thus, from the participants' point of view, they can be particularly good patients through their good time keeping. On the other hand, their detail-oriented behaviours were described as very time-consuming which was said to act in opposition to their desire to manage a timeline well.

5.4.2.6 Therapeutically Addressing Clinical Adolescent Perfectionism

Perfectionism was described by participants as being both beneficial to therapy (patients completed therapeutic tasks well and in a timely fashion) and detrimental to therapy (patients struggled to tolerate tasks with vague instructions or boundaries). Beyond standard psychological approaches (e.g. systematic desensitisation, graded exposure, responsive prevention etc.) the participants outlined ways in which they attempt to specifically address perfectionism in therapy.

Raising the Adolescent's Awareness of their Perfectionism

As described by the participants, adolescent perfectionists seen in a clinical setting are young people in need of being more aware of their perfectionism and the ways in which it may affect their life and wellbeing. The participants unanimously agreed that their core motive in working with perfectionism therefore was to increase the adolescent's level of awareness surrounding this phenomenon. Participant 1 explained:

"I think what your main aim is to increase their awareness of it and how vulnerable it makes them and what the vulnerabilities are to be able to, to keep challenging them in the future."

In general, the participants explained, they discuss perfectionism with their patients as being a trait which makes them vulnerable to psychological ailments and life stress.

Challenging Perfectionism

The participants all revealed that within their therapeutic work they attempt to challenge perfectionist behaviours and attitudes, as well as encouraging the adolescent to do this for their self. They explained that they do not necessarily indicate to the young person that it is perfectionism that is being challenged but instead addressed it as part of the overall therapeutic process.

“Either formally like within something like CBT, where you’re actually challenging, do you know what I mean, some of the thinking process which may be perfectionist. But actually, just informally, I think in all the work we do.” (Participant 1).

Encouragement and Support from External Sources

Another way in which participants described addressing perfectionism was to help arrange external sources (e.g. parents, teachers etc.) of encouragement and support for issues linked to the adolescent’s perfectionism. This could include ensuring schools and colleges attended by these individuals were aware of their difficulties resulting from the perfectionism so that the educational staff were aware of how best to support the young person’s academic career.

“It’s trying to get them into an environment where the people understand, and are...understand their perfectionism and are also helping them to try and set realistic goals for themselves. So like, at college sort of support staff advising or trying to kind of, you know, work with them about the choices that they’re making and things and then supporting them in college.” (Participant 3).

5.5 Discussion

While perfectionism has been found to relate to psychological ill health and poor treatment outcomes in adolescent clinical populations, methodological issues in the literature exist. A main concern lies in the use of adult-derived conceptual accounts of perfectionism across the adolescent literature. Many adolescent studies use the CAPS (Flett et al., 2016; Flett et al., 2000) which, despite being developed for use in younger populations, is in fact derived from an adult conceptualisation of perfectionism. The current study used a qualitative approach – focus group methodology – to identify how perfectionism is currently being conceptualised by clinicians working with adolescent clinical populations and how these clinicians perceive and work with perfectionism in a therapeutic context.

5.5.1 Clinician Perspectives of Adolescent Perfectionism

The focus group explained that they perceive there to be two types of perfectionists in the adolescent population, those that manage to be healthy and those whose perfectionism leads to negative consequences for their health. These groups, in general, seem to hold similar characteristics to the types of perfectionists described in adult literature. The first group was described similarly to healthy/adaptive perfectionists in regards to their experience of low negative and high positive affect resulting from their perfectionism. The description of the second group was more similar to unhealthy/maladaptive perfectionists in that they seem to experience increased negative outcomes from their perfectionism (Stoeber & Otto, 2006). A novel contribution from this study was the suggestion of two further distinguishing factors between the groups: awareness of and management of perfectionism. The participants explained that the two groups differ in their level of awareness of their perfectionism, with the latter group exhibiting poor management of their perfectionist tendencies in

contrast to healthier adolescent perfectionists who have clear awareness and appropriate management. It was said by the participants that adolescent perfectionists must maintain appropriate levels of awareness and management of their perfectionistic tendencies or may be at risk of ill-health. This finding may be important for the development of prevention programmes. Perfectionistic adolescents could be trained in perfectionism awareness and management techniques to reduce their risk of mental health problems.

Adolescent perfectionists were described as being highly characterised by goal or target driven behaviour. This may indicate a novel feature not currently emphasised by adult-derived theories of perfectionism. Alternatively, it may be the case that clinicians were describing a behavioural sub-feature of the previously described dimension of striving for high standards. Goal or target driven behaviour may be the specific process by which perfectionists strive for their high standards. Whether these goal/target driven behaviours are in themselves a novel feature of adolescent perfectionism or if instead they provide a deeper insight into the specific process by which perfectionists strive towards high standards could not be determined in this study. Future research may wish to delve into this finding further by specifically exploring striving techniques used by perfectionists.

A finding which was continually emphasized by the focus group was that adolescent perfectionists are characterised by *excessive* standards and expectations for the self. These standards and expectations were described as more than simply high, they are excessively so and they are beyond what the participants believed any person should reasonably expect to hold. These excessive standards and expectations were described as being directed by the individual towards themselves. This orientation of perfectionism is in line with the notion of self-oriented perfectionism described by

previous theorists (Hewitt & Flett, 1991b). It is important to note that differing orientations of perfectionism have been found to be linked to different clinical presentations. For example, SOP has typically been linked to eating disorders while SPP have been linked to suicidal behaviour and ideation (Shafran & Mansell, 2001). The participants in the current study all had extensive experience working with eating disorder populations and so the orientation of this feature, excessive standards and expectations, may be influenced by this.

The feature of dichotomous perspectives and behaviours is one less frequently emphasised by current perfectionism models. The participants in this study suggested that dichotomy influences the individual's perspective on situations as well as their behavioural choices. Adolescent perfectionists were described as splitting their world into successes and failures, not being able to judge partial-success in the same way as other people. While many models of perfectionism do not consider dichotomy to be a core feature (Frost et al., 1990; Hewitt & Flett, 1991b) the theory of clinical perfectionism does (Shafran et al., 2002). This finding from the current study supports the description of dichotomy as a main feature of perfectionism in clinical populations.

Precision was a feature described by the participants that encompasses the individual's display of and desire for precision, detail, and orderliness. Adolescent perfectionists were described as exhibiting this feature through their personal appearance, character, and environment (e.g. bedroom). In their development of the FMPS, Frost and his colleagues created a subscale for Orderliness; however, they advised removing this subscale from the overall scoring of perfectionism because they found it to have weak inter-correlation with the other five subscales and weak correlation with the total score of the other subscales (Frost et al., 1990; Hewitt & Flett, 1991b). This current study has returned to the question of including organisation as a core feature of perfectionism;

perhaps Frost's suggestions merely reflect the psychometric quality of their measure, rather than a reality about the conceptual structure of perfectionism itself.

A final feature of adolescent perfectionism suggested by the participants was high productivity levels and drive. Not only did participants perceive there to be a strong desire to be highly productive, but adolescent perfectionists were seen to be resistant to reducing their productivity levels as, participants explained, they struggle to tolerate being in a more relaxed state. This feature was first discussed by Burns (1980) who described the perfectionist's self-worth being defined in terms of their productivity. It is a salient feature when considering adolescent perfectionists within the context of eating disorder treatment settings. Often clinicians encourage these individuals to reduce their levels of activity and to attempt to relax so that they do not exert energy and consequently lose more weight. Doing this may inflict injury on the young person's self-worth and thus it is understandable why many of them find it so difficult to adequately do this. Clinicians may need to address issues of self-worth to help aid their practice of reducing the young person's productivity levels during recovery.

While perfectionism has often been described as a personality trait and thus a trait that presents in a homogenous manner throughout all of a perfectionist's life, this study identified differing presentations of perfectionistic tendencies in three core life areas: academia, presentation, and social life. Within academic life, the features of goal setting and excessively high expectations were very apparent to participants. With obvious ways to engage in goal driven behaviour (class work and examinations) and a clear ranking of standards (academic grading system), adolescent perfectionists clearly engage in perfectionistic behaviour. In a different aspect of life, presentation, the feature of precision and organisation was seen to be more apparent. Adolescent perfectionists were perceived as focusing on controlling their personal and physical presentation, as

well as that of their environment and therapeutic activities, in a very precise manner. Other features, such as goal-behaviour, were less obvious to participants here. Finally, within the social areas of life, participants described adolescent perfectionists in a way that emphasizes their dichotomous behaviour and negative decision making. They explained that it was common for these young people to socially isolate themselves and actively choose not to engage in social activities. This may be because social achievement is more ambiguous than achievement in other areas (e.g. academia) and due to their inability to tolerate grey-area achievement, the young person elects to completely disengage from their social life.

Clinicians in this study explicitly described perfectionism as a stable personality characteristic that forms part of the young person's internal nature. This assumption, however, was largely informed by parental reports of the young patients' perfectionism and so may be flawed. Because of their fixed view of adolescent perfectionism, the clinicians expressed that they do not believe they can change a young person's perfectionistic tendencies. This could have implications for the treatment of perfectionism in the therapeutic setting. Despite explicitly stating a view that adolescent perfectionism does not develop as a result of parental influence, frequent reference was made by participants to perfectionistic tendencies exhibited by parents of such young people. Maternal perfectionism has been implicated in the development of perfectionism in girls (Cook & Kearney, 2014; Frost et al., 1991) and so clinicians may need to incorporate this finding into their approach to treatment for these young people. In contrast to the stable-personality developmental perspective of adolescent perfectionism, participants also discussed adolescent perfectionism as a defence mechanism that enables the young person to avoid intimidating issues in life. This perspective suggests a view that perfectionistic tendencies have been learned over time by the young person to protect them from perceived threats to their comfort.

5.5.2 Clinical Adolescent Perfectionism in the Therapeutic Setting

There were several issues described by participants as being heavily impacted by perfectionism in adolescent perfectionists, including the experience of eating disorders, negative affective experience, biased decision making, and issues with time-keeping. Overall, it seems that for the limited number of positive outcomes that are shared by all adolescent perfectionists (e.g. punctuality, attainment of high standards), some adolescent perfectionists experience lives riddled with negative outcomes from their perfectionistic tendencies. Participants were unanimous in their perspective that the negative outcomes experienced by young perfectionists they encounter in clinical settings outweighed the positive outcomes and so perfectionism was something that needed to be tackled in the therapeutic setting.

Adolescent perfectionism was viewed by participants as being both beneficial and detrimental to therapeutic processes. On the positive side, adolescent perfectionists often complete tasks well and in a timely manner. On the negative side, this group often had great difficulty in tolerating the ambiguity of some therapeutic tasks; for example, these patients often struggled with the instruction to eat more food without a precise indication of what volume or caloric count they should consume. Participants described ways in which they attempt to address the perfectionism of these young people beyond common psychological approaches, such as, systematic desensitisation, graded exposure, and responsive prevention. Raising the young person's awareness of their perfectionism was seen as the core method for preventing the potential negative impact of perfectionism on their life. By discussing perfectionism with young people as a trait that increases their vulnerability to psychological difficulties, the participants hoped that these young people would develop a clearer awareness of their tendencies and be better able to manage their inclinations. Another approach the participants described was that

of challenging perfectionism. They both directly challenge perfectionistic behaviours and attitudes exhibited by adolescent perfectionists and encourage these young people to do this themselves. This was in line with the common therapeutic practice of challenging automatic thoughts and behaviours, common to cognitive and behavioural therapies. Finally, the participants explained the importance of drawing on other bodies of support for all of their therapeutic approaches. This included support from family members and school teachers, people who they stated should also be aware of the young person's perfectionistic tendencies. They expressed a belief that awareness by others could facilitate appropriate support in challenging perfectionism and supporting the young person in situations that may be difficult as a result of their perfectionism.

5.6 Conclusions

This study shows that clinicians may hold very distinct views on perfectionism in clinical adolescent populations. Some of their views are in line with current theories of perfectionism, while others reveal both expanded and new perspectives of various elements of the construct, as well as some views that contradict findings from the literature. Clinicians' own understanding of perfectionism appears to influence their therapeutic practice and their expectations for therapy outcomes when working with young perfectionists. Furthermore, their perspectives may influence the understanding of perfectionism and perfectionistic behaviour held by young people in their care. While informative, the findings in this study regarding the nature of adolescent perfectionism represent second-hand interpretations of adolescent perfectionists' behaviour. The next chapter in this thesis reports a study that explored the construction of adolescent perfectionism through the direct accounts of a group of highly perfectionistic adolescents.

Chapter 6: A Grounded Theory Study of Adolescent Perfectionism

6.1 Introduction

Concerns about whether conceptual accounts and measures of perfectionism used in adult populations can be successfully transposed to adolescent populations led to the question: is perfectionism experienced in adolescence different to that experienced in adulthood? The preceding chapters have highlighted the developmental uniqueness of adolescence and the relevance of this context for the expression of perfectionism during this period. As perfectionism appears to have a role in adolescent mental health problems, it is vitally important that an informative and developmentally appropriate conceptual framework for clinical adolescent perfectionism be identified.

Chapter 5 explored how clinicians who are involved in the care of adolescent eating disorders perceive clinical adolescent perfectionism. Participants in this study all expressed a view that perfectionism is an ongoing issue within the context of adolescent eating disorders and therapy. While some of their perceptions of the construct were in line with current perfectionism theory, the clinicians also suggested some alternative perspectives on what constitutes clinical adolescent perfectionism. Additionally, they provided insight into the unique developmental context of adolescent perfectionism, emphasising how the construct may be expressed differently in adolescents compared to adults or younger children. While I do not seek to refute the significant contributions current perfectionism models have made to our understanding of this construct, it is my

view that these conceptualisations may not sufficiently account for perfectionism in adolescent clinical populations and may lack a necessary degree of developmental sensitivity. A fresh conceptualisation of perfectionism as it presents in this developing clinical population is necessary for the advancement of both research and clinical practice.

6.2 Research Objectives

The current study explored clinical adolescent perfectionism through qualitative methods to develop a robust conceptualisation of this construct. The study aimed to identify and interpret areas of importance for clinical adolescent perfectionism and to develop a framework based on adolescent expressions of perfectionism.

6.3 Method

An appropriate methodology, which enabled the researcher to adopt an agnostic stance towards the data and to develop an unbiased adolescent-derived conceptualisation of perfectionism, was required. A method suited particularly well to these demands is that of grounded theory methodology.

6.3.1 Origin of Grounded Theory

First developed by Glaser and Strauss (1965, 1967, 1968), grounded theory drew on both Glaser's positivist style and Strauss's background in pragmatics and field research to develop a logical interpretive methodology. Grounded theory is a method where theory is grounded in the data collected. Unlike traditional hypothetico-deductive methods designed to test specific hypotheses, grounded theory is a technique that allows us to induce theory from the actual data. The benefit of such an approach is that it enables us to step away from the current theoretical accounts and develop theory that is representative of the actual experience of interest. New theories are constructed from

the themes, which 'emerge' from the data. Such theories can then be subject to further analysis to explore their generalizability.

For these reasons, grounded theory methodology is ideal for this study, which aims to develop a fresh conceptualisation of perfectionism in clinical adolescent populations. Distancing this study from classic perfectionism theories (Frost et al., 1990; Hewitt & Flett, 1991b) and adopting an agnostic view of perfectionism reduces the risk of this study imposing adult-derived concepts onto this younger, developing population. A new adolescent specific theory of perfectionism in clinical populations would be based on the themes drawn from collected data rather than previous research.

6.3.2 Adopting an Open Approach

As discussed extensively by Charmaz (2006), grounded theorists outside of Glaser's research group agree that grounded theory should be viewed as a framework for research – a set of guidelines rather than a prescriptive approach. While Glaser's approach to grounded theory holds some strong positivist leanings, an entirely positivist approach assumes that the researcher can approach the subject matter with absolutely no prior knowledge of the subject or expectations for the data. Moreover, a positivist grounded theorist would believe that they are entirely independent of the data, that they have no influence over it at any stage of the research. Realistically, it can be argued that it would be impossible for a researcher to approach a study with no knowledge or expectations whatsoever. Bearing in mind that most grounded theory research is conducted on qualitative material, it would be naïve to believe as a researcher that one's specific *and* wider knowledge, expectations, and beliefs about the world would have no influence over how one collects and analyses the data. With this in mind, one should not claim to approach research with an empty mind but instead with an open mind, thereby making oneself aware of one's own influence. To prevent the researcher from imposing

on the research, reflexivity – a process of reflecting on how one may influence the collection and interpretation of the data – should be attempted.

6.3.3 Constant Comparison

With regard to the analysis in a grounded theory study, a unique process takes place, again distinguishing grounded theory methodology from traditional scientific methods. Rather than waiting to conduct data analysis until the data collection period is complete, grounded theory researchers engage in a process known as constant comparison (Glaser & Strauss, 1967). This process involves comparing all elements of data with each other throughout the data collection period. For example, one can compare statements, incidents, categories, and themes with each other both within and between participant interviews.

Interviews evolve to reflect the emerging themes, however, the interviewer should keep returning to topics from earlier interviews so that the old and new data can be compared. To be able to fully conceptualise themes, the researcher should aim to further develop each theme. This can be done through *theoretical sampling*, a process of strategically and systematically exploring and clarifying emerging categories so that final themes are robustly conceptualised (Charmaz, 2006). It must be understood that theoretical sampling is done for the purpose of developing the emerging theory and is *not* conducted to produce a more representative sample of a population or to improve the generalizability of the results. It may be more appropriate to refer to grounded theory methodology as an abductive process; categories may be inducted from the data but further themes are deducted by checking initial categories against newer data.

6.3.4 Theoretical Saturation or Theoretical Sufficiency

One other defining analytic aspect of grounded theory is the process of *theoretical saturation*. This occurs when categories and themes have been so well developed that

no new information emerges from the data. In reality, research is often time limited and so it would be near impossible to reach true theoretical saturation. For this reason, Dey (1999) recommends that we instead aim to reach *theoretical sufficiency* – a point where our themes are strongly *suggested* by the data. A less grand claim is perhaps better fitting to the critical academic world.

6.3.5 Specific Focus Clinical Population – Eating Disorders

While perfectionism may be considered transdiagnostic (Egan et al., 2011), this study elected to focus on the perfectionism of one particular clinical group, the adolescent eating disorder population. As highlighted in previous chapters of this thesis, perfectionism is relatively characteristic of the adolescent eating disorder population and so it is appropriate to select this population for the study. This approach would result in a more homogeneous sample, helping to ensure the development of a more complex, in depth, and focused theory of perfectionism rather than might be expected if the project had attempted to develop the theory to account for the experience of perfectionism in a more heterogeneous adolescent clinical population. Starting with this focus on adolescents with eating disorders, the developed theory can then be tested out with other clinical adolescent populations in future research and adapted if necessary.

6.3.6 Methodological Approach of Current Study

This study adopted a social constructionist approach (Burr, 2015) to grounded theory methodology, which allowed the researcher to adopt an open minded stance towards the data and to develop a conceptualisation of adolescent perfectionism.

It is important to note that while the current study is reported after both the systematic review and survey study, it commenced in 2014, prior to either the systematic review or survey study were conducted. This ensured my approach to the current data was not

influenced by the findings of these other studies. The studies were reported in non-chronological sequence to aid the narrative of the overall thesis.

6.3.7 Researcher's Position

I acknowledged that my personal experiences and perspective may influence my interactions with those interviewed and the subsequent data analysis and so, for the sake of transparency, I have elected to include some background description of myself.

I am a 27-year-old, British, female doctoral student in Clinical Psychology. Educated in the British state schooling system, I subsequently obtained undergraduate and postgraduate degrees within the field of psychology at a British university, which exposed me primarily to experimental research methods. I have held employment in social and clinical sectors within both public and third sector organisations. This employment has resulted in intimate professional experience with childhood developmental disorders and adolescent mental health disorders from the position of a support worker or clinician. From a personal experience, I was raised in a supportive, two-parent home environment along with siblings.

Two key challenges were identified early on in the research process. First, owing to my training and experience, my previous research experience exhibited a somewhat positivist approach which I felt needed to be reconsidered before commencing this study. Through self-reflective writing exercises and broad philosophical discussion with my supervisors, I reevaluated my position as is outlined in the next section. Second, having not conducted much qualitative research prior to this project, I experienced some apprehension about conducting such a substantive piece of non-experimental research. To combat this insecurity, I acknowledged my naïve approach to the methodology and exerted effort in training myself in the method through extensive reading of core texts. My individual work with adolescent patients within CAMHS enabled me to develop skills

in rapport building, sensitivity, and listening for this young population. Personally, I have long held the view that “*everything is about perspective*”. That is to say, my personal view is that even concrete experiences can be experienced in different ways depending on the perspective of the individual. It was my belief that while some constructs are common to all, our individual nature leads us to perceive them in a unique manner. This perspective is relatively in line with common approaches to grounded theory research.

6.3.8 Philosophical Position

Taking my history, recent training, and personal views into consideration, and following several reflective exercises, I adopted an open minded approach in this research to explore concepts by constructing an understanding of them in partnership with the participants, as is recommended by Charmaz (2006). I acknowledged that my background in psychology may lead to eventually describing phenomena using psychological terms but relied on rigorous analysis techniques to ensure that any such terms were arrived at following strong direction from the data. Perhaps the best epistemological and ontological position with which I could align myself is that of ‘critical realism’, a stance originating in the philosophical writings of Roy Bhaskar. Critical realism is a philosophical approach which attempts to be somewhat more theoretical and more realistic than either positivism or social constructionism succeed in being (Alvesson & Skoldberg, 2009); it attempts to address the interface between nature and nurture views of reality, unlike the polar positions of positivism (i.e. nature) and social constructionism (i.e. nurture). This stance corresponds to my personal philosophical position, developed through personal, academic, and clinical experiences.

6.3.9 Research Context

This research was conducted across the second and third year of my Ph.D. in Clinical Psychology. This Ph.D. involves a collaboration between the University of Edinburgh and

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NHS Lothian, meaning I acted both as a Ph.D. researcher, accessing my study population through NHS Lothian sites, and as an assistant psychologist, conducting therapeutic work in outpatient services whilst under the supervision of a Clinical Psychologist based in NHS Lothian. To ensure no overlap between the two roles, I did not recruit participants to my research from my own clinical caseload and did not engage in clinical work with any individuals who had participated in the research. The study was contained entirely to the Child and Adolescent Mental Health Service (CAMHS), which accepts referrals for young people experiencing mental health difficulties typically up to the age of 18 years of age (although some exceptions do exist for young people exceeding this age limit, e.g. the Early Psychosis Support Service). CAMHS caters to a wide range of mental health issues, with clinicians from a range of disciplines coordinating to ensure quality care for all children and young people referred to Tier III and Tier IV services.

6.3.10 Recruitment

The recruitment took place over the course of 12 months and consisted of three key stages.

Stage 1

All participants were accessed through clinicians based in four Child and Adolescent Mental Health Services (CAMHS) within NHS Scotland. A variety of approaches was used. Poster and flyer advertisements were displayed throughout CAMHS departments, advising young people of the opportunity to participate and directing them to ask their CAMHS clinician for more information about the study. Recruitment drives were conducted at CAMHS and psychology team meetings, through CAMHS group mailing lists, and at a Continuing Professional Development course I provided for clinicians. Individual CAMHS clinicians were also approached directly for recruitment purposes.

Stage 2

Once a clinician identified a young person they felt might be suitable for the study, the eligibility of this adolescent was further examined. If potential participants did not meet inclusion criteria, they were excluded at this point. Clinicians were then asked to give the Participant Information Sheet (see Appendix J) to eligible young people for their consideration. A systematic process of following up with clinicians at least once per week regarding potential participants was followed (or at greater intervals if requested by the clinician). Young people were not required to decide immediately on their participation in the study and the researcher would follow up at an agreed interval. Meetings were arranged to discuss participation in the project with interested young people.

Stage 3

Initial meetings with potential participants were held in collaboration with clinicians, ensuring these young people were accompanied by a familiar adult when first meeting the researcher. If following the meeting the young person indicated they were happy to participate, a preliminary date was set for the interview (no sooner than 24 hours after the initial meeting). Contact details were exchanged between the researcher and the young person so that either party could rearrange the interview time if needed. Interviews were arranged to fit around the young person's schedule so as not to impede any prior clinical, educational, or personal commitments.

6.3.11 Participants**6.3.11.1 Inclusion Criteria**

In an attempt to capture as many of the young people in contact with CAMHS as possible, broad inclusion criteria were defined for the study. This study was open to all young people attending CAMHS Lothian specifically in North Edinburgh, South Edinburgh, East

Lothian, and Midlothian services. Inclusion criteria specified the age range 12-18 years to capture the adolescent group within CAMHS Lothian.

Further criteria specified that participants must be actively engaged in treatment primarily for an eating disorder within CAMHS Lothian. Although comorbidity was not automatically an exclusion criterion, this was stipulated as a criterion to reduce the inclusion of young people who are receiving treatment for disordered eating behaviour that is secondary to a more pertinent mental health problem. It was stipulated that young people had to be actively engaged with CAMHS to ensure participants would have appropriate support should their participation in this study cause them any distress.

6.3.11.2 Exclusion Criteria

Young people who for any reason may not have the cognitive capacity to provide their own consent to participate or to engage in a coherent conversation were excluded from this study. Eating disorders can result in temporary cognitive compromise that may inhibit participation or capacity to consent (Tchanturia, Campbell, Morris, & Treasure, 2005) and so this issue of cognitive capacity was particularly relevant for adolescents with eating disorders. Cognitive capacity was determined by their referring clinician prior to participation. The researcher also excluded participation of her own patients to prevent conflicts of interest.

6.3.11.3 Response Rates

A total of 46 young people were initially identified by CAMHS clinicians as potentially being suitable for the study. Of these, 5 did not meet the criteria for an eating disorder, 3 were too unwell to consent or participate, and 2 had a diagnosis of autism spectrum disorder. A further 2 were discharged from the service before they could participate and 2 were not able to attend NHS sites approved for this study. Unfortunately, due to difficulty maintaining contact with some clinicians, contact was never made with 6 of

these young people. Therefore, 20 of the original 46 potential participants were excluded from the sample at this point. The remaining 26 eligible adolescents were approached by the researcher. Ten did not want to participate in the research. The final study sample comprised 16 participants, reflecting a response rate of 35% of the original potential sample. These numbers are presented in Figure 7.

6.3.11.4 Demographics

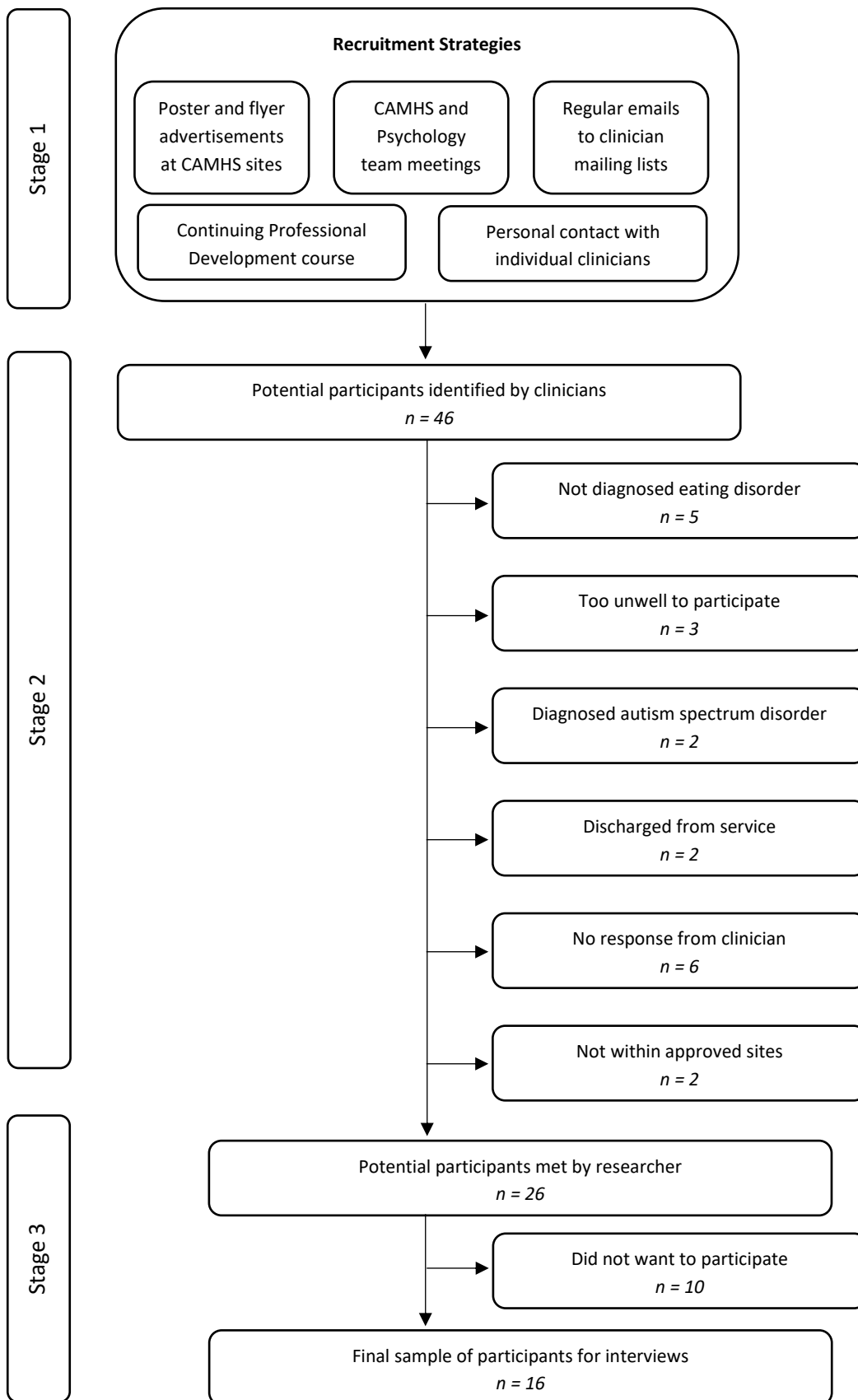
A final sample of 16 young people volunteered to participate in the study. To protect anonymity, no individual demographics will be reported. The sample consisted of 14 female and 2 male participants who were receiving treatment from either tier 3 or tier 4 CAMHS Lothian teams for an eating disorder, with diagnoses including anorexia nervosa (n = 12) or eating disorder-not otherwise specified (ED-NOS; n = 4). All ED-NOS individuals were in recovery from anorexia nervosa. The participants ranged in age from 13 years and 1 month to 17 years and 11 months old, with a mean age of 15 years and 10 months at time of interview. All participants were Caucasian and living at home. Participants were enrolled in either state (n = 12) or private (n = 3) secondary school education, with one participant having completed secondary school education the semester previously.

6.3.12 Ethical Considerations

6.3.12.1 Formal Research Ethical Approval

Ethical approval for this study was granted by the Scotland A NHS Research Ethics Committee (Ref: 09/MRE00/93, Date: 01/08/2011; Appendix K). Site-specific approval for NHS Lothian was granted by the Research & Development (Ref: 09/MRE00/93, Lothian R&D Project No: 2012/P/Psy/03, Date: 08/05/2012, Appendix L).

Figure 7. Recruitment process for grounded theory study.



6.3.12.2 Informed Consent

Clinician Consent

While it may be deemed acceptable to assume capacity to consent in adolescents, the added vulnerability of this population (i.e. mental health problems) meant it was appropriate to seek a further level of consent from clinicians involved in the young person's care prior to participation. This was particularly pertinent for the specific clinical population approached for this study as eating disorders can lead to diminished cognitive ability (Tchanturia et al., 2005). One clinician involved in the care of each young person was required to provide their written consent for the young person's participation, indicating that in their clinical opinion the particular young person had the cognitive capacity to provide their own consent to participate (see Appendix M). This approach safeguarded particularly vulnerable or cognitively incapacitated young people from participating in a study that they may not entirely understand. An unfortunate limitation resulting from this added consent procedure was the potential for exclusion of cognitively able young people; however, it was felt that this was a reasonable risk to take to prevent the opposite (i.e. the inappropriate inclusion of cognitively incapacitated young people).

Participant Consent

Potential participants were provided a Participant Information Sheet a minimum of one day prior to interview. This information sheet was developed to clearly explain aspects of the study design and issues of participation, consent, and confidentiality to young people. It was written in a manner to be comprehensible to all potential participants from the targeted age group with the avoidance of technical language. Further, the information sheet was designed to ensure young people did not feel pressured to participate and were aware of their on-going right to withdraw from the study at any

point. Finally, the information sheet clearly explained that the study would in no way impact on their clinical treatment at CAMHS. Immediately prior to the beginning of an interview, the researcher engaged in a short discussion of the study and the above issues with the young person to allow them the opportunity to ask for clarification or further information if required. The participant was then required to complete the Participant Consent Form (see Appendix N) which was signed by both them and the researcher before the interview began. Throughout the interview process, the researcher would periodically check that the participant was happy to continue (i.e. ongoing consent).

6.3.12.3 Confidentiality and Anonymity

Signed consent forms were stored as hard copies in a locked storage unit within the School of Health in Social Science. Interviews were audio recorded using an electronic device and then transferred to a password protected secure University of Edinburgh network drive before being permanently deleted from the original recording device. Transcripts of interviews were constructed by the researcher and stored on the same network drive. All of these storage and recording facilities were solely accessible to the researcher. All personally identifiable information (e.g. names of school, dates of birth) were excluded from written transcripts and analysis. Furthermore, pseudonyms were used in place of actual names in all transcripts and analysis, thus ensuring anonymity for all participants.

6.3.12.4 Sensitivity to Prevent Distress of Participants

Due to the nature of the research, it was acknowledged that discussion of some topics such as mental health, eating disorders, or clinical experiences might be distressing for some participants. For this reason, the inclusion criterion stipulated that participants had to be actively engaged in CAMHS services. This would ensure, should they need it, participants had an appropriate support system of mental health professionals with

whom to discuss any issues raised during the interview. Before introducing sensitive topics, the interviewer explicitly checked with the participant if they were comfortable to discuss the topic. Throughout the interview, the researcher maintained a level of sensitivity to the participants' emotional state. If the participant exhibited signs of distress, they were asked if they wished to continue with the line of discussion or if they would like to have a break from the interview. While this could have influenced the immediate data collection, overall this approach both safeguarded the participants from excessive distress and in all cases led to the participants' continued consent to participate. Contact details were also provided for the researcher's academic supervisor, a clinical psychologist, for participants to contact if they were unhappy with any aspect of the interview process. Following this approach, no participants became so distressed that they withdrew from or complained about the study. A debrief sheet was made available for all participants following completion of the study (see Appendix O).

6.3.12.5 Disclosure of Risk

Any disclosure pertaining to risk for either the participant or another person made during the interview would be addressed according to CAMHS protocol. Disclosures would have been discussed with the participant and, if necessary, the researcher's research supervisor at CAMHS (a consultant clinical psychologist) would be included in the assessment of risk. All participants were made explicitly aware of this prior to commencement of the interview.

6.3.13 Interview Style

Although the term 'interview' implies a process of an interviewer asking specific questions to an interviewee, the interview style used in this study was far less structured and was intended to be participant driven. To enable the interview to develop organically, the only essential interview question was that which began the interview.

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The rest of the interview followed the natural flow of the conversation, driven by the participant's contributions.

An interview schedule was initially devised to support the novice interviewer, a technique advised by Charmaz (2006), highlighting potential areas of conversation (e.g. personality, school experiences, relationships, hobbies, etc.). In this sense, the interview style could be described as semi-structured; however, questioning was kept to a minimum to reduce the risk of participants' responses being influenced by the interviewer. Suggestions from the schedule were only employed in moments of uncertainty or stagnation. Questioning was open-ended and often merely to seek further details of a described experience. It was essential for the interviewer to allow the discussion to flow naturally from the participant so as not to impose a preconceived structure to the data.

Each interview relied on three core components:

1. Interview began by asking the participant to introduce himself or herself, to tell the interviewer a little about who they are and how they would describe themselves.
2. Topics introduced by the participant were further explored through open-ended questions.
3. The interview schedule was utilised to maintain the fluidity of the conversation.

Following the first couple of interviews, successive interviews also comprised the following component:

4. Potential perfectionism-related themes that had emerged from previous interviews were tentatively introduced and explored in the latter part of the interview.

6.3.13.1 Use of Perfectionism Terminology

The grounded theory approach aims to explore a phenomenon, not to dictate it; the interviewer's role is to encourage the participant to explore what the phenomenon of interest means to them and to seek detailed examples of experiences of this trait. The terms "perfectionism", "perfectionist", or "perfectionistic" were only used by the interviewer following the organic, unprompted introduction of them by participants. It was felt that perfectionism terminology had the potential to be highly charged and may bias the participants' interview towards conceptualisations that had been exposed to by others (e.g. clinicians, media), thereby limiting the potential of the research which aimed to explore *their* conceptualisation of perfectionism. In reality, these terms arose naturally from the data in the earliest interviews. Logically, it would have been appropriate to use perfectionism terminology in subsequent interviews since this terminology had already emerged from the data. For participants who did *not* organically use perfectionism terminology, these terms *were* introduced and explored but only in latter parts of each interview. This enabled the exploration of the phenomenon without biasing the data through leading terminology.

6.3.14 Recording of Data

All interviews were audio recorded using a digital voice recorder (Olympus WS-811). Some written notes were also taken by the interviewer to aid them during the interview. Audio recordings were transferred to a secure electronic storage drive hosted by the University of Edinburgh and remained under password protection.

Audio recordings of interviews were transcribed by the researcher, with transcriptions also being stored on the secure electronic drive. These were uploaded to NVivo 10 software (NVivo, 2012) for analysis.

6.3.15 Procedure

Following recruitment, interviews were scheduled at a time to suit participants and held at CAMHS sites across NHS Lothian (excluding West Lothian sites), with one interview being conducted at the University of Edinburgh. Written informed consent was obtained from clinicians for each participant prior to the interview. Participants met individually in a private room with the researcher. The information sheet was provided for consideration again and participants were offered the opportunity to ask questions about the research. Written informed consent was then obtained from the participant in the presence of the researcher. Following this, the audio recording device was turned on and the interview began. Interviews were scheduled for a maximum of two hours' length. Following the completion of the interview, the researcher debriefed the participant to the full nature of the research, enquired as to whether they would like any part of their interview to be shared with their clinician, and offered an opportunity for further information about the research later.

6.3.16 Analysis

The data was analysed in line with grounded theory principles using NVivo 10 software (NVivo, 2012). Grounded theory method does not clearly divide the processes of data collection and data analysis and in reality the constant comparative method – moving between data collection and data analysis simultaneously – was used, however, for the clarity of this report, the two stages have been described individually.

6.3.16.1 Initial Coding

First, the data was broken down from interview-format to small, distinct codes. Coding involved working through the transcripts on a line-by-line basis to describe each unique section of the data. *In vivo* codes, codes that use the wording or phrasing of the data,

were used when suitable. This initial stage of coding produced nearly 4000 initial codes across the dataset.

6.3.16.2 Broad Grouping of Code Themes

During the second stage of coding, initial codes were grouped into broad themes. For example, a theme of “*Comparisons*” would encapsulate all initial codes that related to any form of comparison. Some initial codes fitted into more than one broad theme; for example, “*Comparing appearance to every single other person...*” was assigned to both “*Comparisons*” and “*Appearance*” themes. This broad grouping of code themes was conducted for each participant data individually. Next, these themes were compared across participants, with themes from each participant being adopted as required for other participants. Finally, themes that appeared most relevant to the topic of perfectionism were separated from those that did not appear to be relevant to this phenomenon.

6.3.16.3 Focused Coding

The third stage involved re-analysing each of the broad themes from stage 2, breaking them down again to compare initial codes between and across participants. This process enabled the identification of commonly emerging themes within these broad categories. For instance, a more commonly recorded code within the broad theme of “*Comparisons*” was “*Comparing self to peers*”, while a less common theme was “*Comparing self to parents*”. This stage of focused coding was more directive, selective, and conceptual than initial coding, as is described by Glaser (1978). *In vivo* codes were helpful in aiding this process.

6.3.16.4 Axial Coding

Axial coding was used to identify and explain relationships between all themes, categories, subcategories, and codes, thus increasing the density of the theory (Strauss,

1987). As a novice grounded theorist, axial coding was highly recommended for providing a clear structure for the developing theory and reducing ambiguity (Charmaz, 2006).

6.3.16.5 Theoretical Coding

The final stage of the analysis involved bringing together and clarifying all aspects of the coding into a coherent theory of perfectionism in this adolescent clinical population.

6.3.16.6 Memo Writing

Throughout the study, a log of memos reflecting on the research process and emerging categories or themes was maintained. This practice encouraged engagement with and theorising about the data, as well as capturing fleeting thoughts or concerns experienced by the researcher. The memos provide an opportunity for reflection on the development of the theory and an insight into how the theory was influenced by the researcher, two critical issues for the analysis process.

6.4 Results

6.4.1 Overview of Interviews

Participants varied in the depth of their engagement with the interview process. While some were particularly engaged and provided lengthy descriptions throughout, others were more reserved, providing shorter and less in-depth descriptions. Retrospectively (following discussion of recovery progress with participants' clinicians) it appeared engagement and depth of response may have been influenced by the health status of the participants. Those who at the time of interview were on a downwards curve (e.g. losing weight/maintaining very low weight) were less forthcoming in interviews, while those who were on an upwards curve (e.g. gaining weight/maintaining healthy weight) were noticeably more engaged and forthcoming.

6.4.2 Overview of Perfectionism

In the interviews, participants described perfectionism as wanting to be "*perfect*" or the "*best*", be that in terms of their self-image, their behaviour, the outcomes of their behaviours, and/or their surrounding environment, as evaluated by the participants themselves.

"I expect myself to be perfect ... wanting to do the best that you can all the time at everything. That's how I'd describe it." (Participant 2);

"It's to be the best person that I could be ... this perfectionistic thing that I expect to be perfect..." (Participant 4);

"I want everything to be perfect..." (Participant 8);

"I quite like things to be almost perfect." (Participant 10);

"...I like to be the best I can..." (Participant 11);

"Like, everything needs to be perfect I guess." (Participant 12);

"Just doing everything to the best of your ability and doing it perfectly." (Participant 14);

"I like to get things perfect ... it's like kind of desire to perfect everything." (Participant 16).

Perfectionism was described in the interviews as constant in these individuals' lives; they explained that it never ceases to exist, although it may be heightened or lessened in reaction to certain situations. When asked about where perfectionism is apparent in her life, one participant exclaimed:

"Anywhere and everywhere!" (Participant 2).

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This revealed the apparently pervasive nature of perfectionism in her life. The interviews indeed proceeded to provide examples of perfectionism in a vast range of life domains, such as academia, athletics, health, appearance, and relationships.

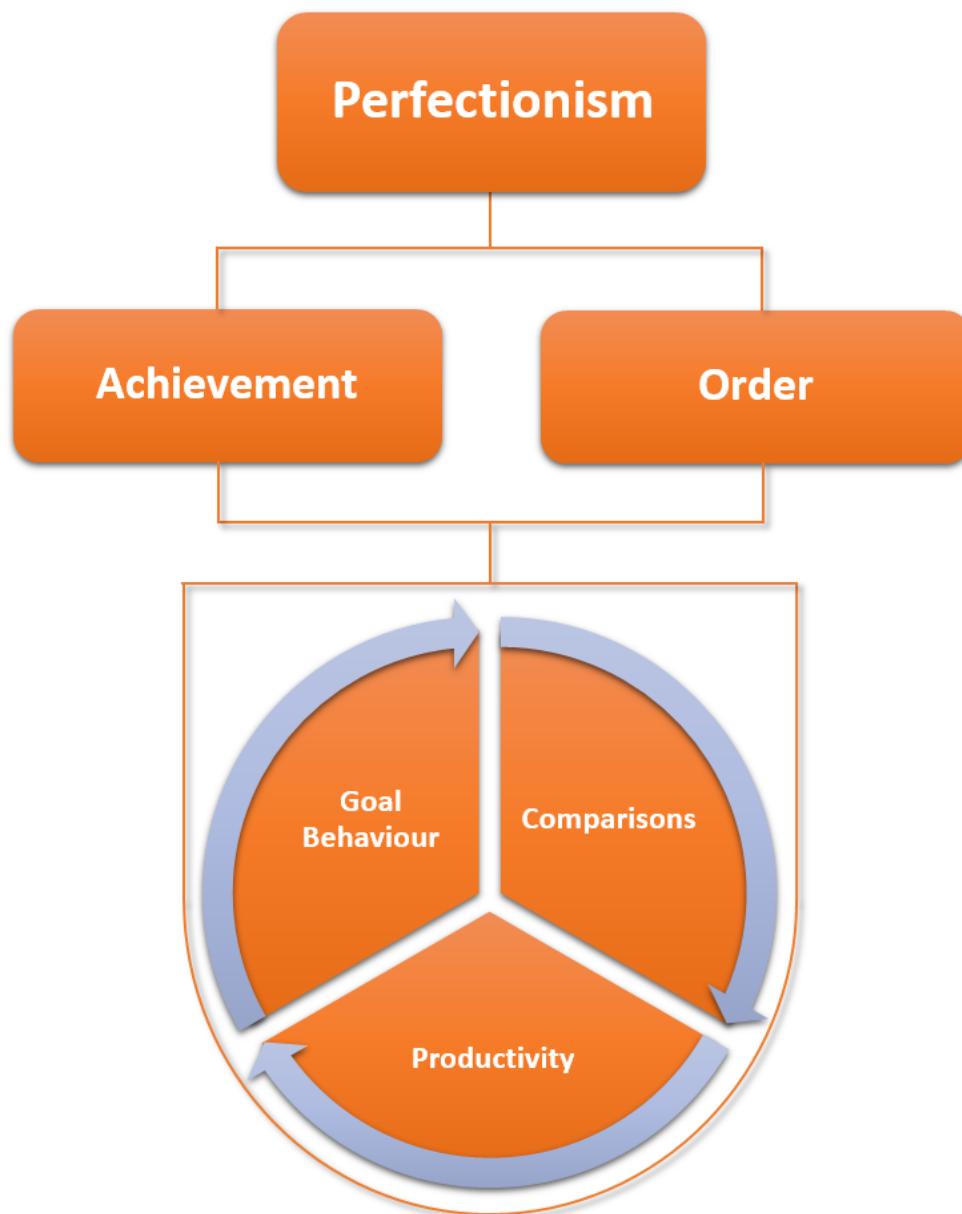
When questioned as to why perfectionism may develop no strong opinion emerged in the interviews. Many of the participants explained that they couldn't identify a root cause for their perfectionism.

"I'm not sure. 'Cause like when I came in here they were saying "why", like "why did they whole kinda...happen?" And I was like, "I don't really know". I just kind of got obsessed with perfection, I don't really know where it came from. 'Cause no one ever said to me that I had to be perfect or anything." (Participant 16).

Despite the common lack of explanation as to the origin of their perfectionistic tendencies, in general the participants described it as deriving from an internal desire for perfection and as being quite personal to them. While some participants described perfectionism as being part of their nature for as long as they can remember, others felt their perfectionism was either triggered or exacerbated by the experience of an eating disorder.

"I've been a perfectionist for as long as I can remember." (Participant 2);

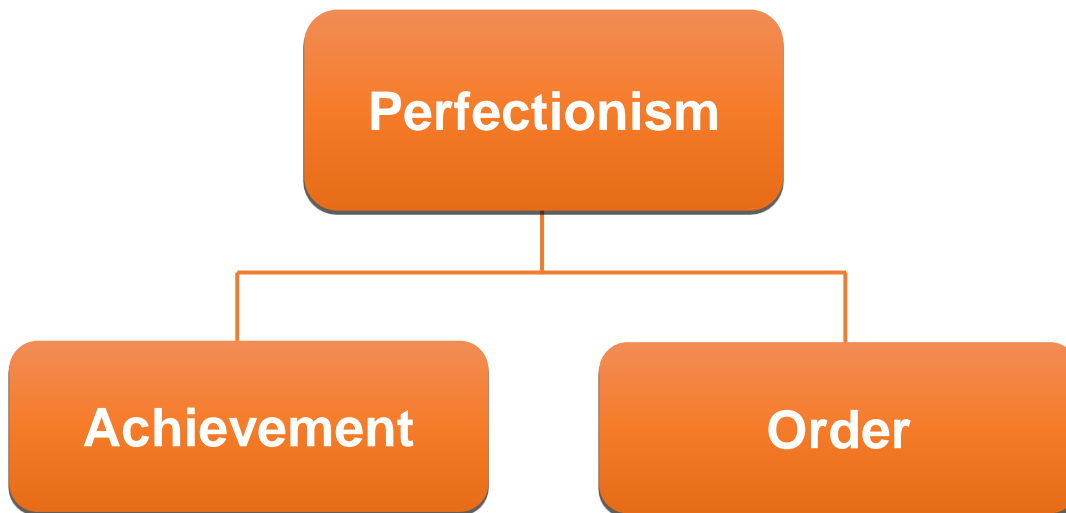
"Yeah, I think, well, I think maybe I always had the slightest bit of Miss Perfectionist ... so I think probably the eating disorder just brought it out even more to the point where now I can recognise it as a voice. Like, an individual voice." (Participant 14).

Figure 8. *Model of adolescent perfectionism.*

6.4.3 Sub-Themes of Perfectionism

Through simultaneous interviewing, coding, and comparative processes, a number of Perfectionism themes were identified (see Figure 8). Consistently, participants described Perfectionism as primarily being about "Achievement" and "Order" (see Figure 9). They described using "Goal Behaviour", "Comparisons", and "Productivity" in their pursuit of Achievement or Order, i.e. their pursuit of Perfection (see Figure 10).

Figure 9. *Defining themes of adolescent perfectionism.*



6.4.3.1 Achievement

In discussions about perfectionism, participants in this study most frequently described issues of Achievement. Some described themselves as "*high achievers*" while others described an intrinsic need to achieve and stressed the personal importance of achievement.

"I would say like almost everything I do is for a sense of achievement ... achievement is really important to me." (Participant 14);

"I felt like I needed to achieve." (Participant 4).

These young people described achievement as being valued not only by themselves but also by others in their environment.

"I think just like I said, like, I think it's just how I've been raised with my education. Em. That achievement is really important to me and to other people around me..." (Participant 14);

They also described achievement as being important for their self-worth.

"I base a lot of my self-worth on my achievements and like the academic, sporting achievements..." (Participant 4);

"...it sort of makes you feel good about yourself. It makes you...like when you're feeling low about yourself you can say "oh I did this and it's something good about me." (Participant 16).

When asked for other reasons why they valued achievement, the participants often described achievement – particularly in the area of academia – as something that will lead to positive opportunities and outcomes in their future,

"I want to do well ... it's really because I want to get good qualifications, like, all my friends that I go out with want to get good qualifications for the job they want to do. Em, so they want to go to university – so quite a lot in my year want to go there – so I think they all need really good grades to get like a place in uni or college or whatever they want to do. So I think that's why they want to do like really, really well." (Participant 9);

"I'd know that like that means that it'd be good for me in the future ... Because it'd mean I'd get a good job that'd pay well and stuff." (Participant 16);

"Just 'cause it means I get better opportunities to get into better universities and I can have more choice of where I go and stuff." (Participant 14).

Positive feelings about achievement were occasionally described by participants.

"But in like the mock Prelim, because I went back to school just as we were doing them, em, when I got mine back I got 100%. Em. I don't know, it just felt really like, I don't know, it makes me feel happy and like I've succeeded in something I think." (Participant 11);

"Yeah I'd feel proud, I'd feel really happy" (Participant 16);

"Like impressed with myself. Em. Happy about it, happy with myself I did it. Em. Glad, yeah." (Participant 6).

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However, these feelings were described as often fleeting and quickly forgotten following the immediate pursuit of a new level of achievement.

"I'll always feel like if I can, you know, if I step on the scales and I lose a pound then I'll be happy but then I feel like "right okay, lets lose another pound"." (Participant 14).

The pursuit of the next achievement can even prevent them experiencing any positive affect from their current achievement.

Researcher: *"How do you feel when you do accomplish something?"*

Participant 16: *"Em. I feel the need to move on accomplish something else. When it's done I need to do something else after. Like, I always, as soon as I read one book, I start another book or...as soon as I've done like, like say I've done something like set my goal to run 5K or something, then once I've run that my next goal will be stepped up. I always have to have goals to keep going with it."*

Researcher: *"Okay. So, um, so you kind of maybe hit your 5K and you go "okay, now I'm going to do 10K" or something like that?"*

Participant 16: *"Yeah."*

Researcher: *"Umm. What about before you've even thought about like what the next goal is. Do you ever kind of stop and just experience the fact that you've accomplished that?"*

Participant 16: *"Not really.""*

In their discussions about achievement, participants often used negative language (e.g. "sad", "disappointed", "annoyed", "frustrated", "stressed", "scared", and "angry") to describe their feelings about non-achievement or failure.

"...makes me feel like giving up on other things. I just feel really sad or something. Like, disappointed in myself." (Participant 16);

"Just feels like quite sad and makes me feel like I can't really do anything right." (Participant 14);

"Em, I was annoyed with the 85%, I was really mad with the 85% 'cause in some of the other Maths tests we'd done I was getting 100%. Em, so I was annoyed with the 85% ... Because I know I can do better and should have done better." (Participant 2);

"Frustration I would say 'cause it's like I think I've done well at something but then it turns out it's not well enough so it is really frustrating." (Participant 14);

"I was scared of that. I was scared of like not achieving." (Participant 4);

Researcher: *"When you fail, like, how do you, kind of, react to that when you feel like you've failed?"*

Participant 15: *"I get very, very angry at myself. "*

Researcher: *"Mhmm?"*

Participant 15: *"Yeah and agitated and upset sometimes. Makes me just angry at myself."*

Researcher: *"Why do you think you get so angry with yourself?"*

Participant 15: *"Because it's my fault for ruining it so I should be angry at myself."*

In general, the participants explained that any external pressure to achieve was a general effect of the environment they have grown up in rather than expectations of specific influential figures in their lives (e.g. a parent or teacher).

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"...it's just how I've grown up and how I've been raised as that. Achievement is really important so I feel like that's kind of going to stick with me for quite a while." (Participant 14).

That being said, some individuals described a desire to make their parents or family proud, something they said they thought would happen subsequent to their own achievement. Further questioning revealed that the potential familial pride at achievement had not been communicated explicitly by the family to the young person, but instead resulted from past exposure to apparent parental pride following the achievement of either the young person themselves or a sibling.

"Like, my sister has only ever got straight 'A's in all of her exams and she's a law student and she's just got a job at a law firm and stuff and like she has all these things to achieve and she, like, she really goes for everything. Like, she's signed up for like seven different sports and three different clubs and she's captain of the ski team and the hockey team and she's just like, you know, she just achieves a lot of things and I see how proud my parents are of her so it kind of makes me want to show them that I can do something." (Participant 14).

Relatedly, participants from this study expressed a desire for their achievement to be acknowledged by others.

"I need people to see my achievements." (Participant 4).

These participants explained that acknowledgement gives validity to their achievement and all associated outcomes. Lack of recognition of their achievements led these individuals to question the point of such achievement. In the instance of her school not acknowledging her achievement in a skiing competition, one participant explained:

"It feels like kind of disappointed because, 'cause I work really hard at my ski-racing and I was really like proud of how I did and my family were really proud and I kind of wanted like the school to know about it so that they could be proud as well. But then they kind of just completely ignored it and then made me feel bit like it was a bit pointless like kind of...undermined everything and it just made me quite upset and felt like

it wasn't actually that important 'cause they hadn't said it was important. So, yeah, it was quite upsetting." (Participant 14).

The participants explained that sacrifices are sometimes made in their quest for achievement. For example, one participant explained she invested a lot of time in the pursuit of achievement in her dancing.

"Well, it varies from week to week but typically...like the scheduling last year was Wednesdays after school until whenever and then had an hour break to go home, get my dinner and then two hours after that. Thursdays, em, for a while I was teaching for, em, two and a half hours after school and then dancing straight after for three. Em, Fridays teaching for three hours. Saturdays...em, sometimes teaching, also had competition class for an hour, could be...could be a couple of hours if I was teaching a routine to someone else, em, and then she'll throw in extra classes sometimes on Sundays or Tuesdays or we have shows. That kind of thing." (Participant 2).

Conversely, if they felt they were unable to achieve or felt achievement would involve too high an investment of their time, some participants explained that they may actively avoid or withdraw from certain situations. In her explanation of why she now chooses not to participate in swimming galas, one participant highlighted time waste and anticipation of failure as reasons for her decision.

"...it felt...like a bit of a waste of time ... And I think and all this kind of just that wasted time was like the time I was in the gala ... I didn't like galas because it meant that I might not achieve..." (Participant 4).

Another factor that was described as influencing engagement with or enjoyment of situations lies in the ambiguity of achievement in that situation. For example, ambiguity of achievement in social settings led one participant to withdraw from this domain.

"...I just shut off completely and for a while I didn't really talk to anyone I'd just read on my own at breaks and just it felt just impossible." (Participant 2).

6.4.3.2 Order

A second core theme identified from the interviews was that of “Order”. This followed frequent description of perfectionism by the participants as a need for some form of Order, whether that be through organisation, neatness, tidying, planning, or timetabling.

“Researcher: *“Have you ever heard the word perfectionism?”*”

Participant 15: *“Mhmm.”*

Researcher: *“What would that mean for you? It’s something I’m quite interested to know a bit more about.”*

Participant 15: *“Like everything just the way it should be. Like, everything like in its place and working as it should be and tidy and clean and all nice.”*”

The majority of participants in this study revealed a preference for neatness and order, be that in their personal space (e.g. bedroom), physical appearance, or such things as handwriting, which they attributed to their perfectionism.

“Yeah, I think, well, I think maybe I always had the slightest bit of Miss Perfectionist because I’ve always been, like I said, really neat, really neat.” (Participant 14);

“Like I try and keep my bedroom like exactly like in order.” (Participant 13).

Interviews identified perfectionism as wanting everything to look “right” and highlighted a need to fix anything that did not.

“...it would really bug me for like the rest of the day and I wouldn’t be able to just sort of leave it and just sort of forget about it. I would have to fix it ... It would make me feel quite upset like just a bit disappointed as well and just it would kind of, I wouldn’t really be able to get on with the rest of my day very much because I would just be thinking about that bit of writing.” (Participant 10);

“Researcher: *“I’d be really interested to know from your point of view, like, what actually do you think perfectionism is?”*”

Participant 12: *“It’s making sure everything looks right. Don’t know. It’s just... Like, say you drew a line that wasn’t straight but most people would think it was fine because it was just a little bit off like you’d have to fix it so it looks perfect.”*”

The Order theme was also shown in description of planning behaviour. Many of the participants described detailed organisation of their everyday life through plans and timetables they set themselves.

“I prepare for things or study or I think things out and make lots of lists and stuff. When I go on holiday I read books or like make lists or a plan or I think about things a lot to make sure they’re exactly the way I wanted them.” (Participant 16);

“It’s day-to-day really, like, I like to plan ahead. So like today I will have already planned the next day and the next day kind of thing. Just so I know what tomorrow’s going to involve kind of thing.” (Participant 11).

Disruption of any plans or timetables previously made by the participants was said to be very stressful for them.

“...in the mornings and stuff I like to leave my house at the same time and stuff and I try to leave it... The thing is it’s like random times, it’s never like...like if my mum and my stepdad say “we’re going here” then I say “ok we have to leave at this time”. And if it’s like later than that – or earlier I’ve tried as well – I get like stressed because I feel like the whole day I’ve planned is ruined kind of thing, even though it’s not, it’s just a bit later. And I can see that when I say it but actually at the time of it happening it stresses me out. I don’t mind being early for things. I like to be early but I hate being late for things. It gets stressful.” (Participant 11).

In general, failure to achieve Order was described with language reflecting negative feelings, such as, sadness, disappointment, stress, and anxiety.

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“Well I just feel really bad inside ... It would make me feel quite upset like just a bit disappointed as well...” (Participant 10);

“...I think I'd get a bit stressed if everything was out of order, I couldn't read the notes and stuff like that ... I get quite stressed if like someone I'm sitting next to in class is really messy.” (Participant 14);

“Just the fact that I would just feel disappointed in myself just because I would think “why didn't I change that? Why didn't I make that neater?” And I would just be disappointed and think that my work wasn't good.” (Participant 10);

“I like to plan the way I'm going to do things and if they don't go to plan then I don't feel okay with that ... It makes me anxious.” (Participant 11).

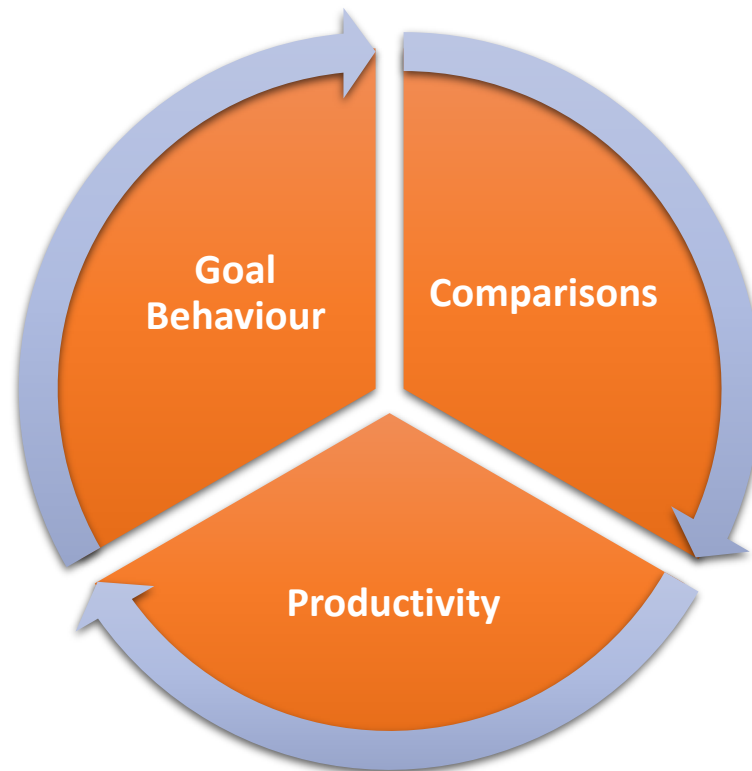
Beyond the emotional experiences highlighted in their descriptions of Order, some participants felt that Order helped them prevent change.

“I suppose I like to plan so that change doesn't happen...” (Participant 11).

On the other hand, some very practical benefits of Order were discussed by participants:

“I think it's just like so I know where everything is and I don't need to look around for it.” (Participant 13);

“If I don't organise it then I won't get it my own way so I organise things quite a lot.” (Participant 16).

Figure 10. *Underlying mechanisms of adolescent perfectionism.*

6.4.3.3 Goal Behaviour

In the interviews, participants frequently described their behaviour in terms of goals, tasks, aims, or targets, a theme which is termed here as Goal Behaviour. This theme was described across many life domains, including, academia, hobbies (e.g. sports, dancing, reading), and health (e.g. weight management, food intake, exercise).

“So I wish I could definitely get back into it [running] and do some more kind of races and stuff. Obviously in my studies at school, I want to pass my tests for those so...because I’ve got my prelims next year so hopefully I’ll be able to do all them. Goal to recover obviously and get out of here, kind of get back to the way I was kind of before.” (Participant 14);

“Well, I mean, I suppose I’d set targets for myself when I was doing running...” (Participant 12);

“I do...when I used to do my gymnastics I used to set goals for myself and then spend most of the time working on that...” (Participant 7).

It emerged that much of the participants’ lives depended on Goal Behaviour in a variety of domains. Overall, the individuals described a belief that these Goal Behaviours motivated them to improve themselves compared to their current or past situation.

“...if I didn’t have high goals I would just not bother with things. So like, to motivate myself to do things.” (Participant 8).

The participants described setting goals following comparisons with other people (a process that is elaborated on in a later section). Following setting the goal, participants explained that they may rely on timetables, a feature of Order, to reach their desired goal.

“Make like timetables and stuff ... the times that I’m going to do like revision for each thing and then like times for breaks and stuff.” (Participant 12).

They also described exerting a lot of effort in working hard towards their goals (described in a later section).

6.4.3.4 Productivity

Across the interviews, participants often described themselves as busy people who constantly feel the need to be productive, as people who are constantly doing or thinking about things, and as people who work hard and put effort into numerous aspects of their lives. This desire to be productive was described alongside a dislike for relaxation or less productive days.

“I just kind of like getting out and doing things. I hate being stuck in the whole time, that’s why it’s hard when I’ve been in here because you’re stuck in for the whole day. So, like, for something to do, I hate just sitting down and yeah...I need to be out doing something.” (Participant 16);

"I'm quite a busy person. Like, I don't think I'm ever like totally like chilled out. I'm always like doing stuff ... Just like there's always like 1000 things going on like in my head so I'm always just like...I wouldn't just watch T.V., I'd watch T.V. and do something else at the same time. If you know what I mean? So, yeah. And I've just always been like that. Like as a kid I would always have like 1000s of activities going on." (Participant 8).

These experiences have been categorised as another core theme, Productivity. The participants highlighted the role of productivity within perfectionism in their explanation that being productive and working hard would result in positive outcomes, such as, becoming perfect, better, or the best, achieving goals, and improving feelings of self-worth.

"I was working towards getting myself to this fantastic person then I felt great. I felt like I was getting somewhere. I felt...when I got to that point it was just so great." (Participant 4);

"You feel like you're doing something worthwhile, you're making good use of your time, finding something new...doing...yeah kind of bettering yourself." (Participant 2).

Being productive was described as being important for self-worth, as highlighted in this exchange:

- | | |
|----------------|---|
| "Researcher: | <i>"And why is it so important to be doing something productive?"</i> |
| Participant 2: | <i>"Otherwise you just...personally I just feel like a waste of space like I'm not worth anything."</i> |
| Researcher: | <i>"So it's kind of linked to your worth?"</i> |
| Participant 2: | <i>"Yeah."</i> |
| Researcher: | <i>"Em, so, how would you define how worthy a person you are? What comes into making you a worthy person ... for you personally?"</i> |

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Participant 2: *"I guess I feel like I...I need, I do need to be constantly hard working and, um, doing things, helping people, being productive."*

It also helps them avoid unpleasant outcomes.

"I remember I used to get like awful reports and it used to be really scary in the house and just...so I didn't...I guess I didn't want that again. Em which is why I worked really, really hard. I mean, harder than I've ever worked before for these exams." (Participant 5).

At times, potential negative feelings following non-achievement could be negated by these young people thinking that they worked as hard as possible. For example, a less than perfect exam mark may not impact on the young person's emotional state if they felt they had put in as much effort as possible studying for it.

"Yeah, like, if I try my hardest then even if it doesn't go that great, I can still say well I tried my hardest at something." (Participant 14).

Failure to exert effort towards something was described as leading to negative feelings.

"Well I'd be kind of upset and disappointed in myself that I didn't work hard enough." (Participant 6).

Being physically productive was often described as a way to help these young people distract their minds from constant thinking and as a way to enable their minds to relax.

"Just kind of keeps your mind off things if you've got stuff to do ... Well that's kind of why I make a timetable so I don't kind of get stuck." (Participant 12);

"I quite like Maths ... I just feel like it really distracts my mind..." (Participant 10);

"I just like that when you're dancing you're not thinking about anything else so like doesn't matter what kind of day you've had you just like at the dance class or whatever you're just thinking about the dances." (Participant 8).

In line with this high valuation of Productivity related behaviours, the interviews revealed that if an individual felt they had not exerted enough effort towards a goal, they may feel negatively about themselves and that they were undeserving of the outcome.

"I don't like being given things. So I would feel like I would need to do it at a harder level or perhaps not do it because whatever it is I was just being given it and I don't deserve that." (Participant 11).

A less clear point lies in how these young people evaluate their level of Productivity. If they are to value high Productivity, then they need to be able to quantify it. Some participants seemed to inherently know when they were working to full capacity or not, yet others explained that successful goal achievement was the measure of effort. That is to say, they only believed they had been fully productive if they achieved the best possible outcome in a given situation. Any lower than perfect outcome indicated to these individuals that they had not been fully effortful. One participant explained that less than 100% in an exam meant she *"...wouldn't have worked as hard as [I] possibly could."* (Participant 11).

When asked about the opposite of Productivity, the participants indicated a dislike for or difficulty with relaxing. Activities that may typically be considered relaxing (e.g watching a film, meditating) were viewed as boring by these young people; they would rather be doing something productive with their time.

"Like, I do think I find it easier than I used to but like I still don't...I still like making sort of plans for each day like I don't like having a whole day where I'm doing not much but I don't mind in like small bursts like doing nothing." (Participant 8);

"...my mum would be trying to get me to go to bed and stop and relax and I couldn't, not until I'd finished and [the project] was done perfectly, I couldn't relax." (Participant 2).

6.4.3.5 Comparisons

Participants in this study expressed a recurrent tendency to compare themselves to other people. Comparisons were described as being made between the individual's own and others' achievement or abilities in such areas as academia, appearance, athletics, and eating disordered behaviours. The comparisons were described as constant and ongoing.

"I suppose in some ways I've always compared myself to people. Like, I find it difficult not to ... I compare myself in looks every single day. Every...like almost...like I compare myself to at least 15 people in the first 2 hours of my morning. I would, if I was walking down the street and I saw someone and they had long skinny legs, compare them ... So that you know compare and compare all the time ... So I'd just compare myself over and over and then I'd build all that up and it would just keep ticking over ... I compare myself a lot to one of my best friends who looks like a model, who is very skinny, who umm does a lot of exercise, and who is just generally and is very, very smart. Like all of the things that I wanted to be." (Participant 4);

"Yeah, well, definitely with my eating disorder I always compare myself to people. Like, I'm always asking my mum like "am I skinnier than her, am I skinnier than her" and my mum's always saying "stop looking at other people" and I always try to look at each other, like, other people in the mirrors and stuff. Like, I don't mean to, I just do it. And em, I see one girl walk past and I'll think like "oh I wonder if I'm skinnier than her" and I'll ask my mum and she'll like she just doesn't answer now. Em. But yeah, always compare myself to other people." (Participant 14).

Some participants explained that they feel the comparisons are particularly triggered by feelings of inferiority or inadequacy and may be less pertinent when they already feel they are the best at something.

"Like, if they're doing really good at something and I feel as if I'm not doing as good. Em. I compare myself like that quite a lot." (Participant 13);

"I felt like when I was that good I didn't even need to compare myself against anyone 'cause I was the best. Like, I was who I wanted to be, not

who I was comparing myself against, if you see what I mean?"
(Participant 4);

"I've always compared myself to other people ... like if I can't get something right..." (Participant 9).

The participants in this study wanted to be able to judge themselves better than, or at least as good as, other people. Unfortunately for these young people, the process of comparisons often leads to them viewing themselves in a negative light.

"I kind of always compare myself with like everyone and I always comes out as like less than other people. Like if someone's done something, I don't know, I always find a reason why they're better. I don't know why."
(Participant 1).

Comparisons were described as leading these participants to feel a range of negative emotions, including sadness, annoyance, and stress.

"I would just compare myself to her and I would get really upset about it." (Participant 14);

"So, it upsets me when there's someone who's working harder than me."
(Participant 11);

"Makes me feel really annoyed that I can't like get as good as them."
(Participant 13).

"There's one boy in my year who, he always seems to beat me. Like, I've only beat him a few times but he, he's like me in the sense that he works really hard to get what he wants and we're always coming in the top, kind of, the top. And it's always like, he always says to me, like, it's always just that 1% that he did better than me and it annoys me so much!" (Participant 11);

"I don't know, like, it does stress me out because I feel like I do have to prove a point to him and get better than him." (Participant 11).

Issues arising from comparisons can negatively impact on a young person's performance, as was the case for one participant during swimming galas:

"[I] compared myself to every single other person and I couldn't do it and it just beat me down." (Participant 4).

Another participant found comparisons to have a very detrimental effect on her attempts at recovery from her eating disorder.

"So, I've kind of started just comparing myself to other people ... certainly in the inpatient unit, I was always comparing myself to other people and that was one of the reasons my discharge got pushed really quickly. Like, I only got pass a week ago and then within a week I was discharged and that was because I was comparing myself to, like if there was a new girl that also had an eating disorder I would just compare myself to her and I would get really upset about it because I would be like "she's more unwell than me" so yeah." (Participant 14).

6.4.4 Relationships between Underlying Mechanisms

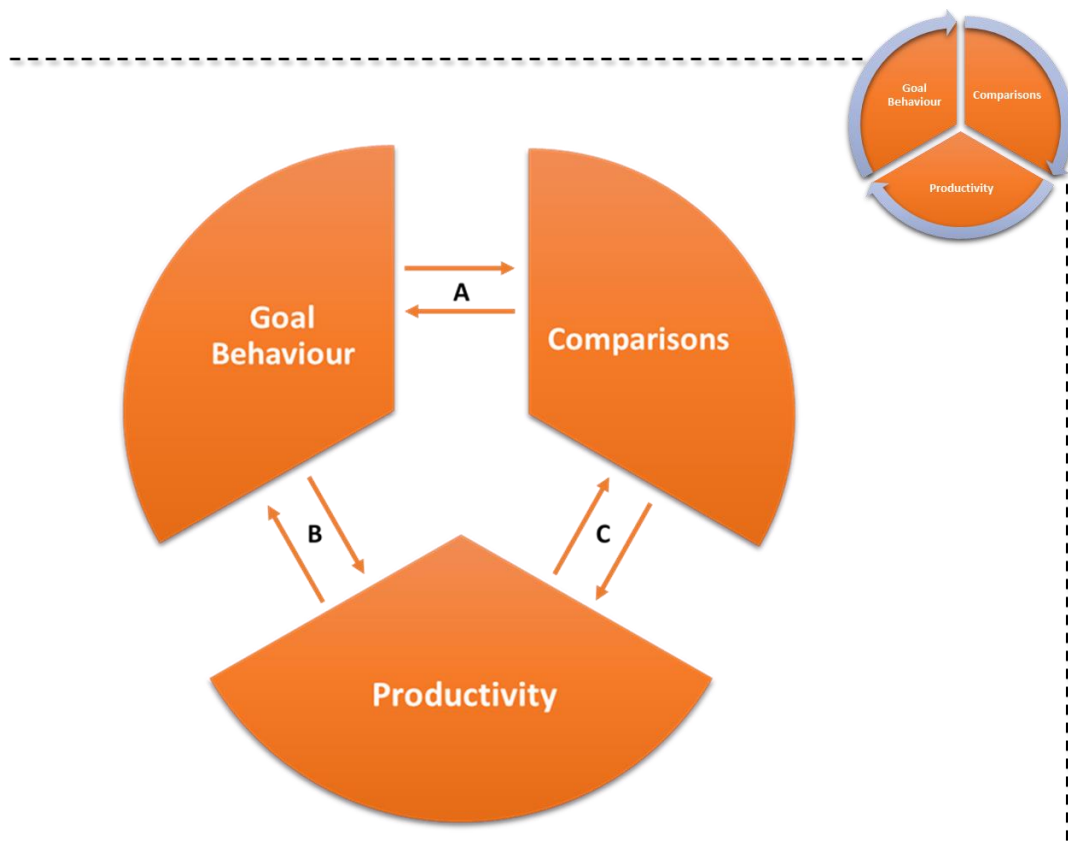
The above sections have outlined each sub-theme individually as described during the interviews with young people. This next section tentatively presents relationships between three proposed underlying mechanisms of perfectionism – goal behaviour, comparisons, and productivity. The relationships are displayed in Figure 11.

6.4.4.1 Comparisons and Goal Behaviour

In the interviews, participants explained that by comparing their behaviours and abilities to people around them (e.g. friends, classmates, siblings, etc.), they were able to determine what goals to set. They described setting what they perceived to be equal or more challenging goals for themselves based on these comparisons.

"Well, normally I find my goals from seeing what other people are doing ... I like see what other people can do and then sometimes I think "oh that looks quite good, I want to try that" and then I work on it for a while." (Participant 7);

"I think just by comparing myself to other people it allows me to do better at things. Like, if say I did really well in a test but then I found out that one boy in the class has got 2 marks above then I can try like I can set a goal to do 2 marks better next time." (Participant 14).

Figure 11. Relationships between underlying mechanisms of adolescent perfectionism.

6.4.4.2 Productivity and Goal Behaviour

The participants described working hard towards their goals and also described an awareness of the necessity to be productive for the attainment of their goals. A high level of productivity, hard work, or effort appeared to be a key method employed by the participants in their goal behaviour.

“I still think to myself “well I have to keep trying” because that will hopefully get me there ... I sometimes give up but not often. Like, I try as far as I can and then I eventually do get it.” (Participant 7);

“Em, ‘cause of like for my grades and things like that like you need to work to get them ... so yeah it would be good to like, like to work hard to get my, like, good results for my exams.” (Participant 9);

“Just working really hard, em, and studying really hard in school so I can get good grades...” (Participant 14).

6.4.4.3 Comparisons and Productivity

Constant comparisons with other people was described as driving the intensity of productivity engaged in by the participants. If they perceived themselves to be working less hard compared to a peer, then they increased their productivity level.

“... comparing myself to people was a kind of like drive to get me to that point so like it was just like little reminders all the way like “look at that person, they can do this, why are you doing that” you know so “work harder!” And then like I would work harder and harder...” (Participant 4);

“...I need to work harder to get better than him but then he’s also working harder to get better than me so we just go around and, do you know what I mean?” (Participant 11).

6.4.5 Markers of Achievement

Participants varied in what they spoke of as markers of achievement, revealing a fluidity between the underlying mechanisms. Some participants described the explicit measurable outcome of a goal as the determinant of whether they have achieved. This was easy to do in such life domains as academia where they might be awarded a particular grade to reflect their achievement.

“I’ve managed to get full marks on a test.” (Participant 13);

“I like 100% in everything. Em. If I don’t get that I don’t really feel like I’ve succeeded” (Participant 11).

It was more difficult for participants to assess their achievement in domains such as their social life.

Participant 2: *"...nobody can know everything but kind of knowing...knowing when to stay out of things, when to...when to make social contact, what type of social contact to make, that kind of thing. And if you do the wrong thing it's like putting the wrong answer on a test."*

Researcher: *"Do you find the social more difficult?"*

Participant 2: *"Yeah."*

Researcher: *"Em, and I suppose when you're at school or at dancing you're also assessing you know your performance there, do you find that easier? "*

Participant 2: *"Em, school and dancing and things...yes 'cause it's clear cut. At school you've got grades and tests and stuff and exams, dancing you've got exams, you've got competition results, so it's easier definitely."*

Researcher: *"And then your social life you don't necessarily have grades or ..."*

Participant 2: *"No. It's kind of down to you to judge. Yeah.""*

Another way in which participants measured their achievement was in terms of how productive they were. In this perspective, failure to achieve the desired measurable goal outcome was still described as achievement by the individual if they viewed themselves as having worked to the highest level they possibly could have; the productivity itself was described as an achievement.

"Yeah, like if I try my hardest then even if it doesn't go that great, I can still say well I tried my hardest at something." (Participant 16);

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“Well if I was like trying hard it would make me feel like I was achieving something, like I achieved something. If I didn’t, I would feel a bit disappointed in myself and say “why didn’t I try harder?”” (Participant 10).

The divide between these two types of markers – goal outcome or productivity level – was not always so clear cut. Some participants described assessing their productivity through goal outcomes. That is, they described non-achievement of a goal as indicating to them that they had failed in terms of *both* the goal outcome and their productivity level. Participant HM expressed this view passionately:

“Researcher: *“If you worked and you were absolutely certain you had worked as hard as you possibly could and you still only got 70%...”*”

Participant 11: *“Then I wouldn’t have worked as hard as I possibly could.”*

Researcher: *“Okay. Why? Surely, if you’ve like done everything you possibly could...”*”

Participant 11: *“I feel like I obviously haven’t if that’s what happened, kind of thing. Like...I’ll say like “Oh I didn’t...” like if I fail something, my Prelims, I came out, I got really nervous when we were in the exam hall and for a lot of them I had kind of mini kind of breakdowns right before them because I really didn’t like the whole exam hall setting and like the whole invigilators walking around and stewing the whole time. It made me feel really uncomfortable because I was like “why are they staring at me, am I doing something wrong?” and it kind of put me off doing my actual exam because I was so stressed about what happened around me so I’ll say “well that was my fault for failing because I didn’t focus” and obviously I didn’t work hard enough because I didn’t focus and I needed to focus. So, I feel like if it’s a low score there must be a reason why because everybody can do well.””*

6.5 Discussion

The current study explored perfectionism through the accounts of a sample of adolescents with a current diagnosis of an eating disorder. The majority of the participants in this study referred to themselves as perfectionists, while a minority did not identify themselves as such, despite exhibiting many perfectionistic characteristics. This was similar to the finding in a recent grounded theory study of perfectionism in adults with anorexia nervosa that a minority of perfectionists do not identify with the term “*perfectionist*” (Petersson, Johnsson, & Perseius, 2017). Using grounded theory methodology, an emerging model of perfectionism in this young clinical group was identified, one which encompassed themes of Achievement, Order, Goal Behaviour, Comparisons, and Productivity.

The adolescent participants described perfectionism as presenting in a manner that was conceptualised by the researcher as falling into one of two themes – Achievement and Order. These themes of perfectionism are similar to key perfectionism themes of Top Performance and Order, which were recently identified in the adult perfectionism study conducted by Petersson et al. (2017). If we first consider the Achievement theme, we can see through their descriptions that these adolescents’ perfectionism clearly relates to a desire to achieve highly in various areas of their lives, as was seen in the Petersson et al. (2017) qualitative study of adults. This theme appears similar to many current conceptualisations of perfectionists as being individuals who aim to perform highly and to achieve success in their relatively high ambitions (Lo & Abbott, 2013). Indeed, this type of conceptualisation of perfectionism has remained central to many theoretical models of perfectionism from the early pathological accounts (Burns, 1980; Hamachek, 1978; Hollender, 1965; Pacht, 1984) through to the widely accepted multidimensional accounts of the early 1990s (Frost et al., 1990; Hewitt & Flett, 1991b). Specifically, the

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common dimension of perfectionistic strivings, seen in many current conceptualisations, seems to be represented well here by the Achievement theme. In the current study, Achievement was described as being highly valued by the participants and by others around them. This finding is similar to a retrospective finding from a qualitative study of adult anorexia nervosa patients that, during adolescence, perfectionism was influenced by the demanding achievement ideals of society (Nilsson, Abrahamsson, Torbjornsson, & Hagglof, 2007). Interestingly, in contrast to an adult-focused study suggesting fear of failure to be the primary motivator for striving (Riley & Shafran, 2005), the adolescent participants in the current study described internal drive and a desire for a good future as being important motivators for their Achievement focus. Given the social context of adolescent development, it seems natural that the adolescents would be exposed to achievement-oriented preferences. For example, all of the participants had attended school where they were informed of the importance for performing well academically (i.e. had the value of achievement reinforced by their teachers). Explanations of achievements being beneficial to them for their future were given and occasional feelings of happiness in their success were described; however, these positive outcomes from achievement were typically described as short-lived, with the participants' focus instead shifting to the pursuit of the next possible achievement. Overwhelmingly, despite any potential positive outcome resulting from achievement, the adolescent participants employed predominantly negative language in their accounts of achievement-oriented experiences. From sadness to anger, from disappointment to frustration, the participants revealed a range of negative affective experiences associated with this element of their perfectionism. Such emphasis on negative emotions may highlight the impact perfectionism has on the wellbeing of these young people, despite achievement-focus often being viewed as an adaptive phenomenon by others in their lives (e.g. teachers, parents). Perfectionism was explained as playing an important role

in their sense of self-worth, as has been suggested by clinical conceptualisations of perfectionism (Shafran et al., 2002). Given the incidence of onset of mental illness in adolescence, the role perfectionism plays in affective experience is perhaps a crucial consideration that warrants further investigation. Beyond their internal desire to engage in achievement-oriented tasks, the participants described a desire to make other people proud as a driving factor in their achievement-oriented behaviours. Further, these participants wanted their achievements to be acknowledged by others and felt that if this did not occur then their achievement was undermined. This finding is supported by other qualitative research that similarly found adults to describe gaining approval from others as being particularly important for their perfectionism (Petersson et al., 2017). It is worth noting, however, that while this finding was conceptualised within the perfectionism framework, it mirrors a reflection made by adults with anorexia nervosa that they had a desire during adolescence to receive more attention from their parents (Nilsson et al., 2007). Thus, the need for approval or acknowledgement may be characteristic of anorexia nervosa rather than perfectionism. Finally, Achievement was described as requiring a great investment of time, with tasks that were perceived as requiring too great a time investment or those in which the measure of achievement was ambiguous leading the young person to avoid the situation altogether. Given the relatively lower life experience and cognitive maturity adolescents have compared to adults, perspective taking may be poor and feed into these avoidance behaviours. This point is even more relevant for this clinical group, with eating disorders leading to cognitive impairment or delay (Tchanturia et al., 2005).

The Order theme represents a less consistently conceptualised element of perfectionism. While some current conceptualisations do consider orderliness to be a component of perfectionism, there is less agreement about the precise role it plays and it is often excluded from theoretical models or measurement. For example, the FMPS does

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comprise a subscale Organization, yet the authors do not incorporate this subscale into the overall FMPS perfectionism score following structural issues with this subscale. The Sport Multidimensional Scale-2 (Gotwals & Dunn, 2009) was modelled on the FMPS (Frost et al., 1990) and elected to include a subscale of Organisation, reflecting on *"...athletes' tendencies or desires to establish and implement plans or routines that dictate their behavior prior to and during competition in their primary sport"* (p74). In this study, a strong element of the Order theme was organisation and planning behaviours, so again the study reflects conceptualisations currently in the literature. Additionally, the current study conceptualised issues of neatness, orderliness, and tidying as falling within the theme of Order. This theme is similar to the perfectionism theme of Order identified in the grounded theory study of adult anorexia nervosa patients, which described Order as comprising orderliness and cleanliness (Petersson et al., 2017). Beyond a preference for facets of Order, the adolescent participants in the current study described a *need* to fix anything that was not, in their view, orderly. Disruption of Order in areas such as neatness or visual order can easily be rectified; however, disruption of plans or timetables is not always rectifiable. Any failure to maintain Order was described, similarly to failure in Achievement, using predominantly negative affective language, again highlighting the clear potential for a strong association between this feature of adolescent perfectionism and emotional consequences. Perhaps due to the difficulty in aligning Order-related phenomenon with other more Achievement-related issues, this facet is often discounted from current perfectionism models. The results of this study, alongside other emerging findings in both qualitative and quantitative perfectionism literature, strongly suggest that Order should be incorporated in a model of adolescent perfectionism to encapsulate the full experience of perfectionism in this population.

The identification of a trio of underlying mechanisms of perfectionism in this study was of particular interest. Each theme – Goal Behaviour, Comparisons, and Productivity – as

well as reciprocal relationships between them were frequently described by study participants in their reflections on perfectionism. While high or excessive goals have been referred to in past pathological perfectionism theories (Burns, 1980; Pacht, 1984) and the relationship between perfectionism and goals in sport has been addressed (Madigan, Stoeber, & Passfield, 2017), the current study suggests that goal behaviour is more general than this. The adolescent participants described much of their behaviour (i.e. not task-specific) as being directed by goals. This was not limited to aiming for high goals and was interpreted by the researcher as indicating a more general tendency to act in relation to goals across numerous life domains. The participants described setting goals for many aspects of their lives that dictated how they performed in a certain situation. Ultimately, this behaviour was described in line with their perfectionism, with goals being set to help motivate improvement and attainment (linking to Achievement) and goal behaviour at times relying on timetables (linking to Order).

In line with past theory, the participants in this study identified themselves as engaging in high levels of Productivity. Through analysis, it appeared that the participants' references to "*working hard*" was an example of them being productive and so was categorised within the theme of Productivity. Productivity was described as playing an important role in the participants' ability to achieve goals, attain perfection, and improve feelings of self-worth. This finding is very much in line with the suggestions of Burns (1980) pathological model of perfectionism, which linked productivity and achievement were described as definitive factors for an individual's self-worth. A protective feature of Productivity was its ability to negate negative affect following the failure to achieve a desired goal. Low or non-productive activities were described as boring by these participants who used negative language in their accounts of such activities, explaining it can lead to sadness or disappointment. Conversely, being productive was described as being mentally relaxing for these participants – a point clinicians may need to account

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for in their therapy with eating disordered adolescents who may be required to focus on lower productivity activities to reduce energy expenditure.

An interpersonal element of perfectionism, which was identified in this study, was termed Comparisons, a theme highlighting the adolescent participants' tendency to compare their abilities and achievements to that of others around them. Without objective standards for assessing the adequacy of one's own abilities, people can be driven to compare themselves to others (Festinger, 1954). People tend to want to be as good as or better than their peers and so will often compare themselves to others who share similar attributes, such as, age, background, gender (Goethals & Darley, 1977; Kelley, 1967). In this study, participants described comparing themselves to peers in this fashion and further explained that their inclination to compare themselves to others was amplified in cases where they felt inferior to them. This identified theme of Comparisons seems to fit well with social comparison theory yet is not currently featured in any perfectionism theory in the literature. It may represent a unique feature of adolescent perfectionism or a feature of perfectionism that has been overlooked by previous studies. Currently in perfectionism literature, the only recognised interpersonal concept is that of perfectionistic self-presentation, the interpersonal expression of perfectionistic behaviours (Hewitt et al., 2011; Hewitt, Flett, Sherry, et al., 2003). The findings of this current study propose Comparisons to be a further interpersonal element of perfectionism. Of note, however, women with eating disorder symptomology do appear to engage more in social comparisons than healthy peers do (Corning, Krumm, & Smitham, 2006). Given the current sample, it is possible this theme of Comparisons is somewhat reflective of eating disorder pathology rather than perfectionism exclusively. Participants described Comparisons with predominantly negative language, describing feelings of sadness, annoyance, and stress resulting from the comparisons. While this theme of Comparisons may not necessarily be unique to

adolescent perfectionism, its role in perfectionism during this time may be crucial in both identity development and mental wellbeing. Further, it may help us to understand interpersonal behaviours of perfectionists, such as perfectionistic self-presentation.

6.5.1 Methodological Strengths and Limitations

A unique strength of this study was its methodological approach to exploring perfectionism. The current perfectionism literature predominantly features quantitative research involving psychometric perfectionism measures. As discussed previously, electing to study perfectionism in adolescents using measures that were developed in adult populations risks oversight of issues pertinent to the developmental context of adolescent perfectionism. Furthermore, current perfectionism theory appears to have been largely driven by the development of these psychometric measures, risking an insufficient conceptualisation through specific focus on the strength of the measures rather than the accuracy of the theory. The methodological approach of this study enabled the researcher to approach perfectionism in adolescents with an open mind, constructing a theory in line with the actual experiences of the individuals, whilst maintaining a methodical and transparent approach to the data collection and analysis. This differs from anecdotal or clinical accounts currently in the literature in that the data was meticulously recorded and analysed with researcher influence and bias being intentionally monitored throughout. The developed model of perfectionism incorporates real-life experiences and perspectives of perfectionism in adolescence while ensuring rigorous research technique and analysis.

Despite the strengths of this study, limitations should also be acknowledged. Grounded theory research is not designed to be reliably generalizable to wider populations and so it is important to note prevalent characteristics of this study's sample as they may have influenced the findings. Beyond sharing a diagnosis of an eating disorder (majority

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anorexia nervosa), the participants were also predominantly female, high functioning, educated, Caucasian, English-speaking, and living with at least one parent. Additionally, all participants were recruited through services based in NHS Scotland, a publicly funded national health care system in Scotland, UK. Any and all of these variables may have influenced the data in this study and thus the findings must be interpreted with caution by clinicians and researchers working with patients from different populations. The issue with limited generalisability of the findings, however, was considered a legitimate price to pay for the development of an empirically driven theory that is intimately tied to the phenomena of perfectionism in adolescence (Rennie, Phillips, & Quartaro, 1988). The detail obtained by this study is often lost in large-scale empirical work and, as well as helping to expand the theoretical view of perfectionism, may present particular benefit to the development of psychological interventions for adolescents.

Difficulties in recruiting this population were evidenced by the relatively low recruitment rate (35%). Assertive tracking was employed to follow up on all initially identified suitable candidates for the study, with non-responders being contacted at regular intervals until a final positive or negative response was attained. Patel, Doku, and Tennakoon (2003) describe a 70% response rate as being generally considered good for providing a representative sample. The response rate of the current sample was half the recommended, however, as discussed above, generalisability of the results was never an anticipated outcome from this study. Still, it is worth noting some of the key issues with recruitment faced by the researcher so that future research can plan a strategy to deal with such issues. During the course of recruitment, some young people who initially met study criteria later failed to do so (e.g. alternative diagnosis) and some were judged by their clinician as being cognitively incapable of providing consent or too unwell to participate. It is possible that suitable participants were excluded from the study due to clinicians' subjective opinions regarding participation in research and it is recommended

that future studies design objective criteria for determining capacity and health levels prior to the study. The research design relied on young people being open to discussing personal experiences with the researcher. While thorough consideration was given to developing an ideal social dynamic between the researcher and participants (e.g. rapport building, participant led discussion), issues of adolescent social development (e.g. embarrassment with disclosure, adult-adolescent power balance) may have played a role in both the recruitment and successful data collection. Personal characteristics of the researcher (e.g. gender, age) may have influenced the process, as well as the identity with which the young people assigned the researcher (e.g. researcher or student or clinician). In future, researchers could focus on enhancing collaborative relationships with young peoples' clinicians to improve recruitment rates (Patel et al., 2003).

The specific focus on adolescents in this qualitative study is supported by previous qualitative research, in which adult perfectionists felt perfectionism developed most for them during adolescence (Petersson et al., 2017). Indeed, throughout the interviews in the current study, issues of adolescent development were clear and thus the importance of an adolescent-specific focus was further emphasised. From the language used by participants to express themselves, to the increased importance they placed on social status, to their awareness of important future goals (exams), the context of this study was unique from both earlier childhood and subsequent adulthood. Of particular interest, language development appeared to affect the sophistication of the data, with younger participants in particular using far simpler language to describe perfectionism and associated experiences and older participants being able to explore their experiences of perfectionism in a more complex manner (although often not at the level that may be expected from an adult). Age-related changes in vocabulary count and semantic complexity have been identified during adolescence (Nippold, 2000). The methodological approach of this study enabled me to account for this development in

this population. By allowing the participants to explore their experiences of perfectionism using their instinctual language and thinking processes, the data was less influenced by adult-derived concepts and language. This not only ensured that the emerging theory was developmentally appropriate but also highlighted a weakness of current perfectionism models that may not appropriately account for linguistic abilities across the adolescent period.

6.5.2 Future Directions

The identified model of perfectionism in adolescence needs to be further explored in future research. As previously discussed, grounded theory research is not reliably generalizable to wider populations. This study provides a foundation for future research to expand upon and to test the developed model in a range of differing samples (e.g. depressed adolescents, healthy adolescents, gifted students). This could be achieved through additional grounded theory studies or through the evaluation of hypotheses that may arise from this study's results. For example, the model presented here identifies underlying mechanisms for perfectionistic tendencies – Goal Behaviour, Productivity, and Comparisons. Future research should explore these themes to determine how and why they relate to perfectionism and if they are unique to this particular group or relevant to wider adolescent populations. Alternatively, the findings of this study could be well utilised by researchers developing both prevention (Nehmy & Wade, 2015) and intervention (Wilksch et al., 2008) programmes for perfectionism in adolescents. The model may help inform the overall approach of these programmes and individual themes, for example, the underlying mechanisms, could be addressed through individual programme modules to improve outcomes for adolescent clinical groups.

6.6 Conclusions

Perfectionism as it presents in adolescent clinical populations may have previously been overlooked due to the common use of adult-derived, measure driven conceptualisations of the construct across the literature. This study employed a qualitative technique to rigorously explore perfectionism as it is experienced by adolescents with a current diagnosis of an eating disorder. A model in which perfectionism is described as presenting in two forms, Achievement and Order, and with three underlying mechanisms, Goal Behaviour, Productivity, and Achievement, has been identified in this study. Developmental and clinical issues relating to this adolescent model of perfectionism have been discussed. Clinicians and researchers may benefit from the detail provided in this account of perfectionism in this younger developing population, enabling fuller evaluation of the role of perfectionism in adolescent mental health and development. Specifically, intervention and prevention studies should incorporate the results of this study to augment developing programmes aimed at reducing negative outcomes related to perfectionism in young people.

Chapter 7: General Discussion

7.1 Introduction

This thesis explored the conceptualisation of adolescent perfectionism within the context of mental health problems. It provided a comprehensive analysis of the construct in the adolescent population and insight into the relationship between perfectionism, adolescent mental health disorders, and psychological treatment. In this final chapter, a brief synthesis and reflection on the methodological approaches is provided. Then the findings across the thesis are presented in two sections. First, results regarding the relationship between perfectionism and mental health problems in adolescents are synthesised. Next, findings regarding conceptualisations of adolescent perfectionism are presented and discussed. Implications of these findings for clinical practice are then considered. Finally, key limitations of the thesis are discussed and suggestions for future research are proposed. The chapter concludes with a comment on the thesis' overall contribution to the adolescent perfectionism literature.

7.2 Methodological Approaches in Thesis

In line with recommendations in the literature (Rice & Preusser, 2002), several methodological approaches were taken to assess perfectionism in this population. First, a systematic review was conducted to examine the literature regarding perfectionism in adolescent clinical populations and its relationship with clinical disorders and treatment outcomes (Chapter 3). Following this, a large-scale survey study was conducted to explore perfectionism and mental health risk in the general adolescent population. In

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this study, robust factor analyses of the Child-Adolescent Perfectionism Scale (CAPS) (Flett et al., 2016; Flett et al., 2000) and the Clinical Perfectionism Questionnaire (CPQ) (Shafran et al., 2002) were performed before path analysis was used to evaluate the relative contributions of perfectionism, as conceptualised by these measures, to risk of depression, anxiety, and eating disorders in adolescents (Chapter 4). In consideration of ongoing concerns regarding the suitability of conceptualising and measuring perfectionism in adolescents in the same way as with adults, the thesis then stepped away from previously defined models and explored adolescent perfectionism through qualitative methods. A focus group study exploring clinician perspectives on adolescent perfectionism was conducted to provide insight into the role of perfectionism in adolescent eating disorders and treatment (Chapter 5). Finally, a grounded theory study was conducted to explore perfectionism through the perspectives and experiences of clinical adolescent perfectionists themselves. A novel conceptual framework for clinical adolescent perfectionism was developed in this final study (Chapter 6).

This multimethod approach provided access to adolescent perfectionism through a variety of perspectives: those represented in the literature, quantitative self-reports by the general adolescent population, perspectives of clinicians involved in the care of clinical adolescent populations, and detailed qualitative accounts by adolescent perfectionists themselves. In a field dominated by adult-derived self-report measures, the result of this multimethod approach is an original and rich account of adolescent perfectionism and its role in mental health.

7.3 Perfectionism and Adolescent Mental Health

7.3.1 Eating Disorders

The systematic review and the survey study found evidence of self-oriented perfectionism (SOP) being elevated in adolescent eating disorder populations. For example, adolescents with a diagnosis of an eating disorder, particularly those diagnosed with anorexia nervosa, were suggested to have higher levels of SOP (Castro et al., 2004; Kirsh et al., 2007), with another study suggesting a relationship between disordered personality traits and SOP in anorexic adolescents (Serpell et al., 2006). Conversely, within a multidimensional model of adolescent SOP, the survey study in this thesis found SOP-Striving (SOPS) to have an inverse relationship with eating disorder risk in a general adolescent population. Neither the systematic review nor survey study identified SOP as having detrimental effect on the health of these adolescents. In fact, the inverse relationship found between SOPS and eating disorders may suggest that SOPS serves as a protective factor for adolescents, with those higher in SOPS being less at risk of developing an eating disorder.

In contrast, the survey study found both factors measured by the CPQ, perfectionistic strivings (CPQ-PS) and perfectionistic concerns (CPQ-PC), to be positively related to risk of eating disorders in adolescents. This means that adolescents with higher CPQ-PS or CPQ-PC or both are more at risk of having an eating disorder. The conceptualisation of clinical perfectionism emerged from cognitive-behavioural analyses of eating disorders (Shafran et al., 2002). Indeed, it is stipulated as one of the four core mechanisms underlying eating disorder pathology within the transdiagnostic theory of eating disorders (Fairburn et al., 2003). This result from the survey study provides empirical evidence within a general adolescent sample to support these theories of eating disorders. In line with these findings, the clinicians participating in the focus group study

described increased perfectionism as negatively impacting the health and wellbeing of adolescents with eating disorders. They expressed their perspective that perfectionism interacts with the disorder in a detrimental manner and presents a unique challenge for treatment of eating disorders in adolescents. The clinicians described adolescent perfectionists' awareness of their perfectionism as being an important factor in determining whether the perfectionism led to more or less healthy clinical outcomes for this population. The adolescent participants in the grounded theory study described a reciprocal relationship between their perfectionism and their eating disorder, finding that as one intensified the other would too. They were able to identify some healthy experiences of perfectionism but, overall, these adolescent participants used negative language in their descriptions of perfectionism, alluding to an excess of negative affect and little positive affect associated with perfectionism. Given its grounded theory design, this study could not determine whether the negative tone was an effect of perfectionism or a symptom of the eating disorder. A comparison to adolescent perfectionists without an eating disorder was not made within this study and so this issue remains to be explored by future research.

7.3.2 Depression and Suicide

The systematic review suggested that socially prescribed perfectionism (SPP) was more relevant for adolescent depression. It was found to be positively correlated with dependent depression in adolescents (Freudenstein et al., 2012) and found to interact with medium and high levels of daily hassles to predict the suicide potential of depressed adolescents (Hewitt et al., 2014). Similarly, the current study found SPP to be correlated with depression in the general adolescent population. The survey study then explored the contribution of SPP to depression in this population and found that it did not significantly contribute to the disorder in adolescents. This finding is in line with a recent

study exploring the temporal relation between perfectionism and depression in children (Asseraf & Vaillancourt, 2015). The longitudinal study found that increases in depressive symptoms led to increases in SPP in children rather than SPP affecting depression. So, rather than SPP presenting a vulnerability factor for the development of depression in adolescence, the current results may be best understood as illustrating the impact of depression on adolescents' perceptions that others demand perfection of them.

Two perfectionism factors were shown to positively contribute to self-reports of depression in adolescents. First, SOP-Criticism (SOPC) was found to have a moderate positive contribution to depression. A previous study found a reciprocal relationship between self-critical perfectionism, captured by a compilation of self-report measures, and depressive symptoms in adults over a 4-week period (McGrath et al., 2012). A subsequent 12-month study of the same concepts refuted this earlier finding, instead finding self-critical perfectionism to predict depressive symptoms in adults (Sherry, Richards, Sherry, & Stewart, 2014). The result of the survey study in the thesis supports this latter finding, showing evidence of self-critical perfectionism, as captured by the SOPC measure, positively contributing to self-reported depression in the adolescent population. Taken together, these findings for SPP and SOPC suggest that self-directed criticism presents a greater risk factor for depression in the general adolescent population than perceived pressure to be perfect does. Second, CPQ-PC was found to positively contribute to self-reports of depression in adolescents. No published research has explored CPQ factors in depression, however, studies employing a unidimensional conceptualisation of clinical perfectionism have found CPQ scores to correlate with and predict depression scores in the general adult population (Chang & Sanna, 2012) and in female adults undergoing treatment for an eating disorder (Steele, O'Shea, Murdock, & Wade, 2011). The current finding represents the first examination of depression within a multidimensional model of clinical perfectionism. Further, it is the first study to

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examine clinical perfectionism in adolescents. The finding suggests that CPQ-PC represents a risk factor for depression in adolescents while CPQ-PS does not.

Finally, as was seen in the case of eating disorders, SOPS was found to have a negative relationship with depression, suggesting that adolescents with higher levels of SOPS are less likely to have depression. This finding is in line with a previous study finding SOPS to be associated with fewer depressive symptoms in children with obsessive-compulsive disorder (Soreni et al., 2014). As suggested before, this finding could signify a protective effect of SOPS for adolescent wellbeing.

Related to depression, the systematic review found SPP to feature as a prominent concern for adolescents exhibiting suicidal behaviour and ideation (Enns et al., 2003; Freudenstein et al., 2012; Hewitt et al., 1997) and suicidal potential (Hewitt et al., 2014). SPP was found to be elevated in highly-suicidal adolescents and those who expressed death as the motivation for their suicide attempt (Boergers et al., 1998; Freudenstein et al., 2012). In line with the arguments put forward in a paper discussing the implications for perfectionism in suicide risk (Flett, Hewitt, & Heisel, 2014), the findings of this systematic review need to be taken into consideration to aid the design of preventative programmes for at-risk adolescents.

7.3.3. Anxiety

Despite theoretical arguments for the role of perfectionism in anxiety (Flett et al., 2011), the systematic review found no research examining perfectionism in adolescents with a clinical diagnosis of anxiety. The survey study, however, did provide evidence of a small, positive effect of SPP on self-reported anxiety in the general adolescent population. This is in line with similar findings in the non-clinical literature (Essau et al., 2008; Hewitt et al., 2002). The clinical perfectionism factor CPQ-PC was shown to have a moderate, positive relationship to anxiety in this general adolescent population. The only

published research assessing clinical perfectionism and anxiety found unidimensional CPQ scores to correlate with and predict anxiety scores in a general adult population (Chang & Sanna, 2012). CPQ-PC, in comparison to CPQ-PS, emphasises self-criticism and worry, two core elements of anxiety (Flett et al., 2011) and so the multidimensional view of clinical perfectionism used in the current study could be considered theoretically justified. There is a risk, however, given its emphasis on self-criticism and worry, that this measure is actually tapping in to anxiety itself, rather than distinct elements of perfectionistic concerns. Evidently, the findings are somewhat isolated with little comparable research currently in the literature. Given the clear theoretical arguments for perfectionism's role in adolescent anxiety (Flett et al., 2011), it is important that this area is further explored in future research.

7.4 Conceptualisation of Adolescent Perfectionism

To date, all conceptualisations of perfectionism have been developed in adult populations. As discussed in Chapter 1, adolescence represents a unique developmental context, in which perfectionism may be expressed differently to how it is expressed in adulthood. Chapter 2 reviewed the background of perfectionism conceptualisation and measurement, highlighting concerns regarding the appropriateness of transposing adult-derived models to adolescent research. The CAPS was found to be the most commonly used measure of perfectionism in the systematic review. Surprisingly, no research to date had explored the construct of clinical perfectionism in the adolescent population prior to this thesis.

7.4.1 Previous Conceptualisations

Robust factor analysis techniques were used to assess the conceptual factor structure of two measures capturing multidimensional perfectionism (CAPS) and clinical perfectionism (CPQ) in the adolescent population. Within a sample of 507 Scottish

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adolescents between the ages of 12 and 16 years old, the identified factor solutions were as follows. The CAPS was found to have a 3-factor structure similar to that suggested in previous similarly robust factor analyses (McCreary et al., 2004; O'Connor et al., 2009). This study added to previous literature by bridging the age gap between the two previous studies, providing evidence of this 3-factor model in adolescents aged 12-16 years. The robust analysis techniques used in the current study resulted in a shortened CAPS with 17 of the original 22 items. The items loaded distinctly onto factors of SOPS (5-items), SOPC (5-items), and SPP (7-items). The division of SOP into factors reflective of higher order perfectionism dimensions (perfectionistic strivings and perfectionistic criticism) provides some insight into the conceptualisation and measurement of perfectionism in early to mid-adolescence. While Flett et al. (2016) recently emphasised “...we conceptually regard self-oriented perfectionism as a unidimensional entity...” (p.7), the current findings provided further strong evidence that the CAPS does not measure SOP as a unidimensional entity, thus undermining this conceptualisation for adolescents. The CAPS was developed based on the assumption that the construct of perfectionism is the same in adolescents as it is in adults. The result here shows the flaw in this assumption, emphasising the need for a conceptualisation developed specifically for adolescents, rather than one that has simply been adapted from an adult model.

The assessment of the construct of clinical perfectionism in this thesis represents an original contribution to the literature. Despite evidence supporting the use of this construct's associated measure, the CPQ, in both clinical and general adult populations (Egan et al., 2016), this thesis reports the first study assessing the CPQ in adolescent populations. The survey study found a similar factor structure in adolescents as had been identified in adult populations (Dickie et al., 2012; Egan et al., 2016; Stoeber & Damian, 2014), with the CPQ appearing to have two factors reflective of perfectionistic strivings and perfectionistic concerns. This is in contrast with the unidimensional

conceptualisation of clinical perfectionism that was originally proposed (Shafran et al., 2002; Shafran et al., 2003). In this regard, clinical perfectionism is structured similarly in adolescence as it is in adulthood. The current study found some items not to load sufficiently onto any factor and complex cross loading of others, and so, the scale was reduced from the original 12-items to 7-items to attain a good fit for the data. If the authors of clinical perfectionism wanted to maintain a unidimensional conceptualisation of perfectionism, then they would need to modify the CPQ to accurately reflect this view. If, however, they felt the content of the scale *does* appropriately reflect their theory, then the conceptualisation of clinical perfectionism should be reconsidered. This notion was suggested earlier by Stoeber and Damian (2014). It appears that there is now a general consensus regarding the 2-factor structure of the CPQ, however, in their concluding statement, Egan et al. (2016) stated: "*It can be concluded that the CPQ measures what it was intended to: i.e. striving for high standards, concerns over not meeting standards, and basing self-worth on attainment of standards.*" (p.89). This statement may be misleading as it does not provide a clear statement of whether or not the author's intend to fully concede to the multidimensional conceptualisation of clinical perfectionism. The literature needs further clarification on this issue.

It appeared that items with more complex structures were particularly weak in this adolescent sample and were not viable for inclusion in the final reduced scale. As has been discussed in this thesis, the cognitive abilities of adolescents are comparably less sophisticated than those of adults (Donald, 2002; Keating, 2004), which may have impacted on the adolescents' comprehension of the more complex CPQ items. Additionally, some items relied on the respondents' perception of others' judgements. Adolescents tend to experience increased self-consciousness compared to adults (Elkind, 1967) and so their responses to these items may be sensitive to this developmental issue. Of interest, the CPQ defines perfectionism as "trying to reach high standards". When

questioned as to whether they try to achieve high standards, over three quarters of the sample in the survey study responded positively suggesting this may be too broad a definition to tap into true perfectionism.

With regard to the issue of self-worth being central to clinical perfectionism, the studies in this thesis provide some support. Similar to previous factor analyses (Dickie et al., 2012; Stoeber & Damian, 2014), the survey study found item 7 (*“Over the past month, have you judged yourself on the basis of your ability to achieve high standards?”*) loaded similarly onto both factors. This item appears to reflect the phenomenon of an individual basing their self-worth on their ability to meet high standards, such as is proposed by the conceptualisation of clinical perfectionism, indicating that this feature is apparent in adolescents. Certainly, in the grounded theory study, adolescent perfectionists did describe basing their self-worth on elements of their perfectionism. For example, one participant explained, *“I base a lot of my self-worth on my achievements and, like, the academic, sporting achievements....”* (Participant 4). In her account of the element of productivity – an underlying mechanism of perfectionism identified in this study – another adolescent described her aversion to being unproductive, explaining, *“...personally I just feel like a waste of space, like I’m not worth anything.”* (Participant 2). These experiences are in line with the conceptualisation of clinical perfectionism.

7.4.2 Original Conceptualisations

A particularly substantial and novel contribution of this thesis to the literature arises from the qualitative studies of adolescent perfectionism within a clinical context. This is the first study to explore the construct of adolescent perfectionism through such methods. Through in-depth interviews and methodical analysis, a new framework for adolescent perfectionism was identified. While Chapter 6 provided a fuller discussion of

the details of this model, here, the broader associations of this model to other conceptualisations in the literature are discussed.

7.4.2.1 Categorical Conceptualisations of Perfectionists

The clinicians in the focus group study discussed their perspective that there are two types of adolescent perfectionists - healthy adolescent perfectionists and clinical adolescent perfectionists. They suggested that the healthy adolescent perfectionists experience positive affect as a result of their perfectionism, while the clinical adolescent perfectionists experience more negative affect. The latter part of this comment was supported by the findings of the grounded theory study, in which the participants (considered to fall into the clinical adolescent perfectionist category) used predominantly negative tone in their descriptions of outcomes of their perfectionism. Furthermore, they frequently described negative emotional experiences, such as, sadness, stress, anger, and frustration in association with their perfectionism.

This finding that two groups of perfectionists exist and differ in their experience of emotional and mental wellbeing is in line with the current literature, however, differentiating these types of adolescent perfectionists via perfectionism measures has so far proven difficult (Stoeber & Childs, 2012). Parker (1997) distinguished healthy and dysfunctional adolescent perfectionists using a self-report measure of perfectionism, with the former scoring higher on a subscale measuring organisation and the latter scoring higher on measures of concern about making mistakes and self-doubt. Adaptive and maladaptive adolescent perfectionists were similarly distinguished by Wang, Yuen, and Slaney (2008). Alternatively, adaptive and maladaptive adolescent perfectionists have been differentiated based on scores from a measure of whether high standards were perceived as having been met (Rice & Ashby, 2007; Rice, Ashby, & Gilman, 2011). Several other approaches have been taken to classify adolescents into various groups of

perfectionists (Boone, Soenens, Braet, & Goossens, 2010; Dixon, Lapsley, & Hanchon, 2004; Gilman & Ashby, 2003; Gilman, Ashby, Sverko, Florell, & Varjas, 2005). Due to the varied nature of conceptualisations used in the literature, no precise guideline for how to distinguish adolescent perfectionists into groups has yet been agreed upon. The current findings add to the literature by highlighting alternative ways in which adolescent perfectionist types could be distinguished. First, as was suggested by the clinicians participating in the focus group, these two groups could be differentiated in terms of their awareness of dysfunctional perfectionistic behaviours. Clinical adolescent perfectionists may be more likely than healthy adolescent perfectionists to endorse dysfunctional perfectionistic responses, such as, continuing to exert effort towards a high standard despite negative consequences for their health. Another method of differentiating the two groups arises from the findings of the survey study. CPQ-PC was shown to contribute to three mental health conditions: depression, anxiety, and eating disorders. Since the current conceptualisation claims clinical adolescent perfectionists to be more at risk of adverse mental health outcomes, it may be that scores on the CPQ-PC could be used as a distinguishing measure. Those with higher scores on CPQ-PC would be classified as clinical adolescent perfectionists, due to the increased likelihood of them having a mental health difficulty. This illustrates an additional use for the CPQ in perfectionism research.

7.4.2.2 Clinical vs Non-Clinical Features

Given the clinical focus of this thesis, it is useful to discuss what is added to the clinical conceptual literature first and then move on to what the results tell us about adolescent perfectionism more generally. The survey study provided insight into the different roles of clinical and non-clinical perfectionism models, with clinical perfectionism being more consistently associated with adolescent mental health problems than non-clinical

perfectionism. Similarly, the focus group participants described clinical adolescent perfectionists as being more susceptible to mental and physical health problems as a consequence of their poorly managed perfectionism. By the definition provided in the focus group study, the participants in the grounded theory study would be classified as clinical adolescent perfectionists. Indeed, throughout the interviews, these adolescents' experiences of perfectionism seemed to typically lead to negative feelings. At best, success in areas of Achievement and Order were described as leading to an absence of negative affect, with little experience of positive affect. With such clear implications for emotional wellbeing, the concept of adolescent perfectionism needs to be addressed through intervention or prevention programmes.

Another finding within the grounded theory study was that the adolescents' perfectionism was linked with their sense of self-worth, a concept that has been linked to perfectionism in previous clinical models. Failure to indulge their perfectionism was described by these adolescents as being significantly detrimental to their sense of self-worth. This finding is in line with Burn's early conceptualisation of a perfectionist as someone who defines their self-worth in terms of their productivity and achievement (Burns, 1980) – two core themes which emerged from the current evaluation of adolescent perfectionism. This notion was revisited in the conceptualisation of clinical perfectionism in which an individual's self-worth is said to be dependent on their ability to achieve high standards (Shafran et al., 2002). Both of these previous conceptualisations were derived from a cognitive-behavioural perspective by clinicians with therapeutic experience with adult perfectionists. The current finding adds empirical evidence supporting this notion in adolescent perfectionists, adding strength to these previous clinical conceptualisations.

Figure 12. *An original conceptual framework for adolescent perfectionism.*



Stepping away from the clinical implications of perfectionism, the basic model of adolescent perfectionism developed in Chapter 6 has been framed so that emotion and clinical symptoms are not core features as may be expected from a clinical model (see Figure 12). Rather, the fundamental definitions (i.e. Achievement and Order) and

underlying processes (i.e. Goal Behaviour, Productivity, Comparisons) that were discussed by the grounded theory participants are presented in a way that allows the model to be considered in a more general manner. The descriptions of affective and psychological outcomes are incorporated in the fuller discussion of each theme in Chapter 6, providing an insight into how perfectionism affects these young people with eating disorders. The model itself, however, does not stipulate that perfectionism will always affect adolescents in an adverse manner. Rather, the core features of adolescent perfectionism are that it involves a focus on Achievement and Order and that it is maintained through reciprocal processes of Goal-Behaviour, Comparisons, and Productivity. None of these basic features is inherently clinical. Indeed, neither the focus group nor grounded theory participants felt that these core features of perfectionism were necessarily unusual or unhealthy. This construction matches that of other previous conceptualisations of multidimensional perfectionism, in which, perfectionism has been acknowledged as holding the potential to lead to emotional and clinical outcomes but is defined in normative terms (Hewitt & Flett, 1991b).

7.4.4.3 Striving or “Achievement”

The first core theme of the developed model, Achievement, appears most closely aligned with the higher-order dimension of perfectionistic strivings due to its focus on high performance and attainment of high goals (Stoeber & Otto, 2006). The participants' language reflected a perspective of desiring to achieve and placing high importance on achievement, rather than 'striving', and should be accounted for in adolescent research to improve adolescent comprehension of self-report measures. Achievement was extremely important to these young people, as one participant put it, *“I would say, like, almost everything I do is for a sense of achievement...”* (Participant 14). These adolescent perfectionists, however, described their achievement experiences with negative

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language, citing disappointment, frustration, or merely neutral responses following objective achievement. Anything less than perfect levels of achievement appeared to have a strong, detrimental effect upon their emotional state. This suggests that perfectionisms' focus on achievement is predominantly detrimental for these young people.

The desire for others to acknowledge their achievements was discussed, with some going as far as to describe their achievements as pointless if they were not adequately admired by others. Research has indeed found measures of perfectionism and need for approval to be related in adult clinical populations (Dunkley, Sanislow, Grilo, & McGlashan, 2004). Further, this description is reminiscent of the parenting style hypothesis of perfectionism development, which has been supported by research highlighting the role of authoritarian parenting in the development of maladaptive forms of perfectionism (Enns et al., 2002; Soenens et al., 2005). Parental responsiveness, in particular, has been found to be negatively related to perfectionistic concerns (Miller-Day & Marks, 2006). The grounded theory finding that adolescents seek approval (i.e. a response) from others for their achievement is in line with this theory. The approval they sought was not necessarily that of a parent but extended to other important figures in their life, such as, their teachers or friends. This is reflective of the developmental context of adolescence, in which adolescents form minor attachments to non-familial figures, such as friends (Allen & Manning, 2007), and therefore may seek responses from people other than their parents for their behaviour. Given the suggested changing nature of perfectionism during adolescence (Herman et al., 2013; Portešová & Urbánek, 2013), this study has provided insight into a potential focus for adolescent programmes aimed at preventing the onset of unhealthy perfectionism.

7.4.4.4 Order

The second core theme of perfectionism was identified as Order. In their descriptions of their perfectionism, the adolescents provided numerous accounts of organisation and planning behaviours, a strong preference for neatness and tidy environments, and an extreme dislike of anything that violated these desires. Any disruption of Order was described again with particularly negative language and the young people expressed feeling a need to rectify any such disruption. Order has been suggested as a core feature of perfectionism in both qualitative (Rice, Bair, Castro, Cohen, & Hood, 2003; Slaney & Ashby, 1996; Slaney, Chadha, Mobley, & Kennedy, 2000) and quantitative (Frost et al., 1990; Kim, Chen, MacCann, Karlov, & Kleitman, 2015; Suddarth & Slaney, 2001) research, yet the prevailing consensus in the field is that perfectionism is best represented by just two dimensions – perfectionistic strivings and perfectionistic concerns (Stoeber et al., 2016). As was suggested in Chapter 6, it may be that difficulty aligning the feature of Order with the more Achievement-like aspects of perfectionism led to its lack of presence in current perfectionism measures. Indeed, Frost et al. (1990) had recommend that scores on the Organisation subscale of their perfectionism measure not be included in the total score of perfectionism for similar reasons. The CAPS, the most frequently used measure in adolescent literature, lacks a substantial focus on Order aspects of perfectionism (Flett et al., 2000). Similarly, the analysis of the CPQ in the survey study found this measure to comprise only two factors, perfectionistic strivings and perfectionistic concerns, with no items reflective of Order. The grounded theory study in this thesis provides empirical evidence supporting the necessity of incorporating Order into conceptualisations and measurement of adolescent perfectionism. It seems unwise to disregard a potentially core feature of perfectionism from research because current measures have struggled to align it with another core feature. In the same way that perfectionism researchers currently acknowledge two core perfectionism

dimensions, the findings of this study suggest a third dimension or facet of Order should be accounted for as well.

7.4.4.5 Mechanisms for Perfectionism

A particularly innovative finding from the qualitative studies in this thesis was the emerging evidence of specific behaviours that support adolescent perfectionism. This was most clearly evidenced in the grounded theory study, which identified three related underlying mechanisms for clinical adolescent perfectionism: Goal Behaviour, Comparisons, and Productivity. Both Goal Behaviour and Productivity had also been commented upon by the clinicians in the focus group study. The adolescent participants in the grounded theory study described goal behaviour as being a core process in their perfectionism, helping to motivate improvement and achievement. They strongly relied on goals to structure their lives and to progress them towards the perfection they desired. These adolescents explained their belief that such goals were absolutely necessary and that a lack of them would lead to them “not bothering” with things in their life. Previous literature has highlighted an association with varying types of perfectionism and achievement goals in adolescent school students (Damian, Stoeber, Negru, & Băban, 2014). The addition of this current finding suggests that further research into the goal-oriented behaviour of adolescent perfectionists may be warranted.

Productivity was similarly viewed as a necessary element of their perfectionism. This theme of Productivity is in line with the concept of striving within wider perfectionism conceptualisations (Stoeber & Otto, 2006). Interestingly, productivity was also described as being somewhat protective for the individual. If they felt they had been highly productive, they were less distressed by failure to achieve perfection. This finding should be further explored to determine the relative value of productivity compared to

goal achievement. Productivity also appeared to be linked to relaxation in an interesting manner. Reducing their productivity level was boring for these young people and could lead to feelings of sadness or disappointment. Conversely, they describe a sort of mental relaxation resulting from highly productive behaviour, such as, sports, exercise, or reading. Within a cognitive-behavioural framework, this finding may have important implications for the wellbeing of adolescents. Being physically or mentally productive reduces emotional distress. This point is important for the development of adolescent interventions and is discussed further below.

Finally, Comparisons were a prevalent and unique feature arising from the grounded theory study, with the adolescents describing their perfectionism as being very dependent on them comparing themselves with other people. They described using comparisons between themselves and others as a driving mechanism in their perfectionistic endeavour. These comparisons span non-clinical domains, such as, academics, sports, and social success, as well as clinical behaviours, such as, restricted eating and weight loss. Adolescent boys and girls have been found to engage in social comparisons within the context of body image and attractiveness (Jones, 2001; Morrison, Kalin, & Morrison, 2004) but this current finding expands on that, showing comparisons to be prevalent in numerous areas of the adolescent perfectionist's life. The commonly used CAPS encapsulates interpersonal orientations of perfectionism, for example, perceived pressure from others that the individual be perfect. This new feature of Comparisons presents an alternative interpersonal perfectionism factor, in that the adolescent compares their successes, abilities, and behaviour to that of their peers. If the adolescent perceives another person to be performing more highly in a certain domain, then they will set a goal to match or exceed that person's performance. They will also increase their level of productivity. This description offered through the grounded theory study emphasised how the underlying mechanisms of adolescent perfectionism

relate to one another, driving perfectionism. This feature of adolescent perfectionism is a significant finding that may hold implications for therapeutic approaches with adolescent perfectionists.

7.5 Implications for Clinical Practice

Whilst not a direct aim of the thesis, some insight into the impact of perfectionism on treatment for adolescent mental health problems was gained through the research. The systematic review found perfectionism to play an adverse role in treatment, with higher levels of perfectionism leading to poorer treatment outcomes for eating disorders, depression, and chronic fatigue syndrome in adolescents (Jacobs et al., 2009; Lloyd et al., 2012; Phillips et al., 2010). The focus group study found that clinicians perceive perfectionism as interacting with treatment in two ways. On the one hand, perfectionism was credited with supporting patients to complete therapeutic tasks in a timely and organised manner. In this sense, perfectionistic tendencies were, perhaps controversially, appreciated by these clinicians. On the other hand, the clinicians had experienced resistance from their patients when therapeutic tasks had vague instructions or more ambiguous end goals. Finally, in the grounded theory study, the adolescent perfectionists themselves described finding less clearly defined therapeutic tasks particularly distressing. Additionally, these young patients recognised the issues their perfectionistic comparisons presented in inpatient settings. Being surrounded by similarly unwell adolescents provided a comparison for their eating disorder. These participants described comparing their illness to others and trying to be the best in terms of food restriction or weight loss. This finding illustrates the serious risk perfectionism poses for group or inpatient treatment of eating disorders in the clinical adolescent population.

Perfectionism interventions have expanded in adult settings in recent years (Egan & Hine, 2008; Glover, Brown, Fairburn, & Shafran, 2007; Lloyd et al., 2014; Riley, Lee, Cooper, Fairburn, & Shafran, 2007). No intervention for reduction of perfectionism in adolescents has yet been reported in the literature. Two studies of universal prevention programmes for perfectionism in adolescents have been reported (Nehmy & Wade, 2015; Wilksch et al., 2008). Adolescents who participated in these programmes were shown to have lower levels of unhelpful perfectionism compared to control groups. This effect was identified as much as 12-months after the programme, with shorter term effects for self-criticism and negative affect (Nehmy & Wade, 2015). The Wilksch et al. (2008) programme modelled its content on a self-help book (Adderholdt & Goldberg, 1999) and assessed perfectionism through two subscales of the FMPS (Frost et al., 1990). The Nehmy and Wade (2015) programme was based upon the model of clinical perfectionism (Shafran et al., 2002) but assessed perfectionism outcomes via the perfectionism subscale of the Dysfunctional Attitudes Scale (Weissman & Beck, 1978). Given the evidence provided throughout this thesis, it seems pertinent that these and future programmes are modelled upon an adolescent-specific model of perfectionism or, at least, reflect empirically identified adolescent features of perfectionism.

The model of adolescent perfectionism identified in this thesis has the potential to inform these kinds of programme, thereby increasing their efficacy. For example, the necessity for developmentally appropriate language and concepts for adolescent comprehension of perfectionism was highlighted by both the survey and grounded theory studies. Language and terminology reported in Chapter 6 should be used to develop adolescent-appropriate interventions. The grounded theory study participants often struggled to find any feeling of accomplishment with less than perfect outcomes and were very aware of their ranking in terms of academic performance. Finding ways to increase personal satisfaction in less than perfect achievements could be incorporated to therapy with

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adolescent perfectionists. The issue of adolescents requiring external approval of their achievement may be particularly key to determining whether the adolescent goes on to develop unhealthier forms of perfectionism or not. Clinicians need to explore this feature within therapy to support adolescents. Both of the qualitative studies in this thesis identified adolescent perfectionists as being highly productive individuals. These young people can become distressed or uncomfortable when they feel they are not being productive. This theme was not limited to physical productivity but also mental productivity. Clinicians may need to account for this mechanism in their treatment of adolescent perfectionists. Sufficient mentally stimulating activities may be needed to prevent the young person from becoming distressed. Clinicians could support adolescent perfectionists to engage in such techniques as mindfulness, thereby enabling them to calm their minds in times of distress. Whilst adolescent mindfulness-based interventions are relatively new, a recent review indicated that they do typically lead to positive outcomes and hold promise for adolescent populations (Tan, 2016). Another example of the clinical utility of this framework is the identification of the underlying mechanism of Comparisons. This feature might pose a risk for young people involved in group treatment. Clinicians need to address this perfectionistic mechanism prior to placing eating disorder patients in group settings, otherwise the adolescents' use of Comparisons between themselves and other patients could drive them to more extreme weight loss methods.

The evidence provided in this thesis can also be used to inform schools and families of ways in which their behaviour may affect an adolescent perfectionist. High-performing and private schools often have particularly high demands on their students in terms of academic performance, as well as extracurricular successes (e.g. sports, music). The participants in the grounded theory study frequently discussed feelings of stress and negative affect resulting from their perfectionism in these contexts. The clinicians in the

focus group study recommended raising awareness as a key way to support adolescent perfectionists. This could be reflected in work with the adults who exert most influence over the adolescents' lives (e.g. teachers, parents, coaches).

Finally, it is important for any prevention or intervention programme to note that within the context of adolescence, a focus on Achievement or Order is not necessarily unusual. The relative pressures of educational performance and physical appearance have increased since childhood. The benefits of achievement (e.g. university, careers, social popularity) may be frequently emphasised to them by their teachers, family, and peers. Similarly, organising your time or keeping your belongings in order can be beneficial and, again, is often encouraged by the various people involved in adolescents' lives. It is important, therefore, that any clinical intervention take these normal aspects of adolescence into account and not attempt to negate or undermine them.

7.6 Limitations of the Thesis

7.6.1 Sampling and Generalisability

Convenience sampling was used throughout this thesis. The survey study was conducted in a large urban community in Scotland. The sample was predominantly white and around two-thirds of participants had high socioeconomic status. Similarly, in the grounded theory study, the participants were all white, Scottish individuals. The cultural context of this thesis, therefore, is a limitation as cultural differences have been shown to impact the development of perfectionism (Morris & Lomax, 2014). The findings need to be explored in other cultures to test their cross-cultural validity.

Gender differences in perfectionism have also been suggested in the literature (Morris & Lomax, 2014). While the grounded theory study had a predominantly female sample, the sample in the survey study was fairly even in its representation of boys and girls. The

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study found boys to have lower levels of CPQ perfectionistic concerns than girls in this study. This could suggest that the predominantly female sample in the grounded theory study had a higher level of perfectionistic concerns than may be seen in a mixed-gender population. However, the design of grounded theory research does not seek for the results to be generalizable but rather to be a source of rich detail about the phenomenon of interest. Therefore, despite the gender differences observed in the survey study, the gender imbalance in the grounded theory study is not necessarily relevant to the current findings.

The focus in each of the qualitative studies on eating disorder populations may be considered a limitation for the developed model in this thesis. However, since perfectionism can be considered transdiagnostic (Egan et al., 2011), it is likely that the results will translate into other adolescent groups. The model, therefore, should be validated for alternative adolescent groups.

7.6.2 Unexplored Themes

With regard to perfectionism and mental health risk, the survey study explored the relationship between perfectionism and three mental health conditions: depression, anxiety, and eating disorders. Literature has previously suggested links between suicidal behaviour and ideation. This was not explored in the current study preventing an examination of the links between adolescent suicide risk and the CAPS and CPQ factors identified here. Furthermore, this quantitative study was performed in a general adolescent population. This differs from the focus of the rest of the empirical work on clinical populations but was necessary to obtain a sufficient sample size for the complex analyses performed in this study.

There is also a risk that the qualitative studies of this thesis overlooked conceptually relevant themes of clinical adolescent perfectionism. Traditionally, it was recommended

that data collection in grounded theory research should continue until theoretical saturation has occurred (Glaser, 1978). Within the time constraints of this Ph.D. project, it was decided that the grounded theory study should follow other recommendations that data collection should cease once theoretical sufficiency was achieved (Dey, 1999). Thus, the model outlined in Chapter 6 is best understood as being strongly suggested by the data, rather than conclusively proven.

7.7 Future Directions

Based upon the findings of this thesis, several recommendations for future directions in the field can be made. First, the 3-factor model of the CAPS should be adopted by all future research assessing adolescent perfectionism through this scale. This measure is conceptually and psychometrically more robust when interpreted as a 3-factor scale. Second, the CPQ needs to be modified for use in adolescent populations. This may involve reducing the complexity of some items and also ensuring the content of items is context appropriate for this younger population. Such a reconfiguration of this measure may be well supported by the detailed findings from the grounded theory study reported in this thesis. Third, the perfectionism field should expand its methodological approach to research. Currently, most of the perfectionism literature relies on self-report measures based upon adult-derived conceptualisations that may or may not adequately reflect the construct of perfectionism. As shown in this thesis, qualitative approaches to perfectionism research provide a far richer data set and insight into the lived experiences of perfectionists. Such research is particularly beneficial to the development of clinical interventions and so should be welcomed for the advancement of this field. Within adolescent research, a wealth of alternative methodological approaches would be feasible. For instance, photovoice, a group analysis method in which participants are asked to express their points of view by photographing scenes that highlight research

themes (Wang & Burris, 1997), may be an effective way to access adolescent experiences of perfectionism – particularly for Order aspects of the construct. By collaboratively interpreting these photographs with adolescent perfectionists, we might advance our understanding of the construct during this developmental period and thus be better equipped to develop programs that address the needs of these young people. Finally, the model of clinical adolescent perfectionism developed in this thesis should be further assessed across a range of adolescent populations to test its validity. Specifically, researchers should utilise the detail provided in this model to develop alternative methods of measurement for use across research and clinical settings.

7.8 Overall Contribution of the Thesis

This thesis provides compelling evidence for the need to reconsider how we conceptualise adolescent perfectionism in clinical fields. A lack of cohesion of conceptualisation across the adolescent literature may undermine the value of the findings emerging from it. This was particularly noticeable in the systematic review of adolescent clinical literature, with a range of conceptualisations being used. Conceptualisations that are currently in use across the adolescent literature were robustly assessed in this thesis. Three factors of multidimensional and two factors of clinical perfectionism were identified in adolescents. Results were similar to related studies (Dickie et al., 2012; Egan et al., 2016; McCreary et al., 2004; O'Connor et al., 2009; Stoeber & Damian, 2014) but issues with the appropriateness of some items in these measures for adolescent populations were still apparent. Such processes as striving for high performance may be strongly encouraged during secondary school and may inflate responses to associated items. Similarly, increased self-consciousness during this life period (Elkind, 1967) could impact on adolescent responses to these measures.

By approaching the construct of perfectionism with an open mind in Chapters 5 and 6, a new conceptual framework of adolescent perfectionism within the context of adolescent eating disorders was developed. The model outlined in Chapter 6 of this thesis was derived through empirical examination of adolescent perfectionists' experiences and views of their perfectionism, as opposed to either clinical observation (Shafran et al., 2002) or modification of adult-derived conceptualisations (Flett et al., 2016; Flett et al., 2000). In the context of health care, the Department of Health has encouraged UK professionals to engage with patients as experts. This approach of patients working alongside professionals has been shown to lead to improved health outcomes (Tattersall, 2002). The research approach in the grounded theory study similarly welcomed adolescents as being experts on their perfectionism, allowing them to co-construct this new model of perfectionism. While parallels between this and previous models of perfectionism have been identified (Burns, 1980; Frost et al., 1990; Hewitt & Flett, 1991b; Shafran et al., 2002), the language of the model was taken from that of the participants, ensuring that concepts remain highly reflective of the terminology used and understood by adolescents. Consequently, the concepts of this model may be more readily comprehended by and communicated to adolescent perfectionists. It was noticeable in the grounded theory that some of the participants struggled to comprehend the meaning of terms such as "striving" and "personal standards".

This developmentally appropriate model could inform the development of adolescent-specific perfectionism measures. Furthermore, the conceptual framework developed in this thesis can be tested in alternative adolescent populations. Both qualitative studies identified elements of adolescent perfectionism that are not yet accounted for by such adolescent perfectionism measures as the CAPS (Flett et al., 2016; Flett et al., 2000). Both studies emphasised themes of order, organisation, and neatness as being a core element of perfectionism, as has been suggested by contributors to adult perfectionism literature

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(Frost et al., 1990; Kim et al., 2015; Rice et al., 2003; Rice et al., 2005; Slaney & Ashby, 1996; Slaney et al., 2000; Suddarth & Slaney, 2001). Adolescent perfectionism research should incorporate this theme to progress the knowledge base for clinical psychology.

The surge in the development of self-report measures of perfectionism in the 1990s may have led to a limited understanding of the construct itself, with conceptual models being led by psychometric advances (Shafran et al., 2002). Qualitative research may aid the advancement of the field through provision of more intimate accounts of perfectionism from perfectionists themselves. The research methods used throughout this thesis enabled an evaluation of current models and the identification of a new, complementary model of perfectionism as it presents in adolescents. By constructing the theory in line with the adolescent perfectionists' accounts, the developed theory is developmentally appropriate for adolescent research and practice.

7.9 Conclusions

This thesis explored the conceptualisation of adolescent perfectionism, providing a comprehensive analysis of the construct in the adolescent population and insight to the relationship between perfectionism, adolescent mental health disorders, and psychological treatment. Different perfectionism factors predict mental health conditions in adolescents but current measures may be inappropriate for use in adolescent populations due to conceptual and developmental differences between adult and adolescent perfectionism. Perfectionistic concerns, as measured by the CPQ, appears to represent a transdiagnostic risk factor for depression, anxiety, and eating disorders in the general adolescent population. Clinicians involved in the care of adolescent perfectionists hold an understanding of the construct that is reflective yet not entirely the same as that held by the research community. Adolescent perfectionism may be better understood as comprising two core issues, Achievement and Order. Further,

adolescent perfectionism appears to be maintained by a reciprocal relationship between three underlying mechanisms, Goal Behaviour, Comparisons, and Productivity. While still in their early phases, prevention and intervention programmes for adolescent perfectionism may be improved through consideration of the developed framework of adolescent perfectionism presented in this thesis.

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Appendix A – Survey Booklet

STEP 1: CONSENT TO PARTICIPATE

Before you take part in this research, we need to ask you a few questions.

Please read the questions on this page carefully and indicate your answer by **circling** either 'Yes' or 'No'.

Make sure you write today's date in the box at the bottom of the page

Please circle your answer		
Have you read and understood the participant information sheet?	Yes	No
Do you understand that your participation is entirely voluntary?	Yes	No
Do you understand that you can withdraw at any point and without giving reason?	Yes	No
Do you agree to take part in this study?	Yes	No
Today's Date:		

FIRST A FEW DETAILS ABOUT YOU

1. Are you male or female?

Male

Female

2. What school year are you in?

First (1st)

Second (2nd)

Third (3rd)

Fourth (4th)

Fifth (5th)

Sixth (6th)

3. What is your date of birth? (DD/MM/YYYY)

/ /

4. Which category best describes the ethnic group to which you belong?

Asian or Asian British

Black or Black British

White or White British

Mixed (please specify) _____

Other (please specify) _____

5. Do you regard yourself as being disabled?

Yes

No

If yes, please provide details here: _____

6. Do you regard yourself as having mental health difficulties?

Yes

No

If yes, please provide details here: _____

7. Does your family own a car, van or truck?

- No Yes, one Yes, two or more

8. Do you have your own bedroom for yourself?

- No Yes

9. During the past 12 months, how many times did you travel away on holiday with your family?

- Not at all Once Twice More than twice

10. How many computers does your family own?

- None One Two More than two

11. What do you think you will most likely be doing when you finish school?

- University
- Further Education College
- Apprenticeship/trade
- Youth Training
- Working
- Unemployed
- Don't know
- Other (please specify) _____
- _____
- _____
- _____
- _____

THESE NEXT QUESTIONS ARE ABOUT THINGS THAT PEOPLE THINK OR FEEL

Please read each statement carefully and answer with **how true** you feel each statement is for you personally on a scale from "1" to "5". The five possible answers for each statement are listed below:

False, not at all true of me	Mostly false	Neither true nor false	Mostly true	Very true of me
1	2	3	4	5

Circle one number under each statement to show **how true** it is for you personally.

12. I try to be perfect in everything I do.

1	2	3	4	5
---	---	---	---	---

13. I want to be the best at everything I do.

1	2	3	4	5
---	---	---	---	---

14. My parents don't always expect me to be perfect in everything I do.

1	2	3	4	5
---	---	---	---	---

15. I feel that I have to do my best all the time.

1	2	3	4	5
---	---	---	---	---

16. There are people in my life who expect me to be perfect.

1	2	3	4	5
---	---	---	---	---

17. I always try for the top score on a test.

1	2	3	4	5
---	---	---	---	---

18. It really bothers me if I don't do my best all the time.

1	2	3	4	5
---	---	---	---	---

19. My family expects me to be perfect.

1	2	3	4	5
---	---	---	---	---

20. I don't always try to be the best.

1	2	3	4	5
---	---	---	---	---

False, not at all true of me	Mostly false	Neither true nor false	Mostly true	Very true of me
------------------------------	--------------	------------------------	-------------	-----------------

21. People expect more from me than I am able to give.

1	2	3	4	5
---	---	---	---	---

22. I get mad at myself when I make a mistake.

1	2	3	4	5
---	---	---	---	---

23. Other people think that I have failed if I do not do my very best all the time.

1	2	3	4	5
---	---	---	---	---

24. Other people always expect me to be perfect.

1	2	3	4	5
---	---	---	---	---

25. I get upset if there is even one mistake in my work.

1	2	3	4	5
---	---	---	---	---

26. People around me expect me to be great at everything.

1	2	3	4	5
---	---	---	---	---

27. When I do something, it has to be perfect.

1	2	3	4	5
---	---	---	---	---

28. My teachers expect my work to be perfect.

1	2	3	4	5
---	---	---	---	---

29. I do not have to be the best at everything I do.

1	2	3	4	5
---	---	---	---	---

30. I am always expected to do better than others.

1	2	3	4	5
---	---	---	---	---

31. Even when I pass, I feel that I have failed if I didn't get one of the highest marks in the class.

1	2	3	4	5
---	---	---	---	---

32. I feel that people ask too much of me.

1	2	3	4	5
---	---	---	---	---

33. I can't stand to be less than perfect.

1	2	3	4	5
---	---	---	---	---

THESE NEXT STATEMENTS USE A DIFFERENT ANSWER SCALE. PLEASE READ CAREFULLY.

Please read each statement carefully and answer with **how much you agree or disagree** with each of the statements on a scale from "1" to "7". Indicate your level of agreement along the scale:

Strongly Disagree		Neutral			Strongly Agree	
1	2	3	4	5	6	7

Circle one number under each statement to show your **level of agreement** with it.

34. It is okay to show others that I am not perfect.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

35. I judge myself based on the mistakes I make in front of other people.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

36. I will do almost anything to cover up a mistake.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

37. Errors are much worse if they are made in public rather than in private.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

38. I try always to present a picture of perfection.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

39. It would be awful if I made a fool of myself in front of others.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

40. If I seem perfect, others will see me more positively.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

41. I brood over mistakes that I have made in front of others.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

42. I never let others know how hard I work on things.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

43. I would like to appear more competent than I really am.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Strongly Disagree	Neutral	Strongly Agree
-------------------	---------	----------------

44. It doesn't matter if there is a flaw in my looks.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

45. I do not want people to see me do something unless I am very good at it.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

46. I should always keep my problems to myself.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

47. I should solve my own problems rather than admit them to others.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

48. I must appear to be in control of my actions at all times.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

49. It is okay to admit mistakes to others.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

50. It is important to act perfectly in social situations.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

51. I don't really care about being perfectly groomed.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

52. Admitting failure to others is the worst possible thing.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

53. I hate to make errors in public.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

54. I try to keep my faults to myself.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

55. I do not care about making mistakes in public.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

56. I need to be seen as perfectly capable in everything I do.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Strongly Disagree	Neutral	Strongly Agree
-------------------	---------	----------------

57. Failing at something is awful if other people know about it.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

58. It is very important that I always appear to be “on top of things”.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

59. I must always appear to be perfect.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

60. I strive to look perfect to others.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

THESE NEXT QUESTIONS ARE ABOUT “PERFECTIONISM”

By “perfectionism” we mean trying to meet really high standards whether or not you actually succeed in reaching them.

61. Have you been trying to achieve high standards over the past month whether or not you have succeeded?

Yes

No

If yes, in what areas of your life has this applied? (For example, it might have been your performance at school, at sport, at music, at home, with friends, etc.) Please note these below:

Please read each question carefully and answer with **how often** you have done each thing **over the past month** on a scale from “1” to “4”. The four possible answers are listed below:

Not at all	Some of the time	Most of the time	All of the time
1	2	3	4

Circle one number under each question to show **how often** you have done it **over the past month**.

Over the past month...

62. Have you pushed yourself really hard to meet your goals?

1	2	3	4
---	---	---	---

Not at all	Some of the time	Most of the time	All of the time
------------	------------------	------------------	-----------------

63. Have you tended to focus on what you have achieved, rather than on what you have not achieved?

1	2	3	4
---	---	---	---

64. Have you been told that your standards are too high?

1	2	3	4
---	---	---	---

65. Have you felt a failure as a person because you have not succeeded in meeting your goals?

1	2	3	4
---	---	---	---

66. Have you been afraid that you might not reach your standards?

1	2	3	4
---	---	---	---

67. Have you raised your standards because you thought they were too easy?

1	2	3	4
---	---	---	---

68. Have you judged yourself on the basis of your ability to achieve high standards?

1	2	3	4
---	---	---	---

69. Have you done just enough to get by?

1	2	3	4
---	---	---	---

70. Have you repeatedly checked how well you are doing at meeting your standards? (For example, by comparing your performance with that of others).

1	2	3	4
---	---	---	---

71. Have you kept trying to meet your standards, even if this has meant that you missed out on other things?

1	2	3	4
---	---	---	---

72. Have you avoided any tests of your performance (at meeting your goals) in case you failed?

1	2	3	4
---	---	---	---

THESE NEXT QUESTIONS ARE ABOUT YOUR THOUGHTS ABOUT LEARNING AT SCHOOL

Please read each statement carefully and answer with **how much you agree or disagree** with each statement on a scale from "1" to "6". The six possible answers for each statement are listed below:

Strongly Disagree	Disagree	Mostly Disagree	Mostly Agree	Agree	Strongly Agree
1	2	3	4	5	6

Circle one number under each statement to show your **level of agreement** with it.

73. If I knew I wasn't going to do well at a task, I probably wouldn't do it even if I might learn a lot from it.

1	2	3	4	5	6
---	---	---	---	---	---

74. Although I hate to admit it, I sometimes would rather do well in a class than learn a lot.

1	2	3	4	5	6
---	---	---	---	---	---

75. It's much more important for me to learn things in my classes than it is to get the best grades.

1	2	3	4	5	6
---	---	---	---	---	---

76. If I *had* to choose between getting a good grade and being challenged in class I would choose... (circle one):

good grade

or

being challenged

THESE NEXT QUESTIONS ARE ABOUT YOUR THOUGHTS ABOUT PERSONALITY

Please read each statement carefully and answer with **how much you agree or disagree** with each statement on a scale from "1" to "6". The six possible answers for each statement are listed below:

Strongly Disagree	Disagree	Mostly Disagree	Mostly Agree	Agree	Strongly Agree
1	2	3	4	5	6

Circle one number under each statement to show your **level of agreement** with it.

77. You can't really change what kind of personality you have. Some people have a good personality and some don't and you can't change much.

1	2	3	4	5	6
---	---	---	---	---	---

Strongly Disagree	Disagree	Mostly Disagree	Mostly Agree	Agree	Strongly Agree
--------------------------	-----------------	------------------------	---------------------	--------------	-----------------------

78. Your personality is a part of you that you can't change very much.

1	2	3	4	5	6
---	---	---	---	---	---

79. You can do things to get people to like you, but you can't change your real personality.

1	2	3	4	5	6
---	---	---	---	---	---

80. No matter who you are and how you act, you can always change their ways.

1	2	3	4	5	6
---	---	---	---	---	---

81. You can change your personality a lot.

1	2	3	4	5	6
---	---	---	---	---	---

82. You can always change your personality.

1	2	3	4	5	6
---	---	---	---	---	---

THESE NEXT QUESTIONS ARE ABOUT YOUR THOUGHTS ABOUT INTELLIGENCE

Please read each statement carefully and answer with **how much you agree or disagree** with each statement on a scale from "1" to "6". The six possible answers for each statement are listed below:

Strongly Disagree	Disagree	Mostly Disagree	Mostly Agree	Agree	Strongly Agree
1	2	3	4	5	6

Circle one number under each statement to show your **level of agreement** with it.

83. You have a certain amount of intelligence, and you really can't do much to change it.

1	2	3	4	5	6
---	---	---	---	---	---

84. Your intelligence is something about you that you can't change very much.

1	2	3	4	5	6
---	---	---	---	---	---

85. You can learn new things, but you can't really change your basic intelligence.

1	2	3	4	5	6
---	---	---	---	---	---

86. No matter who you are, you can change your intelligence a lot. #

1	2	3	4	5	6
---	---	---	---	---	---

Strongly Disagree	Disagree	Mostly Disagree	Mostly Agree	Agree	Strongly Agree
-------------------	----------	-----------------	--------------	-------	----------------

87. You can always greatly change how intelligent you are.

1	2	3	4	5	6
---	---	---	---	---	---

88. No matter how much intelligence you have, you can always change it quite a bit.

1	2	3	4	5	6
---	---	---	---	---	---

THESE NEXT QUESTIONS ARE ABOUT THE PAST, PRESENT, AND FUTURE

Please read each statement carefully and answer with **how often** you do these things on a scale from "1" to "7". Indicate your level of agreement along the scale:

Never		Sometimes		Frequently		Constantly
1	2	3	4	5	6	7

Circle one number under each statement to show **how often** you do these things.

89. I think about things from my past.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

90. I live my life in the present.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

91. I think about what my future has in store.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

92. I focus on what is currently happening in my life.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

93. I focus on my future.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

94. I replay memories of the past in my mind.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

95. I imagine what tomorrow will bring for me.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Never	Sometimes	Frequently	Constantly
-------	-----------	------------	------------

96. My mind is on the here and now.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

97. I reflect on what has happened in my life.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

98. I think about where I am today.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

99. I think back to my earlier days.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

100. I think about times to come.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

THESE NEXT QUESTIONS ARE ABOUT HOW PEOPLE MAY FEEL

Please read each statement carefully and, for each statement, choose one response from the four given that best describes **how you are currently feeling**. Indicate your answer by putting a **cross** in the box next to the response that best describes **how you are currently feeling**.

101. I feel tense or 'wound up':

Most of the time	
A lot of the time	
From time to time, occasionally	
Not at all	

102. I still enjoy the things I used to enjoy:

Definitely as much	
Not quite so much	
Only a little	
Hardly at all	

103. I get a sort of frightened feeling as if something bad is about to happen:

Very definitely and quite badly	
Yes, but not too badly	
A little, but it doesn't worry me	
Not at all	

104. I can laugh and see the funny side of things:

As much as I always could	
Not quite so much now	
Definitely not so much now	
Not at all	

105. Worrying thoughts go through my mind:

A great deal of the time	
A lot of the time	
From time to time, but not too often	
Only occasionally	

106. I feel cheerful:

Not at all	
Not often	
Sometimes	
Most of the time	

107. I can sit at ease and feel relaxed:

Definitely	
Usually	
Not often	
Not at all	

108. I feel as if I am slowed down:

Nearly all the time	
Very often	
Sometimes	
Not at all	

109. I get a sort of frightened feeling like 'butterflies' in the stomach:

Not at all	
Occasionally	
Quite often	
Very often	

110. I have lost interest in my appearance:

Definitely	
I don't take as much care as I should	
I may not take quite as much care	
I take just as much care as ever	

111. I feel restless and have to be on the move:

Very much indeed	
Quite a lot	
Not very much	
Not at all	

112. I look forward with enjoyment to things:

As much as I ever did	
Rather less than I used to	
Definitely less than I used to	
Hardly at all	

113. I get sudden feelings of panic:

Very often indeed	
Quite often	
Not very often	
Not at all	

114. I can enjoy a good book or radio or TV program:

Often	
Sometimes	
Not often	
Very seldom	

THESE NEXT QUESTIONS ARE ABOUT FOOD AND EATING HABITS

Please read each statement carefully and answer with **how often** each statement is true for you personally on a scale from "1" to "6". The six possible responses of frequency are listed here:

Never	Rarely	Sometimes	Often	Usually	Always
1	2	3	4	5	6

Circle one number under each question to show **how often** each statement is true for you.

115. Am terrified about being overweight.

1	2	3	4	5	6
---	---	---	---	---	---

116. Avoid eating when I am hungry.

1	2	3	4	5	6
---	---	---	---	---	---

117. Find myself preoccupied with food.

1	2	3	4	5	6
---	---	---	---	---	---

118. Have gone on eating binges where I feel that I may not be able to stop.

1	2	3	4	5	6
---	---	---	---	---	---

119. Cut my food into small pieces.

1	2	3	4	5	6
---	---	---	---	---	---

Never	Rarely	Sometimes	Often	Usually	Always
-------	--------	-----------	-------	---------	--------

120. Aware of calorie content of food that I eat.

1	2	3	4	5	6
---	---	---	---	---	---

121. Particularly avoid food with a high carbohydrate content (e.g. bread, rice, potatoes, etc.)

1	2	3	4	5	6
---	---	---	---	---	---

122. Feel that others would prefer if I ate more.

1	2	3	4	5	6
---	---	---	---	---	---

123. Vomit after I have eaten.

1	2	3	4	5	6
---	---	---	---	---	---

124. Feel extremely guilty after eating.

1	2	3	4	5	6
---	---	---	---	---	---

125. Am preoccupied with a desire to be thinner.

1	2	3	4	5	6
---	---	---	---	---	---

126. Think about burning up calories when I exercise.

1	2	3	4	5	6
---	---	---	---	---	---

127. Other people think that I am too thin.

1	2	3	4	5	6
---	---	---	---	---	---

128. Am preoccupied with the thought of having fat on my body.

1	2	3	4	5	6
---	---	---	---	---	---

129. Take longer than others to eat my meals.

1	2	3	4	5	6
---	---	---	---	---	---

130. Avoid foods with sugar in them.

1	2	3	4	5	6
---	---	---	---	---	---

131. Eat diet foods.

1	2	3	4	5	6
---	---	---	---	---	---

132. Feel that food controls my life.

1	2	3	4	5	6
---	---	---	---	---	---

Never	Rarely	Sometimes	Often	Usually	Always
-------	--------	-----------	-------	---------	--------

133. Display self-control around food.

1	2	3	4	5	6
---	---	---	---	---	---

134. Feel that others pressure me to eat.

1	2	3	4	5	6
---	---	---	---	---	---

135. Give too much time and thought to food.

1	2	3	4	5	6
---	---	---	---	---	---

136. Feel uncomfortable after eating sweets.

1	2	3	4	5	6
---	---	---	---	---	---

137. Engage in dieting behaviour.

1	2	3	4	5	6
---	---	---	---	---	---

138. Like my stomach to be empty.

1	2	3	4	5	6
---	---	---	---	---	---

139. Have the impulse to vomit after meals.

1	2	3	4	5	6
---	---	---	---	---	---

140. Enjoy trying new rich foods.

1	2	3	4	5	6
---	---	---	---	---	---

THESE NEXT QUESTIONS ARE ABOUT RELATIONSHIP STYLES

Below are descriptions of **four** general **relationship styles** that people often report.

141. Please read each description and put a **cross in the box** next to the style that **best describes you** or is closest to the way you generally are in your close relationships.

	Pick one (X)
A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.	
B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.	
C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.	
D. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.	

142. Now, please **rate all four** of these relationship styles according to the extent to which you think each description corresponds to your general relationship style on a scale of "1" to "7". The seven possible answers for each relationship style are listed here:

Not at all like me		Somewhat like me			Very much like me	
1	2	3	4	5	6	7

Circle one number for each style to show **how much that style is like you**.

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not at all like me	Somewhat like me	Very much like me
--------------------	------------------	-------------------

C. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

D. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

THESE NEXT QUESTIONS ARE ABOUT HOW YOU RESPOND TO YOUR EMOTIONS

We all experience lots of different feelings or emotions. For example, different things in our lives make us feel happy, sad, and angry etc. This section asks you to think about **how often** you do certain things **in response to your emotions**. You do not have to think about specific emotions but just how often you **generally** do the things listed below.

Please read each statement carefully and answer with **how often** you would respond to your emotions in that way on a scale from "1" to "5". The five possible responses of frequency are listed here:

Never	Seldom	Often	Very often	Always
1	2	3	4	5

Circle one number for each statement to show **how often** you respond to your emotions in that way.

143. I talk to someone about how I feel.

1	2	3	4	5
---	---	---	---	---

144. I take my feelings out on others verbally (e.g. shouting, arguing).

1	2	3	4	5
---	---	---	---	---

145. I seek physical contact from friends or family (e.g. a hug, hold hands).

1	2	3	4	5
---	---	---	---	---

146. I review/rethink my thoughts or beliefs.

1	2	3	4	5
---	---	---	---	---

147. I harm or punish myself in some way.

1	2	3	4	5
---	---	---	---	---

Never	Seldom	Often	Very often	Always
-------	--------	-------	------------	--------

148. I do something energetic (e.g. play sport, go for a walk).

1	2	3	4	5
---	---	---	---	---

149. I dwell on my thoughts and feelings (e.g. it goes round and round in my head).

1	2	3	4	5
---	---	---	---	---

150. I ask others for advice.

1	2	3	4	5
---	---	---	---	---

151. I review/rethink my goals or plans.

1	2	3	4	5
---	---	---	---	---

152. I take my feelings out on others physically (e.g. fighting, lashing out).

1	2	3	4	5
---	---	---	---	---

153. I put the situation into perspective.

1	2	3	4	5
---	---	---	---	---

154. I concentrate on a pleasant activity.

1	2	3	4	5
---	---	---	---	---

155. I try to make others feel bad (e.g. being rude, ignoring them).

1	2	3	4	5
---	---	---	---	---

156. I think about people better off and make myself feel worse.

1	2	3	4	5
---	---	---	---	---

157. I keep the feeling locked up inside.

1	2	3	4	5
---	---	---	---	---

158. I plan what I could do better next time.

1	2	3	4	5
---	---	---	---	---

159. I bully other people (e.g. saying nasty things to them, hitting them).

1	2	3	4	5
---	---	---	---	---

160. I take my feelings out on objects around me (e.g. deliberately causing damage to my house, school, or outdoor things).

Never	Seldom	Often	Very often	Always
-------	--------	-------	------------	--------

161. Things feel unreal (e.g. I feel strange, things around me feel strange, I daydream).

1	2	3	4	5
---	---	---	---	---

162. I telephone friends or family.

1	2	3	4	5
---	---	---	---	---

163. I go out and do something nice (e.g. cinema, shopping, go for a meal, meet people).

1	2	3	4	5
---	---	---	---	---

END OF QUESTIONS

Appendix B – University of Edinburgh Ethical Approval for Survey Study



SCHOOL of HEALTH IN SOCIAL SCIENCE
CLINICAL PSYCHOLOGY

The University of Edinburgh
Medical School
Doorway 6, Teviot Place
Edinburgh EH8 9AG

Telephone 0131 651 3969
Fax 0131 650 3891
Email submitting.ethics@ed.ac.uk

Susannah Johnston
Ph.D Student
Clinical and Health Psychology
School of Health in Social Science
University of Edinburgh

25 February 2015

Dear Susannah,

Application for Level 2/3 Approval

Re: The Construction of Perfectionism in Adolescence

Thank you for submitting the above research project for review by the Section of Clinical Psychology Ethics Research Panel. I can confirm that the submission has been independently reviewed and was approved on the 20th February 2015.

Should there be any change to the research protocol it is important that you alert us to this as this may necessitate further review.

Yours sincerely,

Kirsty Gardner
Administrator
Clinical Psychology

Appendix C – City of Edinburgh Authority Approval for Survey Study

Susannah Johnston	Date	26 March 2015
	Your ref	
	Our ref	SCS/RW
	Direct dial	0131 469 3137

Dear Susannah,

I am writing in response to your application requesting permission to undertake research in The City of Edinburgh.

Your request has been considered, and I am pleased to inform you that you have been given permission in principle to undertake your research. I must stress that it is the policy of this Authority to leave the final decision about participation in research projects of this kind to Head Teachers and their staff, so that approval in principle does not oblige any particular establishment to take part.

I request that you forward a copy of your completed findings to me when they become available. In this case an electronic summary of your thesis would be preferred. Your work may be of interest to a number of staff in the Children and Families Department.

I would like to thank you for contacting the Children and Families Department about your work, and wish you every success in the completion of your project.

Yours sincerely

Ron Waddell
DSM and School Support Manager

Schools and Community Services, Children and Families

Level 1.1, Waverley Court, 4 East Market Street, Edinburgh, EH8 8BG

Tel 0131 469 3137 Fax 0131 529 6213 E-mail ron.waddell@edinburgh.gov.uk



Appendix D – Survey Study Debrief Sheet



What's it all about?

Thank you for volunteering to be part of this research. We are asking lots of young people to complete this survey. Everything you have shared in the survey today will be stored anonymously. This means that no one will ever know it was you who answered the way you did.

The main purpose of the study is to gain a full understanding of something that has been called “perfectionism”. In research of adults, the term perfectionism has been used to describe when people have very high standards and strive for flawlessness. Sometimes, these people become concerned about whether they will meet their standards, but this doesn't always happen.

Until now, no one has specifically explored whether young people experience perfectionism in the same way that adults do. By taking part in this survey, you have really helped to contribute to this research by providing an inside-view of perfectionism experienced by young people and also how it relates to various aspects of life including personality, intelligence, goals, mental wellbeing, and relationships.

If you have any further questions about this research, feel free to contact our research team using the contact details on the Participant Information Sheet.

If the survey has raised any worries for you, big or small, don't bottle it up. It can really help to talk to someone. **We encourage you to talk to your Support for Pupils teacher, your family, or your G.P. if you have something on your mind.** You could also speak to someone at **ChildLine**, a private and confidential service. Their details are:

- Website: www.ChildLine.org.uk
- Telephone: 0800 1111

Thank you again for your fantastic contribution today!

Appendix E – Survey Study Parent/Guardian Information Sheet and Consent Form

Study: “Young People’s Personalities and Wellbeing”

Guardian Information and Consent Sheet

Dear Parent/Carer,

I am conducting a study looking at whether young people have the same variety of personalities and inclinations when it comes to doing things “*just right*” as has been found in adults.

As part of this study, I am asking a number of young people aged 11-18 to fill out some simple questionnaires about personality, wellbeing, social relationships, and emotions. Questionnaires will be completed during school time and under the supervision of a teacher.

Your child will be asked to read an information sheet about what they will have to do. If your child decides to take part, they will be asked to sign a consent form to make sure they know what they have agreed to do. They will then complete a questionnaire booklet. The booklet will contain a brief questionnaire asking basic questions about such things as their gender, their age, etc. followed by more questions in the form of a list of statements. Your child will read each statement and decide how much they agree or disagree that the statement is representative of them.

The questionnaires will be completed within one class period. Your child will be able to withdraw at any point if they decide they do not want to take part and will be told how to do this before they are given the questionnaires. We will provide your child with a supportive information sheet when they are finished.

I am doing this study as part of my Ph.D. at the University of Edinburgh in conjunction with the NHS. The University of Edinburgh Research Ethics Committee and the South Ayrshire Council have both approved the research as being appropriate to conduct.

If you have any further questions, please do not hesitate to contact me or my supervisor:

Miss Susannah Johnston *or* Dr Emily Taylor

Clinical Psychology, School of Health in Social Science, University of Edinburgh

Medical School (Doorway 6), Teviot Place, Edinburgh, EH8 9AG

Tel: 0131 650 3892

Email: Susannah.Johnston@ed.ac.uk *or* Emily.Taylor@ed.ac.uk

If for any reason you **do not** want your child to participate, please fill in the below form and ask them to return it to their guidance teacher. If you are happy for them to participate, you do not need to respond to this letter.

Thank you for your interest

Susannah C. Johnston. University of Edinburgh

Return Form - *please only complete if you **do not** want your child to participate*

“I have read the information and discussed participation with my child. I **do not** want my child to participate in this study.”

Child’s Name: _____

Child’s Class: _____

Parent/Carer’s Name: _____

Signature: _____

Please return to student’s key person.

Appendix F – Survey Study Participant Information Sheet

Study:

“Young People’s Personalities and Wellbeing”

Participant Information Sheet

What is the study about?

Everyone is different. There are a lot of studies about the differences in people’s personalities and I am looking at whether young people have the same variety of personalities when it comes to doing things “just right” that has been found with adults. I’m also interested in understanding how aspects of mental health and wellbeing are related to personality in young people.

What does it have to do with me?

I am asking lots of young people to fill out questionnaires. They are about you and how much you think each sentence in the questionnaire describes you. These will take about 40 minutes to fill in. Remember that everyone is different and there are no right or wrong answers.

Do I have to take part?

No. If you decide you are not interested or do not want to for any reason, then just tell your teacher you do not want to take part.

If you do decide to take part, you will be asked to sign a consent form to let us know you are voluntarily doing this. However, if you change your mind at any time that’s okay, just tell your teacher you want to stop.

What will I be asked to do?

If after reading this sheet you agree to take part, you will be given a consent form to sign.

This is a way of making sure you know what you have agreed to do.

You will then have a booklet to fill in: this asks some questions about you (e.g. your age, where you are from) and then has a number of questions to complete. These questions are in the form of statements and you are asked to say how much each statement describes you or how much you agree with it. Some questions are about your personality, some about your mental health and wellbeing, and others are about social or emotional aspects of you and your relationships.

You should be as honest as possible. There are no right or wrong answers. The questionnaires will not be stored with your name on, so nobody will know who filled them out. You should be able to complete the booklet within your class period.

Are there any good or bad points?

- ☺ Participating in this research means you are actively engaging with real-world research into young people's personalities and wellbeing.
- ☺ If you want to hear about the results of the study overall, we will provide an information sheet once we have studied all the results.

There are no other good or bad points for you. Your teachers are aware of the study. We will be providing you with a helpful information sheet when you finish so if you have any questions or feel you have been affected in any way by the study you will know who you can talk to about this.

What is this research for?

I am doing this study as part of my Ph.D at the University of Edinburgh. The University of Edinburgh has approved the research, and I have had my study approved by both the South Ayrshire Council and your school.

Your answers to the questionnaires will be used to look at how adolescents differ in aspects of doing things 'just right' and how this might link to adolescent mental health and wellbeing.

I have more questions...

If you have any questions about the study, please contact me or my supervisor:

Miss Susannah Johnston *or* Dr Emily Taylor

Clinical Psychology, School of Health in Social Science, University of Edinburgh

Medical School (Doorway 6), Teviot Place, Edinburgh, EH8 9AG

Tel: 0131 650 3892 (Emily)

Email: Susannah.Johnston@ed.ac.uk *or* Emily.Taylor@ed.ac.uk

Appendix G – Standardised Parameter Estimates of EAT-26 items in Model 3C

Item	EAT-26	R ²
1	.631	.602*
2	.666	.557*
3	.250	.937*
4	.409	.833*
5	.380	.856*
6	.575	.669*
7	.653	.573*
8	.317	.900*
9	.456	.792*
10	.770	.407*
11	.744	.446*
12	.631	.602*
13	.090	.992*
14	.732	.464*
15	.280	.922*
16	.440	.806*
17	.590	.652*
18	.612	.625*
19	.197	.961*
20	.569	.676*
21	.569	.667*
22	.690	.524*
23	.703	.506*
24	.723	.478*
25	.655	.571*
26	.131	.983*

Note: * p < 0.001

Appendix H – University of Edinburgh Ethical Approval for Focus Group Study



SCHOOL of HEALTH IN SOCIAL SCIENCE
CLINICAL PSYCHOLOGY

The University of Edinburgh
Medical School
Doorway 6, Teviot Place
Edinburgh EH8 9AG

Telephone 0131 651 3969
Fax 0131 650 3891
Email submitting.ethics@ed.ac.uk

Susannah Johnston
PhD Student
Clinical Psychology
School of Health in Social Science
University of Edinburgh

14 November 2013

Dear Susannah,

Application for Level 1 Approval

Re: The Construction of Adolescent Perfectionism

Thank you for submitting the above research project for review by the Section of Clinical Psychology Ethics Research Panel. I can confirm that the submission has been independently reviewed and was approved on the 14th November 2013.

Should there be any change to the research protocol it is important that you alert us to this as this may necessitate further review.

Yours sincerely,

Kirsty Gardner
Secretary
Clinical Psychology

Appendix I – Focus Group Participant Information Sheet and Consent Form

Perfectionism in Adolescent Mental Health

Investigator: Susannah C. Johnston - Susannah.Johnston@ed.ac.uk
Supervisors: Dr Emily Taylor - Emily.Taylor@ed.ac.uk
Dr Jo Williams - Jo.Williams@ed.ac.uk

Perfectionism has been implicated in various aspects of mental health and wellbeing. Less is known about its role in adolescent mental health. I am interested in exploring how perfectionism presents in and is experienced by young people with eating disorders.

During today’s session, I would like you to discuss your experiences of patient perfectionism within CAMHS. There are points for discussion that I would appreciate you covering, however, feel free to discuss any issues that you feel are important to this topic.

It is important that you feel able to freely discuss this topic in the certain knowledge that your responses will remain confidential and anonymous. Please read the ethical considerations covered in the below consent form. If you are happy to participate then please complete the form and return it to the investigator.

Consent Form

Please read the following information and sign to indicate your consent to participate in today’s discussion:

I understand that:

- My participation is voluntary.
- I am free to withdraw at any time, for any reason.
- My data and details will be kept confidential and anonymous.
- I will not be personally identifiable in any public display of results.
- I will be debriefed afterwards.
- I can ask questions and I can contact the researchers later.
- I can ask to be informed of the study outcomes.

Name:

Signature:

Date:.....

Appendix J – Grounded Theory Study Participant Information Sheet

Are there any good or bad points?

- ☺ If you want to hear feedback on your interview you will be able to, just tick the "yes" box on the consent form for the question that says "Would you be interested in knowing the results of this study?"
- ☺ If you want to hear about the results of the study overall there is another box you can tick on the consent form.
- ☺ Your contributions will help future work at CAMHS!



There are no other good or bad points for you. Your clinicians at CAMHS are aware of the study and if you have any questions or feel you have been affected in any way by the study you can talk to them about it.

What is this research for?

This research will help clinicians to understand what is helpful to young people in therapy. It will also help clinicians and researchers to understand any 'special' aspects to the teenage personality. The research has been approved by the NHS Ethics committee.

I have more questions...

If you have any questions about the project, please contact:

Miss Susannah Johnston
or Dr Emily Taylor
Clinical Psychology,
School of Health in Social Science,
University of Edinburgh
Medical School (Doorway 6), Teviot Place,
Edinburgh,
EH8 9AG

Tel: 0131 650 3892 (Emily's Phone)

Email: Susannah.Johnston@ed.ac.uk
or
Emily.Taylor@ed.ac.uk



Adolescent Personalities:
Hopes and Aspirations

Participant Information Sheet



What is the study about?

Everyone is different. There are lots of studies about the differences in people's personalities, but we don't know very much about personality in teenagers. I am interested in knowing about your personality and how it might influence your feelings and your mental health.

What does it have to do with me?

I am asking young people, who are currently receiving treatment in CAMHS to meet with me for an informal interview. The interview can take anywhere between 45 and 90 minutes. It just depends on how much you have to say!

Do I have to take part?

No, if you decide you are just not interested or do not want to for any reason, then you do not have to do it. Just tell your clinician you do not want to take part.

Please be aware that you will be asked to consent to your GP being told that you are taking part in the research. There is a box on the consent form for this (we will not share the details of your interview with the GP). If you do not want your GP to know then please do not tick this box.



If you do decide to take part, you will be asked to sign a consent form.

However, if you change your mind halfway through that's okay: you can decide not to take part at any time. Again, just tell your clinician or me you want to stop.

What will I be asked to do?

After you are given this sheet, you will have time to think about whether you want to take part. If you agree to take part, you will be given a consent form to sign. This is a way of making sure you know what you have agreed to do.

I will be asking you what you think about your personality or character and your hopes and aspirations. I am interested in your own thoughts about these topics. There are no right or wrong answers.

Unless you want me to give your clinician feedback, I will not share anything you have told me with anybody else.

I will be recording the interview so that it can be transcribed later. Once I have a written record of our conversation, I will destroy the original recording. From this point on, your interview will be anonymous. This means it cannot be traced back to you.

Appendix K – Grounded Theory NHS Scotland Research Ethics Committee Approval

Scotland A Research Ethics
Committee

Secretariat
Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Direct Telephone: 0131 465 5678
Fax: 0131 465 5650
Denothy.Garrow@ethslothian.scot.nhs.uk



01 August 2011

Dr Emily P Taylor
Clinical Psychologist
NHS Lothian
CAMHS Tipperlinn
Royal Edinburgh Hospital
Tipperlinn Road, Edinburgh
EH10 5HF

Dear Dr Taylor

Study title:	The role of perfectionism in a general adolescent population and in a clinical sample
REC reference:	09/MRE00/93
Protocol number:	N/A
Amendment date:	19 July 2011

The above amendment was reviewed by Scotland A Research Ethics Sub-Committee meeting, held in correspondence on 28th July 2011.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Chairman Dr Ian Zealley
Vice-Chairman Dr Colin Selby

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Covering Letter		19 July 2011
Notice of Substantial Amendment (non-CTIMPs)		19 July 2011
Participant Information Sheet: with tracked changes shown	CAMHS V4	30 June 2011

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

R&D approval

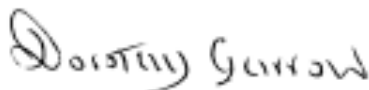
All investigators and research collaborators in the NHS should notify the R&D office for the relevant NHS care organisation of this amendment and check whether it affects R&D approval of the research.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

09/MRE00/93:	<i>Please quote this number on all correspondence</i>
---------------------	--

Yours sincerely



Dr Colin Selby
Sub Committee Chairman



Scotland A REC

Attendance at Sub-Committee of the REC meeting on 29 July 2011

<i>Name</i>	<i>Profession</i>	<i>Capacity</i>
Dr Colin Selby	Consultant Physician	Expert
Dr Craig Melville	Senior Lecturer in Learning Disabilities	Expert
Mrs Margaret Thomson	Retired	Lay Plus

Also in attendance:

<i>Name</i>	<i>Position (or reason for attending)</i>
Dr Alex Bailey	Scientific Officer
Mrs Dorothy Garrow	SAREC

Appendix L – Grounded Theory Study Research and Development Site Approval

University Hospitals Division

Queen's Medical Research Institute
47 Little France Crescent, Edinburgh, EH16 4TJ

CPP/SS/approval

08 May 2012

Dr Emily Taylor
School of Health in Social Science
Teviot Place
Edinburgh
EH8 9AG

Dear Dr Taylor,



Research & Development
Room E1.12
Tel: 0131 242 3330
Fax: 0131 242 3343

Email: R&DOffice@luht.scot.nhs.uk

Director: Professor David E Newby

Lothian R&D Project No: 2012/P/PSY/03

Title of Research: The role of perfectionism in a general adolescent population and in a clinical sample

REC No: 09/MRE00/93

CTA No: N/A

Eudract: N/A

Patient Information Sheet (1B): Version 3 dated 20 January 2010
Patient Information Sheet (2B): Version 4 dated 30 June 2011

Consent Form 1: Version 3 dated 20 January 2010
Consent Form 2: Version 3 dated 23 April 2011
Clinical Consent Form: Version 3 dated 20 January 2010

Parent Information Sheet 1 & 2B &
Clinical Information Sheet 1 & 2B:
Version 3 dated 20 January 2010

Protocol: Version 1 dated 18 November 2008

I am pleased to inform you that this study has been approved for NHS Lothian and you may proceed with your research, subject to the conditions below. This letter provides Site Specific approval for NHS Lothian.

Please note that the NHS Lothian R&D Office must be informed if there are any changes to the study such as amendments to the protocol, recruitment, funding, personnel or resource input required of NHS Lothian. This includes any changes made subsequent to management approval and prior to favourable opinion from the REC.

Substantial amendments to the protocol will require approval from the ethics committee which approved your study and the MHRA where applicable.

Please inform this office when recruitment has closed and when the study has been completed.

I wish you every success with your study.

Yours sincerely

A handwritten signature in cursive script, appearing to read 'Christine P Phillips'.

Dr Christine P Phillips
Deputy R&D Director

Cc Paul Dearie, QA Manager
Leanne Galloway

Appendix M – Grounded Theory Study Clinician Consent Form



Clinician Consent Form

Study Title: The Role of Personal Standards in Adolescent Mental Health

Please read carefully and complete the following for each participant:

I have read the Participant Information Sheet and agree that my client
_____ (name) is able to provide
his/her own consent to take part in this study.

The client is diagnosed with _____
(This must be an eating disorder in order to participate. Please be specific as to which
type of eating disorder).

Signed: _____

Print name: _____

Date: _____

Appendix N – Grounded Theory Study Participant Consent Form



Participant Consent Form 2

Study Title: The Role of Personal Standards in Adolescent Mental Health

Please read carefully and complete the whole form

	Please tick appropriate box			
Have you read and understood the Participant Information Sheet?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Have you been given satisfactory answers to any questions you had about this study?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that your participation is entirely voluntary?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that you can withdraw from the study at any point and without reason?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that your participation (or non-participation) will not affect your care at CAMHS?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that this conversation will be recorded using a digital audio device?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that this recording will be used to create a written copy of our conversation?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that the audio recording will be destroyed once the written copy is completed?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that only my supervisors and I will have access to the complete record of our conversation?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that this conversation is not intended to be for therapeutic purpose?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you understand that any reporting of our conversation will be done so anonymously and in a way that ensures the information is not	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

identifiable as coming from you? (i.e. all personal identifiable information will be changed)				
Do you understand that I will not be providing feedback to your clinician (unless you specifically request this)?	Yes		No	
Do you understand that you can share our conversation with your clinician?	Yes		No	
Do you agree to take part in this study?	Yes		No	
Do you consent to your GP being told that you are taking part in this study?	Yes		No	

Signature of Participant (You) _____

Name in Block Capital Letters _____

Date _____

Signature of Investigator _____

Name in Block Capital Letters _____

Date _____

Appendix O – Grounded Theory Study Debrief Sheet

What's it all about?

Thank you for volunteering to be part of this research. I am interviewing a number of other young people who are going through similar difficulties to you. Everything you have shared with me today will be stored and reported anonymously. This means that no one will ever be able to identify what you have said as being said by you.



The main purpose of the study is to gain a full understanding of something that has been called “perfectionism”. In research of adults, the term perfectionism has been used to describe when people have very high standards and strive for flawlessness. Sometimes, these people become concerned about whether they will meet their standards, but this doesn't always happen.

Until now, no one has specifically explored whether young people experience perfectionism in the same way that adults do. By sharing your experience with me, you have helped to contribute to this research by providing an inside-view to perfectionism experienced by young people.

Now that we have had our chat, I will listen back to the recording made today and type it out so that I can easily read through what has been said. My supervisors and I will be the only people with access to read this. We will look through all of the chats I have had with young people to see if there are any shared experiences and details that will help us to further understand adolescent perfectionism.

The information gained in this study may be presented in my Ph.D. thesis and may also be used for reports which will be presented in scientific journals or at academic

conferences. If I quote our chat to give examples, I will ensure there is no way that the reader can identify you as the person speaking.

If you have any questions about this research, feel free to contact me or my supervisor using the contact details over the page. If our chat has raised any issues or concerns you would like to talk further about, please share them with your CAMHS clinician at your next appointment.

Once again, I would like to thank you for your fantastic contribution today!

Susannah Johnston

For further information, please contact:

Miss Susannah Johnston *or* Dr Emily Taylor

Clinical Psychology,

School of Health in Social Science,

University of Edinburgh

Medical School (Doorway 6), Teviot Place,

Edinburgh, EH8 9AG

Tel: Emily Taylor: 0131 650 3892

Email: Susannah.Johnston@ed.ac.uk *or* Emily.Taylor@ed.ac.uk

If today's conversation has raised any personal issues for you, please speak to your CAMHS clinician at your next appointment.