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RUNNING HEAD: ACT BASED INTERVENTIONS IN DISORDERED EATING

THE EFFECTIVENESS OF AN ACT BASED INTERVENTION IN THE MANAGEMENT
OF DISORDERED EATING

A thesis

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of the requirements for the Degree of
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Abstract

Disordered eating is a term that refers to patterns of thoughts and behaviour that are maladaptive, and often centred around food, weight, and eating. For individuals who engage in disordered eating, the risk of progression to a clinically significant disorder is high, and once the diagnostic threshold is crossed, time becomes an increasingly important factor. This research endeavours to evaluate the efficacy of an intervention which is widely accessible and low cost, which may be used to address increasingly high rates of diagnosis and demand for services.

The efficacy of Acceptance and Commitment Therapy (ACT) in treating a broad range of disorders has been well-established in empirical literature. The present study utilised a non-concurrent multiple baseline design to evaluate the efficacy of a self-help ACT workbook intervention in managing non-clinical disordered eating. Follow up data was collected six weeks after completion of the intervention. Participants were also asked to complete pre and post-intervention measures of acceptance, valued living, disordered eating pathology, and a general screen of psychopathology. The book, 'Get Out of Your Mind and Into Your Life', by Steven Hayes, was used for the purposes of this study in a community sample. The content of the book is based on ACT and contains information and exercises based around the six core principles of ACT.

Seventeen participants who were concerned about their eating were recruited for this research via poster advertisements placed around a university campus and the wider city. 11.8% (n=2) of the participants were male and 88.2% (n=15) were female. Following a two-week baseline, participants worked through select chapters in the book over the course of six weeks. All participants were contacted via telephone to collect weekly measures of suffering, struggle, workability, and valued action, which are key components of ACT. Participants were also asked

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to rate the extent to which the week's reading had aided them in managing disordered eating behaviour. After completing the intervention, acceptance and quality of life ratings showed improvements at a trend level, and disordered eating pathology significantly decreased. All of these improvements were maintained at follow up. There were no significant changes in general measures of pathology, (i.e. depression and anxiety), although non-significant trends were observed, which indicated improvement. Although the small n nature of this research means that findings should be interpreted with caution, the results of this research support the hypothesis that self-help interventions can be useful for mitigating subclinical disordered eating pathology, and suggest that further research is warranted into the development of ACT based interventions for subclinical disordered eating which are widely available and accessible to all.

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This thesis is dedicated to my wonderful parents.

Mom and Dad, every success I enjoy can be attributed to you.

Thank you for helping me achieve more than I ever thought was possible.

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CHAPTER ONE: INTRODUCTION

In New Zealand, 1.7% of the population will be diagnosed with an eating disorder in their lifetime, and 25% of people will experience disordered eating. There is a particularly high prevalence in Māori and Pacific populations, and this is associated with increases in mortality and co-morbid conditions. Among individuals with an eating disorder diagnosis, the suicide rate is 58% higher than that of the general population. The Ministry of Health has reported a dramatic increase in demand for eating disorder services; a 51% increase in service users over the last three years. Although much of this increase in service use can be explained by improvements in accessibility and capacity of existing services, there are still long waiting lists, which means that many individuals with sub-clinical concerns are triaged and excluded based on the severity of their illness. The report published by the Ministry of Health in 2008 states that there is a need for further service assessment and expansion to match the growing rates of diagnosis in New Zealand (Ministry of Health, 2008).

Barriers to services isn't a problem that is limited to New Zealand. In the United States, Eating Disorders are the third most common chronic illness after obesity and asthma (Martinson, Esposito-Smythers, & Blalock, 2016). In a recent review, the average cost of residential and inpatient services in the United States was approximately US\$30,000 a month, with an average admittance period of three months. Those in the New Zealand public health system are able to access free services, although the entitlement to subsidised therapy is limited, with most people only able to attend four sessions free of charge. Fees for psychologists in private practice and community mental health can vary, and will often be partially subsidised by ACC and Oranga Tamiriki. However, despite this subsidy, it is often still financially not feasible for many service

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users to access ongoing clinical interventions, despite the fact that many individuals need more than four sessions to make progress (Ministry of Health, 2004). There is a need for the development of services that treat Māori and Pacific people, and are readily accessible, with a clear focus on the cultural and ethical underpinnings of mental health reform.

Eating disorders are characterized by severe and ongoing impairments in functioning and are frequently classified as either Anorexia Nervosa (AN), Bulimia Nervosa (BN), or Binge Eating Disorder (BED). The diagnostic criteria for Anorexia Nervosa is related to disordered behaviours and body weight, with the severity of the disorder being determined by BMI. Indicators of Anorexia include an intense and irrational fear of gaining weight, restricted energy intake, and amenorrhea, which is defined for the purposes of this research as the loss of three consecutive periods, unrelated to other medical complications (American Psychiatric Association, 2013).

Bulimia Nervosa can be more challenging to detect as clients frequently have no significant weight disturbances. BN is diagnosed when individuals engage in an episode of binge eating, as well as dangerous recurrent compensatory behaviour, such as purging or laxative use, twice per week over a period of three months. BED is diagnosed the same way as BN, with the exclusion of compensatory behaviour. Individuals who do not meet these classifications outlined by the DSM are often diagnosed with Eating Disorder not Otherwise Specified (EDNOS), or non-clinical disordered eating.

Disordered Eating

An equally important but often overlooked issue is that of subthreshold eating disorders. Disordered eating is the term used to describe many of the same attitudes and behaviours as can be seen in someone with a clinical diagnosis, but they are considerably less severe, and occur (or

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are observed) in individuals who haven't yet met the criteria for diagnosis. For individuals who engage in disordered eating, the risk of progression to a clinically significant disorder is high, approximately 20% (Coelho, de Abreu Soares, Innocencio da Silva Gomes & Goncalves Ribeiro, 2014, Stice, Marti, Shaw & Jaconis, 2009). Once the diagnostic threshold is crossed, time becomes an increasingly important factor in achieving good treatment outcomes (Croll, Neumarksztainer, Story, & Ireland, 2002).

There is a clear correlation between duration of illness and treatment outcomes (with longer duration associated with poorer outcomes), which suggests that intervention before a clinically significant disorder develops is pertinent. Disordered eating is considerably less intractable than a clinical diagnosis, although, it is often triaged and overlooked when it comes to accessing services (Grange and Loeb, 2007). A recent study of individuals with bulimia showed that individuals who sought treatment 3-5 years after symptoms began to present themselves had an 80% recovery rate, whereas those who waited 10-15 years to receive treatment only had a 20% recovery rate. With a greater emphasis on early accessible intervention for those with disordered eating behaviour, it is likely that these individuals will have a favourable prognosis and a better chance at a full recovery (Reas et al., 2000).

Disordered Eating is a relatively common phenomenon in the western world, with many individuals exhibiting attitudes and related behaviours associated with a drive to achieve or maintain a low body weight (Jones, Bennett, Olmstead, Lawson, & Rodin, 2001). Of 1600 adolescents surveyed in 2015, 61% of females and 28% of males reported engaging in disordered eating behaviour, such as bingeing, restricting, and over-exercising (Martinson, Esposito-Smythers, & Blalock, 2016). Frequently, individuals who display atypical eating behaviours

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which cause distress or impairment that is clinically significant may be diagnosed with Eating Disorder Not Otherwise Specified (EDNOS) (American Psychiatric Association., 2013).

Disordered eating is an important topic to understand and research because although it is non-clinical in nature, it can cause persistent and significant impairments in both physical and mental health (American Psychiatric Association., 2013). It is associated with an increase in drug and alcohol use, depression, social problems, and comorbidity with other mental illnesses and disorders. Disordered eating is still a public health concern as these issues are costly on a personal and financial level (von Ranson, Iacono & McGue, 2002).

Individuals engage in a number of risky eating related behaviours that can have damaging consequences, and are frequently indicative of other mental health concerns (Martinson, Esposito-Smythers, & Blalock, 2016). Disordered Eating is often more difficult to detect because they may be less severe than clinical eating disorders but they come with much of the same compensatory behaviour, such as bingeing, fasting, purging, laxative use, and exercise abuse, which can result in a number of health problems (Whittaker, 1992, Zerbe, 1995, Reba-Harrelson et al., 2009). Research has shown that young women who engage in sub-clinical disordered eating behaviour are 18 times more likely to go on to develop an eating disorder (Hesse-Biber, Leavy, Quinn & Zoino, 2006). However, this statistic is not limited to females, and disordered eating is frequently a precursor to a more severe clinical diagnosis among all demographics (Patton, Coffey, & Sawyer, 2003, Chamay-Weber, Narring & Michaud, 2005).

While disordered eating is typically believed to afflict young women, the prevalence is more varied and diverse than the popular press would lead us to believe. A study conducted in 1995 and again in 2005, found that rates of fasting, dieting and bingeing tripled amongst the 65-80 year old cohort, leaving them with very similar rates of psychological, physiological and social

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distress as women in the 15-30 year old cohort (Zerbe, 1995). Of the 4,070 women included in the study, 1670 (41%) of them presented with disordered eating pathology such as bingeing, purging, restricting and other compensatory behaviour. Of those, 13 (0.3%) met the diagnostic criteria for AN, 337 (8.4) met the diagnostic criteria for BN, and 70 (1.7) met the diagnostic criteria for BED. Ethnicity is also implicated in rates of disordered eating, with people of colour in the United States having higher rates of disordered eating than their counterparts, and minorities being considered to be particularly at risk for maladaptive coping styles (Croll, Neumarksztainer, Story, & Ireland, 2002).

Rates of disordered eating are similar amongst males and females. However, a survey of 19,000 adults, found significant differences in the way that disordered eating presents itself. Men are more likely to binge eat, and women are more likely to engage in restrictive patterns of eating. Measures of bodily satisfaction, desire to change weight, and rates of disordered eating were strikingly similar, with a <10% difference between genders on all measures (Forrester-Knauss, & Zemp Stutz, 2012). Sexual orientation is another factor which affects prevalence rates of disordered eating. In a large US sample, the presence of disordered eating behaviour was somewhat similar amongst homosexual and heterosexual females, but there was a significantly higher rate among homosexual males, who were significantly more likely to exhibit disordered eating behaviour when compared with their heterosexual counterparts (French, Story, Remafedi, Resnick, & Blum, 1996). Overall, the impact of sexual orientation and culture on disordered eating behaviour is not yet well understood.

Although there has been NZ-based research on clinical eating disorders, literature is scarce when it comes to disordered eating. Epidemiological data collected in 2006 suggests that the lifetime prevalence of eating disorders in New Zealand has remained relatively unchanged in

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the last two decades, increasing from 0.5% in 1989, to 1.2% in 2006 (Wells, Browne, Scott, McGee, Baxter, & Kokaua, 2014, Wells, Bushnell, Hornblow, Joyce & Oakley-Browne, 1989).

Research which provides epidemiological data for the last decade is needed in order to better understand trends, and the prevalence of these issues in the present context.

The absence of recent research that is culturally relevant and includes Māori is somewhat problematic, as it makes it difficult to form conclusive statements about the extent to which disordered eating affects our society (Turangi-Joseph, 1998). Although the absence of the thin ideal and contemporary beauty standards has historically been a protective factor for smaller and non-western nations, disordered eating is increasing in prevalence worldwide. The frequency of dieting behaviour is high in New Zealand, and it can be argued that the effects of colonisation linger on in the 21st century, with increasing access to US media causing loss of cultural relativity and traditional social norms (Ngamanu, 2006). Similarly, the prevalence of normative discontent plays a role in the insidious nature of these kinds of issues. The term refers to the concept that body dissatisfaction is normalised and justified by the belief that it is widespread. That is to say, both men and women feel like their experiences are normal, and therefore relatively unproblematic (Tantleff-Dunn, Barnes & Larose, 2011). This phenomenon is especially dangerous, as it establishes and reinforces the normalcy of disordered eating behaviours and attitudes which are, in reality, highly risky and likely to lead to ongoing illness.

While sociocultural influence is well understood to play a significant role in these types of problems, parental mental health, genetic susceptibility and the whānau environment cannot be overlooked as significant risk factors. In cultures that value holistic treatment models, it is important to understand how disordered eating and other maladaptive patterns of coping develop, and how they can be resolved in a culturally sensitive and effective manner. Within New

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Zealand, it is imperative to develop primary and secondary eating disorder interventions that are widely accessible, holistically based, and aligned with treaty values, in order to combat the high rates of mental illness and to take pressure off services which are unequipped to deal with high demands. There are a number of existing empirically validated interventions that are well understood and have been used to treat disordered eating with varying levels of success, and these are discussed in more detail below.

It is important to consider the merit of the Health At Every Size (HAES) model in the management of eating disorders and disordered eating, and in challenging the concept of normative discontent. The HAES model is a public health paradigm which is somewhat set apart from other weight-centric models of physical and psychological health, due to its focus on size diversity. HAES advocates for the use of holistic health strategies, while still being deeply rooted in empirical evidence and research. In this model, weight is not central, but rather, there is a focus on cognitive flexibility and a dynamic awareness of the body and what it needs. It fosters physical and psychological well-being through a number of principles which could be feasibly implemented by a variety of health providers, and could complement existing therapeutic protocol. There is much overlap between the underlying components of cognitive therapies, especially where disordered eating is concerned.

The HAES principles encourage people to target internalised narratives around size and weight, and use self-compassion and kindness in their own relationship with their body (Tylka et al., 2014). A review of six randomised control trials which evaluated the efficacy of the inclusion of the HAES model in existing CBT programmes designed for individuals with disordered eating found consistent and statistically significant improvements in measures of both psychological and physical health in all six studies (Bacon & Aphramor, 2011). Similarly, the framework was

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evaluated in the format of a psychosocial intervention strategy designed for women with body image concerns and those at risk of developing eating disorders. The results of the research were promising, with a significant number of women reporting lower scores on risk screens, and a statistically significant reduction in disordered eating behaviour and cognitive dissonance (Stice & Presnell, 2007). Research suggests that HAES is a useful and effective paradigm in reducing disordered eating behaviour and associated risk, and furthermore, there is evidence for HAES as a useful and accessible adjunct to cognitive based therapeutic interventions, which are discussed below.

Therapeutic Interventions

Cognitive Behavioural Therapy. Cognitive behaviour models are generally regarded as the gold standard for eating disorder therapy, and remain a popular treatment for many types of eating disorder (Fairburn, Cooper & Shafran, 2003). CBT is based on the premise that faulty cognition underlies behaviour dysfunction, and these cognitions develop as a result of past experience. Dysfunctional and compensatory behaviour, like bingeing and purging, are the result of an individual's subconscious evaluation of their own emotion, and the individual's attempt to manage and control it. In an attempt to counter this, Cognitive Behavioural Therapy encourages individuals to become more aware of this process. Individuals are helped to become more aware of their thoughts, and the role they play in stubborn contingencies which link emotional discomfort and problematic eating behaviour. Individuals are encouraged to self-evaluate and acknowledge these faulty connections and the role they play in the creation of negative cognitive fallacies. In order to identify and change these fallacies, individuals must be able to identify them and replace them with balanced and truthful self-evaluations (Myhr, 2011; Beck et al. 1974).

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CBT is the focus of much empirical research and attention, with over 120 clinical trials conducted on the efficacy of CBT treatments in treating mood disorders, eating disorders, and other mental health concerns in the late 1990's. CBT can be adapted to many forms and varieties of psychopathology, and progress is generally rapid, and more effective than other types of psychological intervention (Gloaguen, 1998).

Research to date has shown that CBT is more effective at treating eating disorders when compared with psychoanalytic therapies, and maintains treatment efficacy at both 5 month (42% of participants) and 24 month (44% of participants) follow up. Psychoanalytic therapies showed significantly smaller gains at 5 month (6% of participants) and 24 month (15% of participants) follow up (Wonderlich et al., 2013). In a further meta-analysis, CBT was found to be just as effective as comparative therapies, such as DBT and interpersonal therapy, but sustained treatment gains at follow up, whereas other therapies were not as consistently effective (Yager, 1989). These findings are similar to those of Juarasico, Forman & Herbert (2013), who evaluated the use of Acceptance and Commitment Therapy (ACT) in the treatment of eating disorders, as an addendum to an existing CBT therapy program. The CBT program used for the purposes of this research was specific to Bulimia, and focussed on weight restoration, elimination of compensatory behaviour, and the normalisation of eating, and this was delivered through individual therapy, group therapy, and facilitated mealtimes. Although successful, all of the therapeutic protocol was delivered daily, and required face-to-face contact with a trained clinician in the context of an inpatient treatment program over the course of approximately a month. Participants who were selected to be in the ACT group received all aforementioned components of the CBT intervention, as well as a twice-weekly facilitated group session which was written based on 'Get Out of Your Mind and Into Your Life'.

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The ACT intervention produced statistically significant decreases in shape concern and weight concern, as well as on measures of global eating pathology. However, the research did not find statistically significant decreases in scores on disordered eating measures when compared to a treatment as usual (TAU) CBT control group, which suggests that CBT is similarly effective to ACT in treating disordered eating. The differences in findings may be due to the research using a clinical sample, who were already undergoing an existing empirically validated treatment, and due to the differences in intensity of the ACT intervention and TAU control. Similarly, the relatively intractable nature of a clinical eating disorder means that progress in a clinical sample is likely considerably slower than that of a sub-clinical population. It is also important to note that ACT is fundamentally different from CBT. ACT focuses mainly on Cognitive Defusion, and individuals are encouraged to focus on acceptance, rather than change. CBT uses cognitive restructuring skills, and a variety of behavioural strategies. Unlike CBT, ACT therapies do not endeavour to change or prevent problematic thoughts, whereas the cognitive behavioural framework stipulates that in order for behaviour to change, thoughts also must change. (Ruiz, 2012). In contrast, ACT works to help clients understand and acknowledge and accept difficulty and distress, rather than attempting to eliminate the experience or symptoms entirely.

In a large review of eating disorder interventions, consisting of 154 patients in total, CBT topped the list of therapies with 54% of patients maintaining weight gain and consistently improving, regardless of their specific eating disorder diagnosis (Fairburn et al., 2009). Treatments for AN were ongoing, typically lasting 12 months or more, and treatments for BN were 20 weeks in total. After the conclusion of the interventions, both BN and AN had reasonably high rates of relapse at 2, 5, and 10 year follow up (Fairburn, 2005). Despite the

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widespread success of CBT, there is still a need for the empirical validation of alternate approaches. Although empirically sound, CBT is not effective in all cases of psychopathology, and needs to be delivered by a trained clinician, which means that it is not readily accessible to many individuals who need it. It is important to explore treatment paradigms that can be delivered sustainably, cheaply, and over long durations. There is promising evidence to suggest that ACT is a suitable framework, and this is discussed below.

Introduction to ACT & Relational Frame Theory

Acceptance and Commitment Therapy (ACT) was developed throughout the 1980s and 1990s by Dr. Steven Hayes. It is based on Relational Frame Theory (RFT), which is a complex theory of human language and cognition. RFT aims to understand the link between language and distress, and how language can provide an explanation for suffering. RFT stipulates that in an attempt to prevent pain, humans are often paradoxically prone to more suffering through the creation of relational frames, meaning that memories and reminders of a painful event, often colloquially termed 'triggers', can provoke significant distress, sometimes equivalent to the actual event. This is based on the bidirectionality of language, which explains the stimulus relation through which a neutral event can be related to a significant one. For example, if an individual has experienced trauma at the hands of someone wearing a red shirt, simply seeing a red shirt - a seemingly neutral event - may cause emotional distress comparable to the traumatic event. The creation of these relational frames is a language skill that is unique to humans due to the complex verbal processing skills we possess (Gross & Fox, 2009). However, Smith (2008) theorised that the relational frames that humans create are prone to error, and this error has a direct impact on mental health. ACT works by changing these relational frame errors and

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addressing inflexible patterns of responding by teaching mindfulness-based coping skills and improving resilience. Individuals are encouraged to acknowledge that their thoughts and language which underlie problem behaviour are simply that - just thoughts (Fletcher & Hayes, 2005).

ACT is based on the concept that suffering is not something to be avoided, but rather a normal part of the human experience. ACT has roots in mindfulness, personal values, and acceptance. This therapy is holistic and inclusive, whilst still being grounded in empirical science (Hayes, 2004). In order to help individuals become more resilient, ACT therapies endeavour to reduce avoidance, and increase acceptance, thus also increasing quality of life and emotional well-being. In order to help individuals achieve this psychological flexibility, ACT works to eliminate Experiential Avoidance (EA). EA is a problematic process that results from unwillingness to experience negative emotions. Individuals who engage in this process may put excessive amounts of energy and time into suppressing and avoiding emotions they perceive as harmful, difficult or painful. It is a key mechanism in psychological distress, and there is a strong correlation between this type of psychological inflexibility and reduced emotional well-being in both clinical and community samples. Although experiential avoidance is an effective emotional regulation technique in the short term, it is unsuccessful and problematic in the long term, and only serves to further disconnect individuals from their emotions and experience (Kashdan, Barrios, Forsyth & Steger, 2006).

Core Components of ACT

There are 6 core components of ACT which target skills deficits at the core of psychological inflexibility, and work at enhancing coping skills and quality of life rather than

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simply endeavouring to eliminate the symptomatology of psychopathology (Hayes, 2006). It is worth noting that each of the components below have independent merit, and can be delivered as a standalone therapeutic process, or as an adjunct to other therapeutic intervention (Masuda, Marshall & Latner, 2018). Individuals who take part in this type of therapeutic process are encouraged to take ownership over their own development and progress, and move towards goals and outcomes that work for them, and are aligned with personal values. The six components are as follows:

Cognitive Defusion. Cognitive defusion is the ability of individuals to recognise thoughts for what they are, based on the idea that human suffering is a normative human experience, and trying to avoid it is only delaying the inevitable. Mindfulness techniques are often used as a technique to aid in teaching cognitive defusion, in an attempt to help people be objectively aware of their thoughts and feelings, without letting their cognitions and emotions influence their behaviour. This component is especially prevalent in those with eating challenges as body image dissatisfaction often comes along with rigid and inflexible patterns of behaviour, and is a significant predictor of developing an eating disorder (Manlick, Cochran & Koon, 2013). The capability of mindfulness based coping techniques in mitigating disordered eating cognition is well understood, and it is a key component of Acceptance and Commitment Therapy.

Expansion and Acceptance. Another key element of ACT is acceptance, which involves allowing feelings of distress to be acknowledged and felt, rather than utilizing experiential avoidance to try and eliminate them. There is a correlation between disordered eating pathology and higher rates of experiential avoidance and a lack of acceptance. Individuals who learn these skills are better able to interrupt maladaptive contingencies and are more adept at both emotional flexibility and self-evaluation (Wildes, Ringham & Marcus, 2010; Baer, Fischer & Huss, 2005).

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Contacting the Present Moment. Individuals who engage in ACT therapies are encouraged to use mindfulness techniques in their ongoing therapeutic intervention. This component encourages individuals to become more aware through questions such as “What is happening right now?” “What thoughts are visiting you?” “How are you feeling in this moment? Describe your emotions”. Without this component, the power of negative cognition often renders individuals ineffective when it comes to awareness and self-observation. Mindfulness techniques enable individuals to become aware of their thoughts, breath, and surroundings, which serves to detract from the attention given to objectifying thoughts, and their related effects on emotion and well-being. This component is the basis of psychological flexibility, and enables progress in the other five domains. It enhances the “natural valuing process” of ACT (Manlick, Cochran & Koon, 2013 pp. 118).

The Observing Self. This component stipulates that individuals who are trying to enhance psychological flexibility need to become adept at self-evaluation, and be able to step back and observe their thoughts, feelings and experiences from an outsider’s perspective (Hayes, 2006). This is a secondary skill, and quite similar to the previous component ‘Contacting the Present Moment’, however this component involves individuals separating themselves from objectifying cognitions, for example, turning the thought “I am unworthy of eating” into “I am having the thought that I am unworthy of eating”, and therefore detaching from the emotional consequences a cognition like this would create (Belmont, 2016).

Values Clarification. Helping individuals establish their values differentiates ACT from other therapies. The values are based on the individual’s goals and how they want to live their life, rather than prescribed societal norms or stereotypical therapeutic outcomes. Individuals are able to take ownership and responsibility over articulating what a good life looks like for them.

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Within ACT, the values come under five major domains: Family, Friends, Intimate Relationships, Spirituality, and Environment. Values clarification requires ongoing action from the participant and gives them greater insight and involvement in their therapeutic journey (Manlick, Cochran & Koon, 2013). This component is especially important in the treatment of eating disorders and disordered eating as it can help clients become less resistant to other aspects of treatment. By focusing on values and goals which are not directly connected to shape and weight, clients are better able to change their behaviour (Juarascio, Forman & Herbert, 2010).

Committed Action. This element of Acceptance and Commitment Therapy is based on the individual's ongoing commitment to living a life that is aligned with their chosen values. Strength in this component ensures that treatment gains are maintained over time, as client's individual treatment goals and objectives are based on their own values, morals and beliefs, rather than being prescribed by a clinician who may not know or fully understand what is important to them (Harris, 2006; Harris, 2007). It is especially important where disordered eating is concerned because often the triggers for relapse are acute and based on environmental stressors (Manlick, Cochran & Koon, 2013).

ACT in Disordered Eating

Although ACT and its related processes can be used to manage a wide range of psychological distress, it has been used effectively in treating disordered eating.

Ultimately, faulty cognition is foundational to the development of disordered eating behaviour, and also contributes to its maintenance. Therefore, it is pertinent to utilise therapies in which the mechanism of change is related to psychological flexibility and acceptance (Baer, Fischer & Huss, 2005). ACT uses both of these mechanisms, and has been utilised in the management of disordered eating concerns in other research with preliminary success.

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A major theory which underpins cognitive therapies is that people who struggle with disordered eating are resolutely fixated on variables such as shape, weight and eating habits when evaluating their own self-worth, rather than a broader spectrum of perceived success. Variables such as family, career, and relationships are of lesser - if any - importance (Fairburn, Cooper & Shafran, 2003). ACT is concerned with how these individuals can restructure the relationship between cognition, language and behaviour, reduce experiential avoidance, and embrace the normative human experience of suffering, rather than trying to control it. An ACT based treatment also helps clients to better understand what they want out of their life, and encourages goal-oriented and values-based living, which is not within the scope of CBT. This helps to eliminate the imbalance in how clients evaluate their own self-worth (Manlick, Cochran & Koon, 2013).

There is preliminary evidence to suggest that ACT can be useful in treating clinically significant eating disorders as well as those which are sub-clinical in nature (Hayes & Pankey, 2002). However, weight restoration cannot be the predominant focus of treatment, and cannot be addressed in its singularity, as meaningful recovery needs to encompass all domains of wellbeing, and include psychoeducation and values clarification to help clients live a meaningful life at any size (Orsillo & Batten, 2002). ACT may help complement more intensive treatment protocols for those with clinically significant eating disorders, as it may help clients get to a point where they are able to recognise that they need to pursue a higher level of care, despite the notoriety eating disorder patients have for being treatment resistant. It may make the transition into and out of care easier for clients (Wilson & Roberts, 2002).

A 2012 study evaluated the efficacy of an eight hour ACT workshop in the management of body dissatisfaction and disordered eating attitudes. Participants (73 females) self-monitored

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their hunger and satiety, as well as bingeing and purging behaviours, and completed pre-intervention and post-intervention measures. Statistically significant improvements were made on measures of anxiety and disordered eating, and participants made improvements on measures of psychological flexibility and acceptance. These findings suggest that ACT has merit in the treatment of disordered eating concerns (Pearson, Follette & Hayes, 2012).

Similarly, Juarasico, Forman & Herbert (2010) used a randomised control design to compare ACT and CBT in the treatment of sub-clinical disordered eating concerns among 150 women (mean age = 26; 89% Caucasian). Participants were evaluated on measures of disordered eating (EDE-Q), DSM-IV diagnostic status (SCID and BSQ), Psychological Acceptance (AAQ-II), Emotional Regulation (DERS). Measures of weight and height were also collected. The ACT and CBT protocol in this study were both therapist led over the duration of 12 hour-long one-on-one sessions, although it is worth noting that the ACT protocol was based heavily on *Get Out of Your Mind and Into Your Life*, which is a self-help publication and does not need to be delivered by a trained clinician (Hayes & Smith, 2005, Hayes, Strosahl & Wilson, 1999, as cited in Juarasico, Forman & Herbert 2010). At post-treatment, participants in the ACT treatment group had a consistent reduction in eating pathology. However, this research utilised ongoing one-on-one therapist support for the participants, so although it provides evidence for ACT's usefulness as an effective intervention in eating concerns, it leaves room for further investigation on alternative and self-directed interventions (Smout, Hayes, Atkins, Klausen & Duguid, 2012)

Masuda, Marshall & Latner, 2018 examined the effectiveness of a mindfulness based intervention which was delivered in a workshop format in order to address subclinical disordered eating in a university students from minority ethnic groups (n= 625, mean age = 20.5 years). Participants completed pre-test and post-test measures, including the Mindful Attention

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Awareness Scale (MAAS), the Disordered eating-related cognitions scale (MAC-R), a scale of emotional distress (IRI-PD), and a measure of general psychological ill health (GHQ-12). The research found significant improvements on all of the aforementioned scales, which suggests that mindfulness was a useful tool in helping participants to separate cognition and behaviour, and in the development of conscientious eating behaviour. Both mindfulness and acceptance are mechanisms of change in ACT, and are prominent in other evidence based treatment models also. These findings are especially pertinent for the present research, as the impact of ACT and mindfulness on minority groups is relatively unknown, but important to understand in New Zealand's multicultural society.

Self-Directed ACT Interventions

Although traditionally, ACT is delivered in a face-to-face therapeutic setting under the guidance of a trained clinician, the use of ACT in self-administered therapeutic interventions is increasingly well-researched and empirically supported. Preliminary findings are promising, showing evidence that it can be successful for use in managing and treating a broad range of issues, including depression and anxiety. Research which has utilised ACT in a self-help content has provided evidence that these components can be taught and understood without requiring the guidance of a trained clinician, making it a sustainable and useful treatment protocol for a wide variety of concerns. These are discussed further below.

Beharry (2008) used a non-concurrent multiple baseline design to evaluate the extent to which the book 'Get Out of Your Mind and Into Your Life' could assist people with public speaking anxiety. She examined to what extent people improved on measures of anxiety, acceptance, quality of life, experiential avoidance, and willingness to engage. Participants in

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Beharry's 2008 study guided themselves through the workbook. Each participant worked through one component per week, and were much more autonomous, although the researcher met with the participants weekly to provide support and guidance. Although two out of ten participants did not complete the intervention, the remaining eight participants made statistically significant treatment gains in experiential avoidance, willingness, and public speaking specific avoidance, although it is important to note that with ACT, there may not be changes in the measures of distress and suffering, but changes and reductions in experiential avoidance, as people are more willing to experience it.

A large meta-analysis of the efficacy of ACT in managing depression and anxiety in individuals with long-term health conditions showed promising reductions in pathological symptomology. In a review of 30 published papers, a total of 4065 participants were assessed on measures of depression, anxiety, psychological distress, and quality of life. ACT interventions were grouped by their varying levels of contact, with group 0 being strictly informative, such as pamphlets, infographics, and mail-out self-help literature. Group 1 was self-directed with guidance; self-help workbook interventions with in-person meetings and follow-ups were included in this group. Group 2 was full immersion therapeutic contact with a mental health professional. Small but significant improvements in measures of anxiety and depression were evident among the participants in the self-help workbook group. Although there were no clinically significant differences when compared to the TAU group, these improvements were statistically significant when compared with the control group at both 3 month and 6 month follow up, which suggests that ACT-based self-help workbooks can be used to mitigate a wide range of psychological distress (Matcham et al., 2014).

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Another self-help ACT intervention, the book 'Living Beyond your Pain', was evaluated for its efficacy in individuals with chronic pain. The research by Johnston (2010) included 24 participants, who worked through the contents of the book, and were supported via phone by the researcher. Despite the higher levels of support, a higher number of participants dropped out, with approximately half of all recruited participants (n=13) dropping out before treatment was completed. Participants who completed the intervention made statistically significant treatment gains on post-test measures of quality of life, acceptance, and satisfaction with life. Improvements in pain ratings were significant, with a medium effect size (Johnston, 2010). While it is difficult to generalise findings from small-n designs, this research provided promising support for the use of ACT in the treatment of sub-clinical mental health disorders but raises pertinent questions about reducing attrition in treatment interventions.

Unfortunately, subject attrition is a significant issue amongst many studies, and especially in those where participants do not have regular contact with a clinician or researcher. There are two main types of attrition that are common in studies of this nature. Non-usage attrition occurs when people remain in the study, but do not participate fully and have very little exposure to the intervention. This type of attrition is especially problematic because in these cases, participant data is often contrived and can be misleading. A second type of attrition refers to instances where participants drop out altogether. While non-usage attrition can skew data, participant drop out can devalue the effects of the research by reducing the number of participants and thereby reducing measures of validity and reliability.

It has been suggested that self-directed interventions are less successful over the long term when compared with therapist directed interventions, and there is room for future research

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into whether outcomes could be improved for self-directed interventions with ongoing therapist contact (Hirai and Clum, 2006 as cited in Beharry, 2008).

Summary

While ACT is effective and increasingly popular among researchers and clinicians, the book 'How to Get Out of Your Mind and into Your Life' has not been evaluated in large scale research. However, it has been trialled as a self-help intervention in New Zealand samples, with promising results. In Beharry's 2008 study on the use of ACT for Public Speaking, participants consistently showed statistically significant improvements on measures of acceptance and action, and statistically significant decreases on measures of anxiety after using the self-help intervention. Self-help interventions such as this one is a cost effective and accessible way for individuals to overcome a variety of issues and warrants further exploration and research.

Given the success of therapist delivered ACT interventions in disordered eating, The present study was based on the book 'Get Out of Your Mind & Into Your Life' by Steven Hayes (2005). The book is readily available, and it is made up of thirteen chapters, which teach the reader a variety of skills, based on the principles and values of ACT. It is an interactive self-help therapy, with worksheets and projects for the reader to complete at the end of each chapter. For the purposes of this study, nine core chapters were chosen for participants to work through.

The aim of the present study was to provide a preliminary evaluation into the usefulness of this self-directed therapeutic intervention, specifically as it pertains to subclinical eating pathology. This is especially topical and important within a New Zealand context as therapy can be expensive and is often unavailable to those who need it due to financial barriers or a lack of readily available and convenient services. The overarching research aim for this study is

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establishing whether or not an ACT based self-help therapy may be able to mitigate sub-clinical eating concerns within a New Zealand sample. Typically, outcome goals of ACT research involve an increased level of acceptance at follow up and an improvement in quality of life measures. In this instance, a reduction in disordered eating behaviour should be the primary result for participants, and therefore changes are expected on measures of disordered eating pathology and eating attitudes. Based on previous studies, this research is also expected to lead to improvements on measures of general psychopathology and subjective well-being.

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CHAPTER TWO: METHOD

Ethics

Prior to the recruitment of participants, ethical approval for the study was gained from the University of Waikato Human Research Ethics Committee (HREC Health) for research with humans (#2017-38).

Participants

Participants were recruited through advertisements placed around community locations, including University campuses, Libraries, and public notice boards. The advertisement, (Appendix A), encouraged people to volunteer if they engaged in food restriction, bingeing, and emotional eating, and if they felt bad about their body image and eating behaviour and were looking for a way to improve their quality of life. An advert was also placed on PsycCafe, a web space for students studying psychology at the University of Waikato. Volunteers were eligible to participate if they were over the age of 16, and wanting to improve their relationship with food and their body. Potential participants who were under the care of a psychologist were not eligible to take part, to ensure participant safety, and to insure that existing treatment was not a confounding variable. From twenty-six enquiries, seventeen met the above criteria and volunteered to participate in the study. 11.8% (n=2) of the participants were male and 88.2% (n=15) were female. Ages were identified in groups, with 29.4% (n=5) of the participants in the 18-24 group, 35.3% of participants in the 25-34 years old group (n=6), 17.6% of participants in the 35-44 group (n=3), 5.9% of participants in the 45-54 years old group (n=1), and 11.8% of participants in the 55-64 years old group (n=2). Of the 17 participants, 64.7% (n=11) identified as NZ European, 5.9% (n=1) identified as Māori, 11.8% (n=2) identified as Indian, 11.8%

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(n=2) identified as Latin American, and 5.9% (n=1) identified as South African. All participants had a minimum of a high-school diploma, with 58.8% (n=10) of participants holding a bachelor's degree, and 23.5% (n=4) holding a higher graduate degree.

Materials

Intervention The book 'Get Out of Your Mind and Into Your Life' was provided to participants. It is a popular self-help book, based on acceptance and commitment therapy. The book is comprised of 13 chapters designed to help people to live a valued life, and are based on the principles of ACT. In the present study, the intervention was designed to be completed in six weeks, and therefore only chapters 1, 2, 3, 4, 6, 8, 11, 12, and 13 were chosen for inclusion, in order to give participants an adequate understanding of ACT and how it can be applied, without requiring intensive reading. The outline of the chapters completed each week of the study are summarised in Table 1. As shown, the intervention began in week 3. Participants were asked to read the introduction to the book, as well as chapters one and two, which provided the foundational understanding of ACT and defined the concept of suffering. In week four, participants learned about Avoidance, and the concept of Letting Go was established, so that the reading on Cognitive Defusion in week five (chapter six) would make sense. Chapter seven was included in week six to teach participants about mindfulness, and this was followed up with chapters eleven and twelve in week seven, which helped participants to understand the concept of valued living, and also to define this concept in the context of their own lives. Week eight was the participant's final week of reading, and provided a succinct overview of the main points and skills learned in the previous chapters. Participants were also asked to read the conclusion of the book in this week. Alongside the book, participants were also given and asked to complete a

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paper copy workbook which was comprised of all corresponding exercises linked to the chapters they had read from the original publication, and this can be found in Appendix I.

Weekly Questions In order to maintain treatment fidelity and assess engagement with the intervention, participants were contacted weekly via telephone. They were asked six weekly questions, answered on a 0 to 10 Likert scale, with 0 being ‘none/not at all’ and 10 being ‘extreme amount’ (Appendix J). Questions were related to suffering, struggle, workability and valued action, which are all key elements of ACT therapies. Each question aimed to evaluate the extent to which participants are engaging in the core components of ACT. This phone check in included a question about whether or not the component they just completed provided skills to help manage disordered eating behaviour, which allows insight into how useful participants found the chapter, as well as their comprehension and commitment.

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Table 1 *Weekly Plan for Participants*

Week	Required Reading	Title
1	<i>BASELINE</i> <i>Questionnaires completed at the beginning of week 1</i>	-
2	<i>BASELINE</i> <i>Questionnaires completed at the completion of week 2</i>	-
3	Introduction, Chapter 1 & 2	What is ACT & Why do we suffer?
4	Chapters 3 & 4	Avoidance & Letting Go
5	Chapter 6	Cognitive Fusion: Having a thought vs. buying a thought
6	Chapter 8	Mindfulness
7	Chapter 11 & 12	What are your values?
8	Chapter 13 & Conclusion <i>Questionnaires completed at the completion of week 8</i>	Committing to doing it: living a valued life
14	Follow up data/questionnaires collected	

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Measures

A series of questionnaires were given to participants to complete four times in total; upon enrolment into the study, after week two of the baseline period (i.e., immediately before starting the intervention), after participants had completed the intervention, and six weeks after the intervention had finished. At each of the four time-points, participants completed the Eating Attitudes Test 26, the Action and Acceptance Questionnaire 9, the Satisfaction With Life Scale, and the Symptom Assessment 45. Participants were also asked to complete a study specific demographics questionnaire (Appendix E).

Eating Attitudes Test 26. The Eating Attitudes Test 26 (EAT 26) is a 26 item scale, derived from the original 40 item questionnaire that was published in 1979. Participants are asked to rate statements relating to eating pathology on a Likert-type scale of 1 (always) to 6 (never), for example, “I am terrified of being overweight”. It is designed to be used in clinical and non-clinical settings, however should not be used as a stand-alone diagnostic tool, but rather as an indicator that a more comprehensive assessment should be conducted.

The EAT-26 was used to establish to what extent participants had concerns around food, weight, and eating, and also to what extent these concerns improved following the intervention. Scores over 20 on the measure indicate higher than average levels of concern. The EAT-26 has three subscales; Dieting (1, 6, 7, 10, 11, 12, 14, 16, 17, 22, 23, 24, and 26), Bulimia and Food Preoccupation (3, 4, 9, 18, 21, 25), and Oral Control (2, 5, 8, 13, 15, 19, 20). Subscale scores are the sum of the responses, and the total score is calculated by totalling all three subscale scores. the Eating Attitudes Test was chosen due to its widespread use and popularity in other research. It has been widely validated and correlated against other measures of self-esteem, ($\text{cor}=-0.38$; $p<0.01$), and translated into many languages (Talwar, 2011, Rivas, Bersabé, Jiménez & Berrocal,

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2010). The internal consistency and test-retest reliability of the EAT-26 are high; .86 and .87, respectively. It is on par with other measures, such as the EDI (.81). However, it is important to note that this test-retest reliability and internal consistency is greater in adult samples, and also greater in clinical samples. Furthermore, the Oral Control subscale is an outlier, with only moderate levels of internal consistency (.56), and therefore results should be interpreted with caution (Gleaves, Pearson, Ambwani & Morey, 2014). For the purposes of this research, the EAT-26 was chosen instead of the EAT-40 due to time constraints. Research shows that the EAT-26 is no less effective than the EAT-40, as a significant correlation remains between outcomes and clinical variables in both the EAT-26 and the EAT-40 ($r=0.98$) (Garner, Olmsted, Bohr & Garfinkel, 1982).

The Action and Acceptance Questionnaire. The Action and Acceptance Questionnaire (AAQ) is a nine item scale that measures acceptance and experiential avoidance. It is the gold standard in research of this nature, and is used widely in all manner of studies. In the present research it served as a treatment check, to see if the measure altered or improved fundamental skills related to ACT. Participants are asked to rate their agreement to a series of statements on a Likert-type scale, with 1 being 'never true', and 7 being 'always true'. The AAQ was chosen for this study primarily due to its efficiency and reliability. It has been used in a number of other studies in order to provide a measure of experiential avoidance and acceptance, without being too time intensive or burdensome for participants. Despite the brevity of the AAQ, the alpha coefficient, a measure of internal consistency, is high (.84). The AAQ has high test retest reliability at both three month follow up (.81) and twelve month follow up (.79), indicating that it is useful in predicting outcomes (Bond et al., 2011). To score the AAQ, all responses are

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summed, with items 1, 4, 5, and 6 reverse coded. Higher scores on the AAQ indicate greater experiential avoidance, and low scores reflect greater acceptance and action.

The Satisfaction with Life Scale. The Satisfaction with Life Scale (SWLS) is a five-item scale that measures subjective wellbeing, and was included in this research to provide information on overall satisfaction with life, based on the assumption that the development of skills fundamental to ACT would contribute to changes in this measure as well. Participants are asked to rate their agreement to a series of statements on a Likert scale, with 1 being ‘strongly disagree’, and 7 being ‘strongly agree’ (Diener, Emmons, Larsen & Griffin, 2010). The SWLS was chosen to provide data around subjective wellbeing among participants, and to give insight into whether or not that the intervention improve satisfaction with life and subjective well-being. Although the SWLS has a somewhat narrow focus, it is strongly correlated and shows acceptable convergent validity with other longer measures of subjective well-being, such as the extended SWLS. It has consistently high test-retest reliability (.82), and a high alpha coefficient (.87), which indicates that it is an effective, brief measure for understanding satisfaction and quality of life (Pavot, Diener, Colvin, & Sandvik, 1991, Pavot, & Diener, 2008). The SWLS is scored by calculating the sum of responses for all items. Higher scores on the SWLS indicate greater life satisfaction.

The Symptom Assessment 45. The Symptom Assessment 45 (SA-45) is a 45 item questionnaire that provides a general assessment of psychiatric symptomatology. Participants are asked to rate their level of agreement with statements on a 5-point Likert scale, with 1 being ‘not at all’, and 5 being ‘extremely’. The SA-45 has been used in clinical and non-clinical settings, and has consistently high test-retest reliability across ages and clinical status, averaging .80. The test has high internal consistency, and a reasonable alpha coefficient for both the adult and

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adolescent age ranges (.71). Due to its broad symptom screening, reliability and validity, the SA-45 is a suitable measure for initial screens of psychopathology (Slavin-Mulford, Perkey, Blais, Stein & Sinclair, 2015). It is a popular measure that has been used in a variety of studies. For the purposes of this research, the SA-45 was used to assess general psychological functioning, and track changes in psychological well-being as a result of the intervention. The domains include Depression, Interpersonal Sensitivity, Hostility, Obsessive-Compulsive, Psychoticism, Paranoid Ideation, Somatization, and Phobic Anxiety. The SA-45 is scored by calculating raw scores for each individual symptom domain. with higher numbers suggest a greater level of pathology. The Global Severity Index (GSI) is calculated by adding all scores from each domain, with a possible range of scores from 45-225. The Positive Symptom Total (PST) is calculated by summing all '1' (Not At All) responses, and subtracting this sum from 45. For the purposes of this research, both domain scores and general scores were evaluated.

Demographics Questionnaire Participants were asked to complete a brief demographics questionnaire that asked participants about their age group, ethnicity, level of educational attainment, and gender, comorbid conditions and highest level of education the highest degree or level of school they have completed,

Study Design

The study utilized a non-concurrent multiple baseline design. All participants were subject to a two week baseline phase in order to examine natural changes in the study measures over time. This research design meant that each individual served as their own control group, and the intervention's progress and effectiveness could be monitored, both during and after implementation.

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Procedure

Participants were recruited through advertisements placed on online forums and community notice boards (Appendix A). Respondents to the advertisement were sent an information sheet, as well as contact details for the researcher, an overview of the inclusion criteria and information about counselling resources (in case the study raised issues that were problematic for them) (Appendix B). Following this, a time was arranged a time for an initial meeting, at which point they were able to ask questions and fill out the consent form (Appendix C). During this meeting, participants were asked to complete baseline measures (Appendix E). Following the initial meeting, all participants completed a two-week baseline period, following which another in-person meeting took place. The intervention was explained to them, and they were given comprehensive information about what the study entailed, and the reading that was required of them. Participants were given a copy of the book 'How to Get Out of Your Mind and Into Your Life' by Steven Hayes, and were provided opportunities to ask any questions they may have about the research. During this meeting they were asked to complete the questionnaires again. This was followed by a six-week intervention phase, as described in the materials section. Participants were asked to read one to two assigned chapters each week, and complete supplementary workbook activities which complemented the chapters they had read in order to consolidate their learning. (Table 1, Appendix M). Participants were contacted weekly via telephone at a time that suited them, and were asked a set of standard questions (Appendix J) In the event that participants were unable to be contacted by phone, an email was sent to follow up. Upon completion of the intervention, participants completed the questionnaires a third time. Four weeks after the completion of the intervention phase, participants were asked to complete the questionnaires again in order to provide follow up data. Participants were asked to complete the

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baseline and intervention in 8 weeks total, although timing was flexible if necessary. At the end of the study, participants were thanked for their involvement. Participants who did not finish the research were asked to complete the questionnaires a final time, regardless of how far they had progressed. The time at which participants withdrew or finished the research was noted. The dates on which participants completed each chapter was also noted.

Safety Procedures

A comprehensive action plan (Appendix H) was created to define appropriate protocol in the event of disclosure or indicators of distress. Participants were actively supported in engaging with whānau, and finding professional services and support groups. For the purpose of this study, the action plan was split into two parts, stipulating specific management protocols for participants who were of concern to the researcher, as well as participants who are at risk of immediate harm to themselves or others.

Statistical Analysis

Intention to Treat Analysis Intention to treat analysis was applied for participants who withdrew after completing four weeks of the intervention, meaning that their data was carried forward, and included regardless of the intervention they received and subsequent withdrawal or deviation from protocol (Gupta, 2011). This did not apply for participants who failed to start the intervention or who withdrew in the first two weeks of participation. A total of 14 participants were included in the final analysis.

Baseline Data. Participants provided two sets of baseline data. The first set was collected upon enrolment in the study, and the second was collected after two weeks. A paired samples t-test was conducted to establish if there were statistically significant changes between the two baseline scores. Baseline data to be used in further analysis was calculated based on the

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average of scores collected on recruitment and at the end of week two, in the event that there were no statistically significant changes between the two scores. week two was used as participant's baseline measure.

To assess the effects of the intervention, a one-way repeated measures Analysis of Variance (ANOVA) was conducted for each of the measures, and their subscales (EAT-26, AAQ, SWLS, SA-45), as well as for the Weekly Rating Scale. When Mauchly's test was significant ($p < .05$) the Green-House Geisser correction was used in interpreting the ANOVA. If it was not significant, then sphericity was assumed. An alpha level of .05 was used in this analysis, and is used throughout this thesis. Effect sizes were also calculated as part of the ANOVA to assess the magnitude of the change (partial η^2). These were considered small if between .10 to .30; medium if between .30 and .50; and large if greater than .50 (Cohen, 1992). If the ANOVA was significant, pairwise comparisons were also conducted, and the Bonferroni adjusted p value was used. For the purposes of the weekly check-in data, difference scores were used in the analysis to help reduce the variability in the data. For all other measures, actual scores were used.

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Results

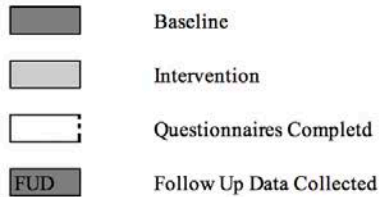
The aim of the research was to evaluate the effectiveness of the self-help work book titled 'Get Out of Your Mind & Ito Your Life' by Steven Hayes (2005). In particular, this thesis sought to answer the question of whether there will be a reduction in disordered eating among participants, and secondarily, if subjective well-being will increase among participants who use the workbook. A total of 17 people were recruited to participate in the study, and a total of 14 people were included in the analysis. Table 2 illustrates the progress of each participant through the intervention, as well as the time period in which they completed the intervention. The average time taken to complete the intervention was 7.6 weeks, with a range of completion times from 6 to 14 weeks. The numbers in the shaded areas shows the chapter the participants worked through in each week.

The following section focuses on the effect of the intervention on the key outcome measures. As described previously, in order to establish a single baseline score, t-tests were conducted to compare participant scores in week one and week two for all scales and subscales of each outcome measure. In the event that the changes from week one to week two were significant, the score from week 2 was used as the baseline score thereafter (as this was the most conservative approach). In the event that the changes were not statistically significant, the score from week one and week two was averaged, and the resulting number was used as a baseline score.

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Table 2 Participant progress through the intervention; Columns represent weeks, and numbers within the boxes represent chapters completed at the time point.

PPT ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
A	Baseline	1 & 2	3 & 4	6			FUD															
B	Baseline	1 & 2	3 & 4	6	8			11 & 12				13 & C			FUD							
C	Baseline	1 & 2	3 & 4		6	8	11 & 12	13 & C	FUD													
D	Baseline	1 & 2	3 & 4	6	8	FUD																
E	Baseline	1 & 2	3 & 4	6	8	11 & 12	13 & C	FUD														
F	Baseline	1 & 2	3 & 4	6	8	FUD						FUD										
G	Baseline	1 & 2	3 & 4	6	8	11 & 12	13 & C	FUD					FUD									
H	Baseline	1 & 2		FUD																		
I	Baseline	1 & 2	3 & 4	6	8	11 & 12	13 & C	FUD					FUD									
J	Baseline	1 & 2	3 & 4	6	8	FUD						FUD										
K	Baseline	1 & 2	3 & 4	FUD																		
L	Baseline	1 & 2	3 & 4	6	FUD						FUD											
M	Baseline	1 & 2		FUD																		
N	Baseline	1 & 2	3 & 4	6	8	11 & 12	13 & C	FUD					FUD									
O	Baseline	1 & 2	3 & 4	6	8	11 & 12	13 & C	FUD					FUD									
P	Baseline	1 & 2	3 & 4	6	FUD																	
Q	Baseline	1 & 2	3 & 4	6	8	11 & 12	13 & C	FUD														



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Effects of the Intervention on Attitudes towards Eating

Figure 1 shows the mean scores for participants on the EAT-26, at the three different time points. There was an overall decrease of scores on the General Severity Index subscale. This decrease was statistically significant, as determined by one-way ANOVA $F(2,26) = 46.1, p < .001; \eta^2 = .78$.

Post-hoc analysis (Bonferroni corrected) confirmed that the difference in scores between baseline and post-intervention was significant; $t(13) = 6.50, p = .010$. Similarly, the difference between baseline and follow up were also significant; $t(13) = 7.20, p = .010$.

The Oral Control subscale of the EAT-26 showed only incremental changes in scores over time, and a one-way ANOVA confirmed that these were not statistically significant ($F(1.4, 15) = 4.2, p = .100$). A downward trend was observable on the Bulimia subscale, with means decreasing from baseline to follow up. Furthermore, a one-way ANOVA established that these decreases were statistically significant, and the effect size relating to the strength of the difference was large ($F(1.2,26) = 30.4, p = .021; \eta^2 = .67$). Post-hoc analysis confirmed that the difference between baseline and post intervention was significant; $t(13) = 5.31, p < .001$, as was the decrease between post intervention and follow up; $t(13) = 2.78, p = .015$. Similarly, the difference between baseline and follow up was also significant; $t(13) = 6.94, p < .001$. A Bonferroni adjusted p-value was used.

Lastly, the dieting subscale also showed a downward trajectory, suggesting improvement. A one-way repeated measures ANOVA demonstrated that these changes were statistically significant, and the effect size was large ($F(1.2, 17) = 23.5, p = .018; \eta^2 = .74$). Bonferroni adjusted post-hoc analysis confirmed that the difference between baseline and post intervention was significant; $t(13) = 5.38, p < .001$, as was the difference between baseline and follow up; t

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(13) = 5.60, $p < .001$. However, the difference between post intervention and follow up was not significant; $t(13) = 1.84$, $p = .087$.

Normal scores on the EAT-26 are those which are below 20. Of the 14 participants who were included in the analysis, 9 scored above the normal range on their initial completion of the measure. All of these 9 participants were back within the normal range at post-intervention, and this was maintained at follow up.

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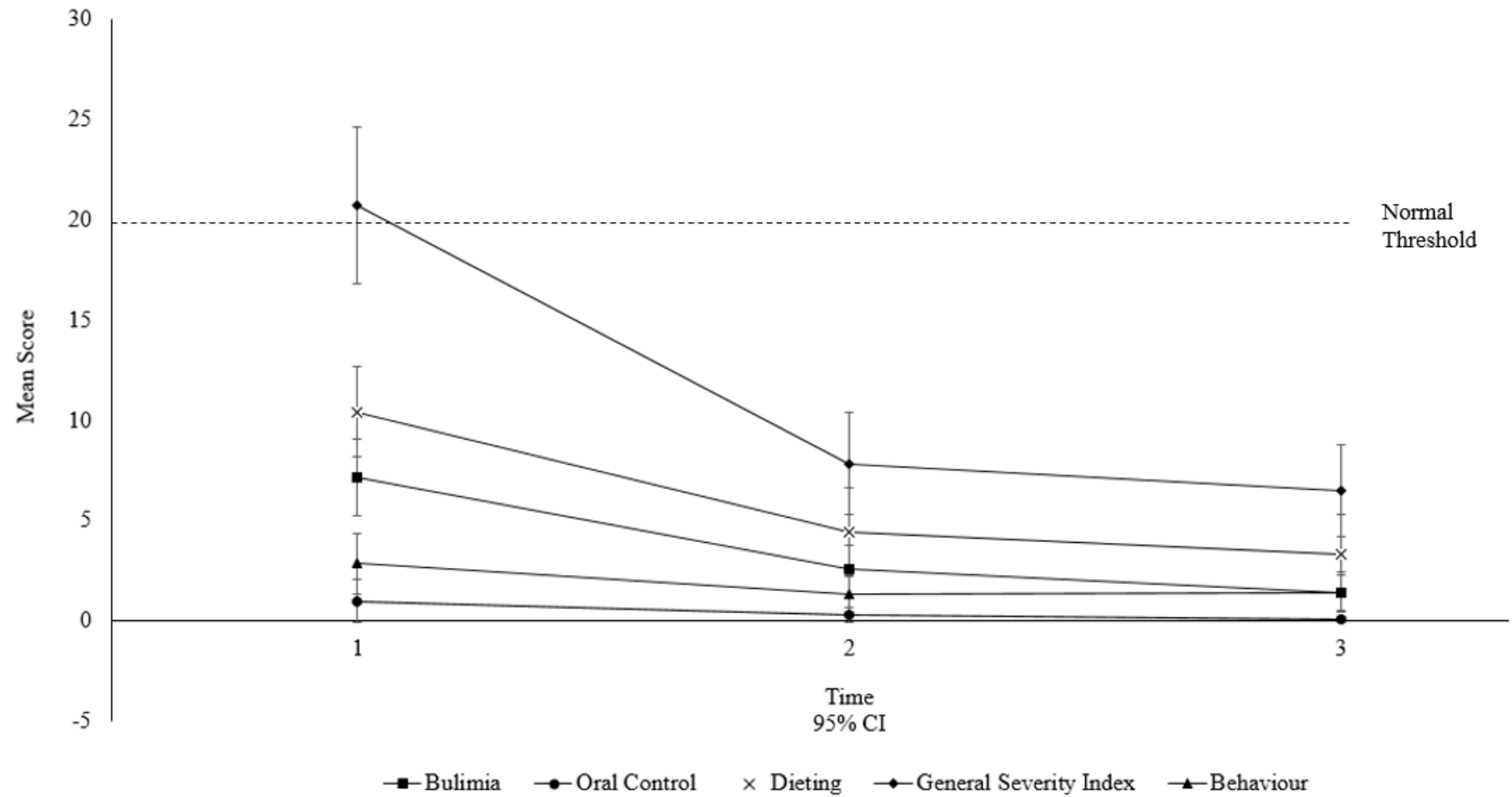


Figure 1. Scores of EAT-26 Subscales across the duration of the intervention: Baseline (1), Post Intervention (2), and Follow Up (3). Data presented as mean scores and 95% Confidence intervals.

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Satisfaction With Life Scale

Figure 6 shows the mean of the SWLS scores. Results from the SWLS can be categorised in seven benchmarks: extremely satisfied (31-35), satisfied (26-30), slightly satisfied (15-19), neutral (20), slightly dissatisfied (15-19), dissatisfied (10-14) and extremely dissatisfied (5-9). The scores showed an upward trend over the intervention, with overall means increasing from 18 (Slightly Dissatisfied) to 22 (Slightly Satisfied). A one-way repeated measures ANOVA showed that these differences were not statistically significant $F(2, 26) = 2.85, p = .079, \eta^2 = .30$.

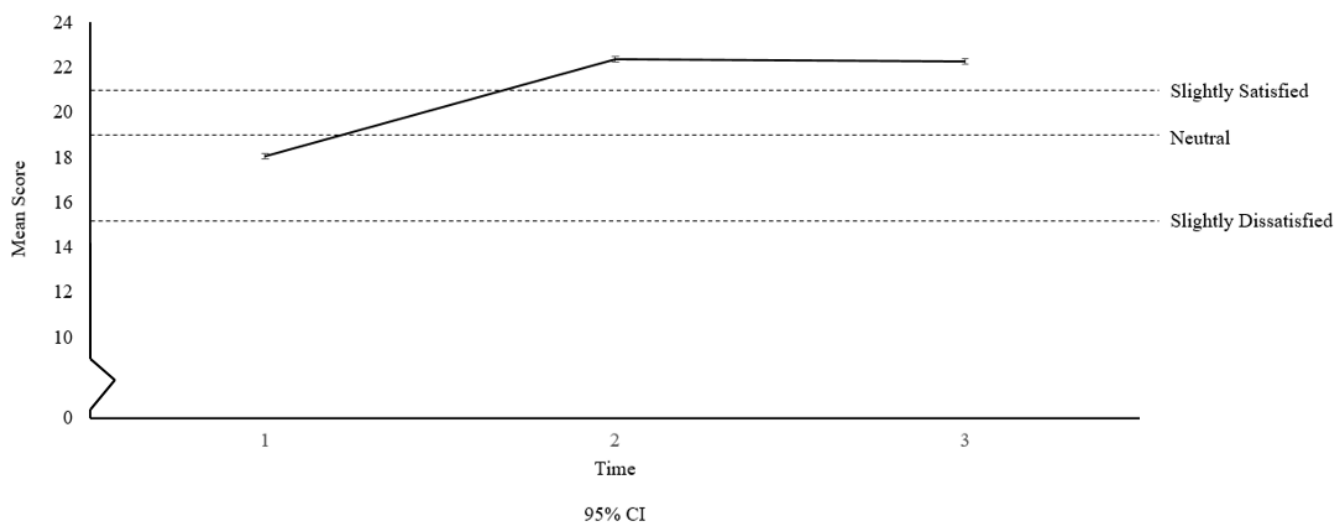


Figure 2. Satisfaction with Life Scale mean scores and confidence intervals across the duration of the intervention: Baseline (1), Post Baseline (2), Post Intervention (3), and Follow Up (4).

Acceptance & Action Questionnaire

Figure 2 shows the mean of the AAQ scores at each time point. The total scores showed a downward trend over the intervention, suggesting less experiential avoidance and an increase

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in acceptance, however this failed to reach statistical significance, $F(1.02,15.4) = 3.09$, $p = .070$
 $\eta^2 = .30$.

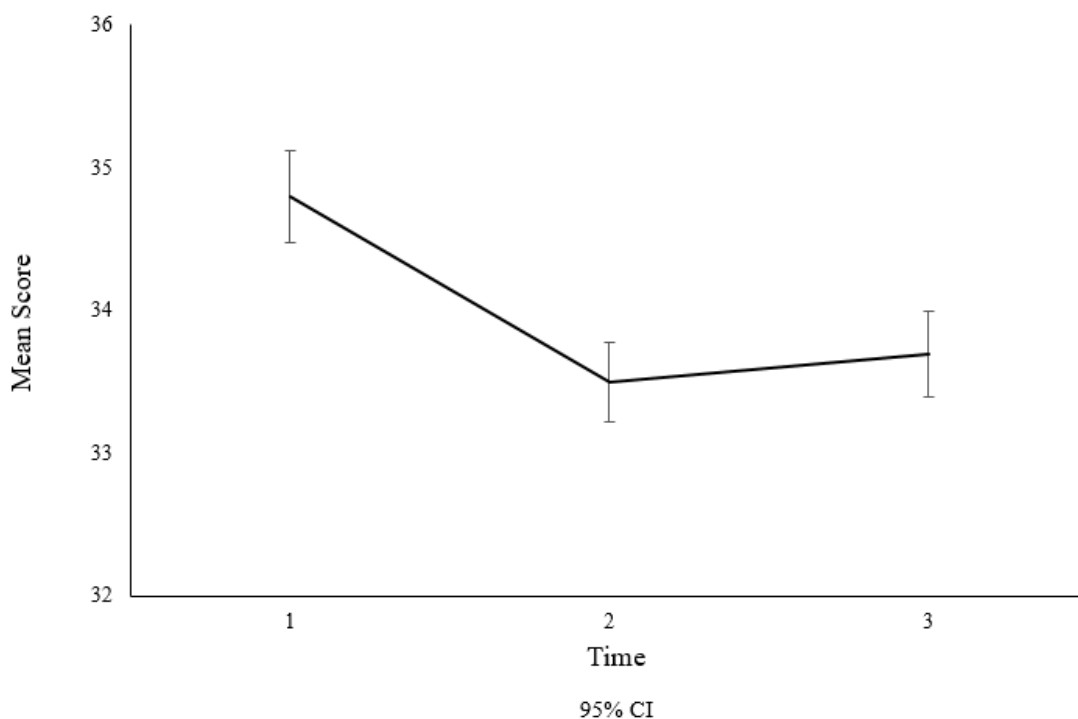


Figure 3. Acceptance & Action Questionnaire mean scores across the duration of the intervention: Baseline (1), Post Intervention (2), and Follow Up (3).

Symptom Assessment 45

Table 3 shows the descriptive statistics and the results of a one-way repeated ANOVA on the subscales of the Symptom Assessment 45. Because changes on all pairs of scores in week one and two were significant, the scores from week two were used for subsequent analysis due to an upward trend indicating higher levels of distress. These are included in Table 3 below. Scores decreased on all subscales, suggesting fewer symptoms present, although the changes were small and not statistically significant on any subscales except for somatization. Post-hoc testing revealed that the statistically significant changes on the Somatization scale occurred between

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time points 1 and 3; $t(13) = 3.15, p = .008$. However, the difference between time points post-intervention and follow up was not significant; $t(13) = 1.38, p = .189$, and neither was the difference between time points 1 and 2; $t(13) = 1.45, p = .170$.

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Table 3: SA-45 subscales: Descriptive statistics at each time point, and repeated measures ANOVA.

	Baseline			Post-Intervention			Follow-Up Data			Anova Result
	Mean	Lower Bound*	Upper Bound*	Mean	Lower Bound ²	Upper Bound ²	Mean	Lower Bound ²	Upper Bound ²	
Depression	12.2	9.6	14.7	11.1	8.4	13.8	10.2	7.7	12.8	F(2, 26) = 1.6, p = .214 η^2 = .112
Anxiety	10.7	8.8	12.6	9.3	7.5	11.1	9.3	7.5	11.3	F(2, 26) = 1.8 p = .177 η^2 = .125
Obsessive Compulsive ¹	11.7	9.5	14	10.5	8.2	12.9	10.9	8.5	13.2	F(2, 26) = 1.6 p = .216 η^2 = .115
Somatization	10.4	8.4	12.4	9	6.8	11.1	10.9	8.5	13.2	F(2, 26) = 4.27 p = .025 η^2 = .247*
Phobic Anxiety ¹	8.1	6	10.2	7.7	5.9	9.4	7.8	5.9	9.6	F(2, 26) = 1.8 p = .177 η^2 = .125
Interpersonal	13.1	10.1	16	11.5	8.7	14.2	10.9	8.3	13.5	F(2, 26) = 2.7 p = .086 η^2 = .172
Paranoia	9.4	7.3	11.5	9.2	7.1	11.4	8.8	6.6	10.9	F(2, 26) = .624 p = .544 η^2 = .046
Psychoticism	6.7	5.1	7.7	6.3	4.9	7.7	6.1	4.8	7.5	F(2, 26) = .96 p = .397 η^2 = .069
GSI	90.6	75.8	105.4	82	68.3	95.6	77.9	64.6	91.1	F(2, 26) = 2.9 p = .069 η^2 = .186
PST	21	15.7	26.4	22.5	17	28.1	24	18.3	29.8	F(2, 26) = .910 p = .415 η^2 = .065
Hostility	7.3	6	8.6	6.6	5.4	7.8	6.7	5.8	7.6	F(2, 26) = .889 p = .423 η^2 = .065

* significance at <.05 level.

Note. ¹ Greenhouse Geisser Correction used; ² 95% Confidence Interval

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Weekly ACT Ratings

Weekly data was collected from all participants from enrolment until the completion of the intervention on self-reported ratings of Suffering, Struggle, Workability, and Valued Action, as well as on measures of participant enjoyment of the intervention, and its usefulness in disordered eating. For all subscales except for Suffering, the differences between baseline scores in week one and two were not significantly different, and therefore the two scores were averaged, and the average score was used as a single baseline score in further analysis. Data was collected at seven time points, beginning with baseline (1), and continuing weekly throughout the intervention (2 through 7), or as the sections were completed. The associated reading for weeks 2 through 7 can be found in Table 1, and more detail can be found in Table 2.

Suffering

Participant ratings on measures of suffering decreased over the course of the intervention. Figure 4 shows the downward trend across seven time points. A one-way repeated measures ANOVA found that the overall changes throughout the course of the intervention were not statistically significant $F(2.8, 39.5) = 2.83, p = .054, \eta^2 = .168$. Ratings between week five and week six (chapter eight) showed the greatest change, which suggested that these were the most effective chapters in reducing suffering among participants.

Struggle

Participant ratings on measures of struggle were variable over the course of the intervention, and no clear trends were observed, suggesting that perceived struggle did not change throughout the intervention. A one-way repeated measures ANOVA revealed that changes on this measure were not statistically significant $F(2.3, 29.4) = .264, p = .796, \eta^2 = .030$.

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Workability

Participant ratings on measures of workability increased over the course of the intervention, suggesting that participants gained psychological flexibility throughout the duration of the intervention however, a one-way ANOVA revealed that changes on this measure were not statistically significant, $F(2.7, 9.3) = 2.098, p = .439, \eta^2 = .165$.

Valued Action

Participant ratings on measures of valued action increased incrementally over the course of the intervention. A one-way ANOVA revealed that changes on this measure were not statistically significant $F(2.9, 38.8) = 2.098, p = .484, \eta^2 = .110$.

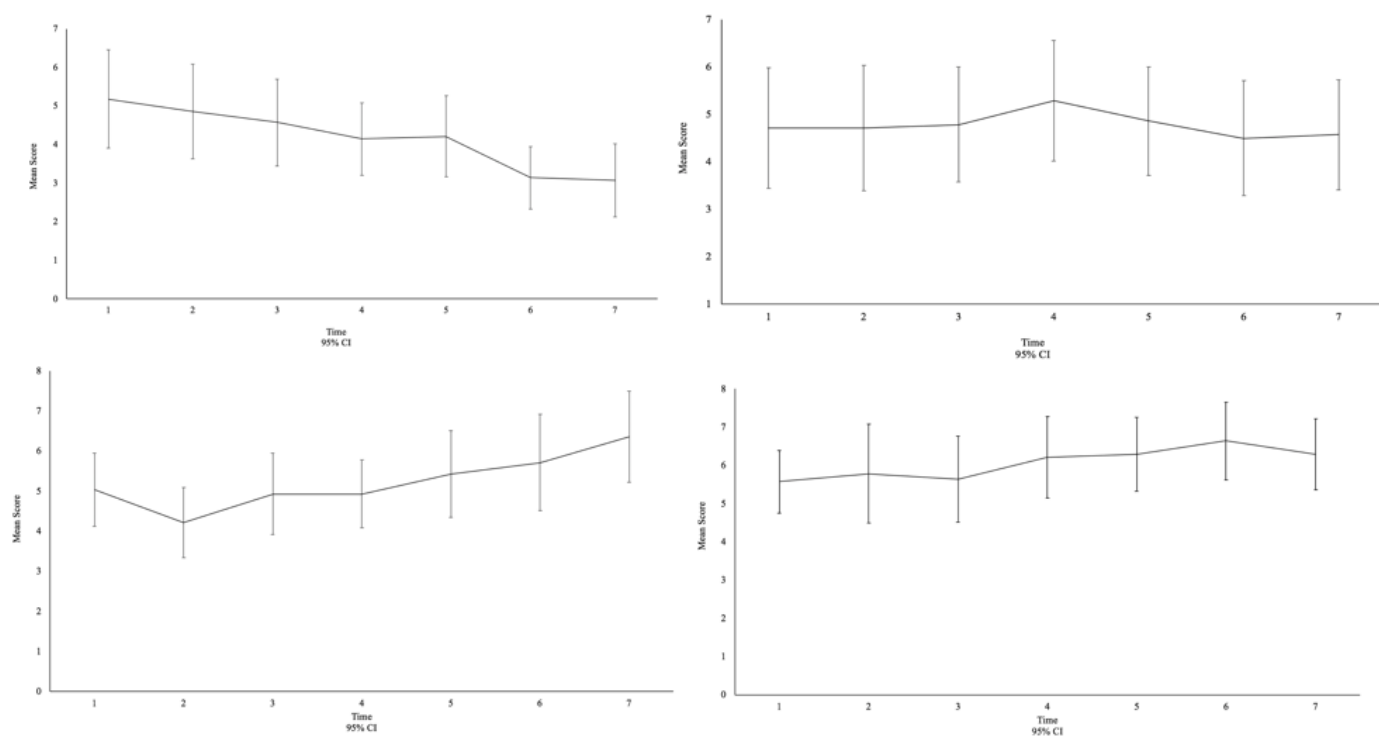


Figure 4. Change scores for 'Suffering' (top left), 'Struggle' (top right), 'Workability' (bottom left), and 'Valued Action' (bottom right) across the duration of the intervention, with 95% confidence intervals

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Usefulness in Disordered Eating Behaviour

Figure 5 presents the data from the weekly check-in question which pertained to the intervention's usefulness in disordered eating behaviour. There was a gradual increase in mean scores over time, which suggests that participants found the book increasingly useful in managing their behaviour but a one-way ANOVA revealed that changes on this measure were not statistically significant $F(2.6, 37.5) = 2.098, p = .261, \eta^2 = .091$.

Enjoyment Participant ratings on measures of enjoyment were variable over the course of the intervention. There were no trends observable, and a one-way ANOVA revealed that changes on this measure were not statistically significant $F(5, 3) = 2.6, p = .231, \eta^2 = .014$.

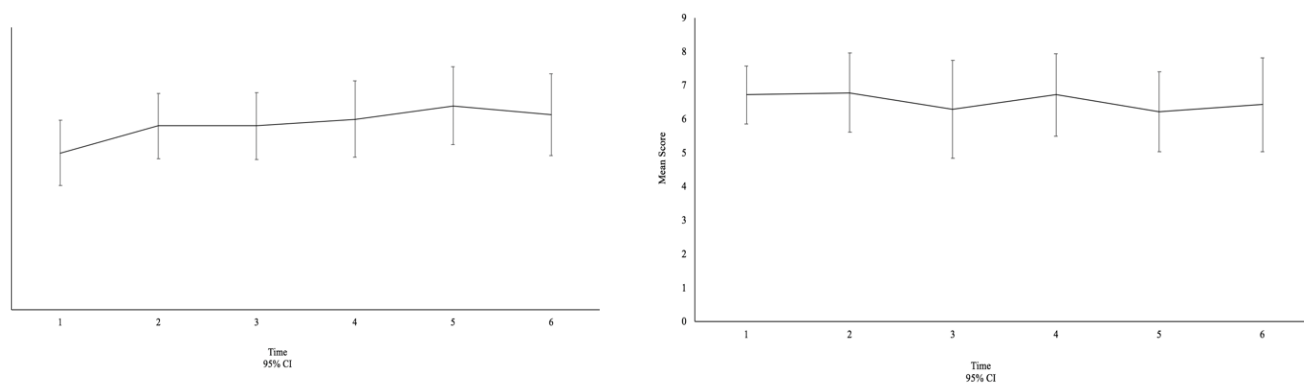


Figure 5. Change scores for 'Usefulness in Disordered Eating' (left), and 'Enjoyment' (right) subscales across the duration of the intervention, with 95% confidence intervals.

To summarise, changes on the post-chapter weekly ratings were only observable on the trend level in the suffering subscale.

Correlations

A bivariate correlation was computed to examine the relationship between scores on the EAT-26 and scores on other measures. There was a positive correlation between the scores on the EAT-26, and scores on the AAQ, suggesting that individuals who reported high levels of

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distress and experiential avoidance were likely to have significant issues with disordered eating also ($r = .818, n = 15, p = .001$) Similarly, a bivariate correlation was computed to assess the relationship between Self-reported disordered eating behaviour, and scores on other measures. There was a negative correlation between the scores on the 'disordered eating behaviour' subscale of the post-chapter weekly checks, and scores on the AAQ, which suggests that as individuals gained skills, their disordered eating behaviour decreased ($r = -.654, n = 15, p = .001$)

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DISCUSSION

The aim of this research was to evaluate the efficacy of the self-help book 'Get Out of Your Mind and Into Your Life' by Steven Hayes, to determine if ACT based self-help intervention could assist in reducing the symptomology of sub-clinical disordered eating. The book is a popular self-help intervention, but has not been reviewed specifically in the context of individuals who have concerns regarding disordered eating. Overall, the findings were promising. Data suggested that the use of the book together with weekly contact with the researcher can be a useful tool to aid individuals in reducing disordered eating behaviour. These findings will be discussed in detail below.

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Reductions in disordered eating behaviour

It's interesting to note that despite the key differences in both studies, the success of ACT in reducing scores on the EAT-26 was statistically significant, and this is consistent with the findings of the present research. The present research found significant score decreases on three of the four EAT-26 subscales, General Severity Index, Dieting, and Bulimia. This suggests that the intervention had a positive impact on eating behaviour and cognition. These findings are similar to those of Masdua, Marshall & Latimer (2018), which found that low scores on the EAT-26 were correlated with psychological flexibility and mindfulness, key components of ACT. Scores on the EAT-26 were correlated with scores on the AAQ in this research, which suggests that there was a relationship between the two variables. Interestingly, other research which evaluated the efficacy of ACT and used the EAT-26 as an outcome measure also found that scores on the EAT improved more in the ACT condition than in the CBT condition, and like the results of the present study, were closely correlated with scores on the AAQ.

Overall, the findings were similar, and differences in these studies is likely due to variability in sample sizes and treatment methods. That is to say, the research by Juarasico, Forman & Herbert was delivered in both a facilitated workshop and an individual face-to-face format, whereas research by Pearson, Follette & Hayes was evaluating workshops only (2012).

It is important to note that these reductions are not unique to scores on the EAT-26, but are also evident on other similar measures of disordered eating behaviour as well. Similar research, such as that conducted by Juarasico, Forman & Herbert (2010), evaluated the use of ACT in the treatment of eating disorders, as an addendum to an existing CBT therapy program. The research provided evidence for the efficacy of ACT, although it was no more effective than CBT. The research also used 'Get Out of Your Mind and Into Your Life' as a foundational

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framework on which to develop an intervention, and measured success on the Eating Disorders Examination Questionnaire (EDE-Q). The consistency of improvements across measures affirms the integrity of ACT in this context.

Reductions in psychopathology

A secondary research question was whether or not general psychopathology would decrease among participants throughout the intervention. This hypothesis was not supported overall, as scores on the Symptom Assessment 45 (SA-45) were not statistically significant. Small statistically significant increases were evident on the Somatization subscale, however the effect size was small. These results are not aligned with the general consensus in literature regarding the efficacy of ACT in psychopathology, but these differences could be due to a number of factors.

Previous research has provided substantive evidence which suggests that ACT workbooks can be a useful tool in reducing psychological distress and pathology. Large meta-analyses have shown statistically significant increases in quality of life, as well as significant reductions in depression and anxiety for those who used ACT self-help interventions (Matcham et al., 2014). These findings are contradictory to that of the present research, but the sample size is vastly different in the meta-analysis and the present research. The research was not specifically focused on ‘Get Out of Your Mind and Into Your Life’, but rather on the underlying processes of a large range of ACT interventions, and therefore the differing results are understandable.

In other research that specifically used ‘Get Out of Your Mind and Into Your Life’, statistically significant changes were found on measures of anxiety, suggesting that the book itself is able to be useful in managing both anxiety that is subclinical and anxiety that is clinically

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significant. However, this research did not utilise long-term follow up measures so it is difficult to make claims about its long term success and usefulness. The differences in findings were likely due to variability in measurements, as the research used both the Leibowitz Social Anxiety Scale, and the Anxiety Control Questionnaire which are both very in-depth measures and would likely evaluate anxiety on a broader scale than the SA-45, which is much more brief. The study only utilised eight participants, who had self-selected based on their experience of anxiety, specifically, public speaking anxiety (Beharry 2008). The impact of expectancy bias on this research is unknown, and potential bias needs to be taken into account when considering the results of this research, and similarly, the fact that the present study recruited people with eating concerns, not with other issues such as anxiety.

Changes in Subjective Well-Being & Quality of Life

There were consistent incremental improvements in scores on the Satisfaction with Life scale, although these were not statistically significant. Beharry (2008), who also used ‘Get Out of Your Mind and Into Your Life’ as a workbook intervention, also found increases on mean scores of Quality of Life measures. The Quality of Life Inventory was used as a measurement tool, which differed from the present study, which used the Satisfaction With Life Scale (SWLS). The brevity of the SWLS means that it was a convenient and effective measure. Although longer, the QOLI evaluates 16 domains of well-being and satisfaction with life on a 32 item measure, and therefore the differences in findings are likely due to the QOLI more effectively evaluating change mechanisms. Global statements such as “the conditions of my life are excellent.” on the SWLS are very general and may not change, even if participants have

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gained and may provide a more expansive assessment of this hypothesis, and should be considered for the purposes of future research.

The weekly rating scales were another measure that provided preliminary support for the usefulness of ACT in this context. Although trends were observable on the other questions, these changes were not statistically significant. This is similar to the findings of other research. Beharry also used the ACT rating scales utilised by the present research, although for the purposes of their study, these were administered daily, as opposed to the weekly administration in this research. There were no descriptive statistics or statistical analysis, as these were only used as a guide to monitor participant engagement and understanding of the workbook and its contents. Although there are no comparable scores, the research still showed consistent trends on each of the four questions relating to the ACT concepts, with upward trends on measures of Workability and Valued Action, and decreasing trends on measures of Suffering and Struggle.

Interestingly, Johnston (2008) also evaluated quality of life measures in her study of the use of Acceptance and Commitment therapy in the management of chronic pain. The research found increases in participant scores on the Quality of Life Inventory, which were statistically significant and had a large effect size. However, it is important to note that Johnston's research was conducted with a clinical sample who were on a waitlist for treatment, so the differences in populations warrants consideration.

Despite its high internal consistency and validity, research suggests that the SWLS may be especially sensitive to differences in data collection methods, with significant discrepancies between data collected online and that which was collected face to face (van Beuningen, 2012). In both Johnston's research and the present study, only the initial measures were completed face-

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to face, and online thereafter, meaning that both studies may have been susceptible to this variation; likely at added risk for social desirability bias.

Similarly, findings from the ACT weekly questions may be susceptible to testing threats, as participants are asked the questions regularly, and they begin before participants are introduced to the questions' underlying concepts in the intervention. Interestingly, three participants shared early on in the study that they did not understand the weekly measures, and this may also be because they had not yet read about and understood ACT concepts. As participants learn about suffering, struggle, workability, and valued action throughout the duration of the intervention, their scores on the weekly questions may be subject to change.

The Acceptance and Action Questionnaire is another measure that is widely used in ACT research. In the present study, it was used to explore changes in psychological flexibility, as well as to check the integrity of the intervention. Participants did not make statistically significant improvements on measures of acceptance, although trends were observable, and it correlated closely with scores on the EAT-26. Participants reported that the questions were too 'wordy' and that they found them to be 'unclear and confusing'. Additional research is needed with alternate measures to make further claims.

Strengths & Limitations

The present study utilized a non-concurrent multiple baseline design. Although this design can lead to challenges with interpretation, the non-concurrent multiple baseline design was chosen for the purposes of this research due to its superior flexibility to improve recruitment and retention. Individuals who enquired and thereafter wanted to get involved were able to enrol in the study whenever suited them, without having to wait for other participants with whom they

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would start concurrently. This flexibility was a key strength of the present research, as it made it inclusive for a wide variety of individuals.

Participants in this research were left fairly autonomous where the reading and exercise completion were concerned, which also aided participant retention. Despite this autonomy, the check-ins allowed for insight into participant buy in and comprehension of the workbook, and was less intensive than a daily measure. They were effective in monitoring trends in participant well-being. Although responses to the measures were recorded on a 1-10 Likert scale, participants were allowed to elaborate on the reasons for their score. In the event that a participant disclosed an adverse event which significantly impacted their scores, this was noted in their file.

The present research fills an important gap, as much of the empirical literature is focused on clinical eating disorders, the outcomes of which are much poorer. There is limited research in New Zealand, and even less that includes sufficient Māori and Pasifika representation in the sample, so this research is a good starting point. However, a limitation of the present study was the homogeneity of the sample. Of the fifteen participants, only two were male. While disordered eating concerns are somewhat more prevalent among women, they are still pervasive among men, and so male representation in research is important. In further research, participant recruitment should continue until there is a representative ratio of men and women. Similarly, there was very little Māori and Pacific Island representation in the present sample when considered in the context of the high number of Māori & Pasifika people that make up New Zealand's population and the large number of individuals with disordered eating concerns within this group. Only one participant declared Māori ethnicity on their demographics forms, and no

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participants identified as Pacific Islander. This under-representation limits the external validity of the research.

Where external validity is concerned, small n designs are considered to have limited strength. However, while larger designs are often more statistically robust and allow for greater control, the small n design of this study allowed for greater flexibility in administration of the intervention, and allowed for close monitoring of participants and their individual performance. This was a key strength of the present study. Participant ages were recorded in groups, for the purposes of maintaining participant anonymity in a small university sample. This limits the conclusiveness of age related findings, and it would be pertinent if future research were able better capture the impact of this problem within a wider context, and allow for a broader demographic of individuals to take part. It is hoped that this research will justify and supplement more in-depth research on a larger scale.

Another pervasive problem in eating disorder research is that of attrition. A 2010 meta-analysis suggests that it is unusual for research of this nature to have more than 50% of participants complete, which is a significant threat to external validity. Furthermore, those who do complete the full requirements of research generally have better outcomes, which can cause bias in the reported results (Neeren et al., 2010). In the present research, we have attempted to mitigate attrition by maintaining regular contact with participants, and guiding them through each week of the intervention via phone or email. This decision was made on the basis of previous research, which has shown that guided self-help is just as effective as face-to-face therapeutic interventions at both short-term and long-term follow up. The effect size for the difference between face-to-face therapy and guided self-help was 0.02, which favoured guided self-help (Cuijpers, Donker, van Straten, Li & Andersson, 2010).

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In the present research, eight out of eighteen participants dropped out of the research prior to completion. Those who dropped out had issues with motivation, and/or felt the intervention wasn't worthwhile. Although many of these participants were able to recognise it as a viable solution to lots of issues, they reported finding it difficult to motivate themselves. Participant J shared that they needed someone to push them along, and reflected that perhaps if they were being counselled through it, they'd be able to find the hour or two a week needed to actively do the exercises and practice them. Other participants gave less feedback, simply citing a lack of time in their lives as a reason for withdrawal.

For participants who dropped out of the research, intention to treat analysis was applied to their data. There is much variability in intention to treat protocol among scientific literature, but the simplest and most widely used method is referred to as "last observation carried forward", whereby the last recorded value is carried forward to all remaining time points. This was done in the present research in order to reduce bias, as participants who continued throughout the duration of the research had generally good outcomes, and only using their data would be erroneous, as it would result in an over-representation of the efficacy of the intervention, and quite possibly, a false positive result. It can be said that intention to treat analysis leads to a more accurate representation of the participant pool, as in the real-world, often individuals will have difficulty with certain interventions and will not adhere to the requirements of a treatment program (Sainani, 2010).

Participants in the present research also reported difficulty in comprehension of certain chapters. These participants may have found the intervention less useful, and less enjoyable than participants who had no trouble understanding the concepts. Because the research design stipulated that participants were fairly autonomous, this may have contributed to the high rate of

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attrition in the present research, as participants may have felt like participation wasn't worthwhile. This statement is supported by the results of research by Johnston (2008), which used a reading screen at the beginning of the research to ensure that participants would have the reading and comprehension abilities to work through the book. Her participants reported that the book was difficult to understand, and her results also suggest that people may have difficulty working through a self-help book by themselves.

Interestingly, participant E, who did complete the full intervention, felt that the weekly check-ins were not necessary, sharing that the regular researcher contact was "over the top". This participant needed no additional prompting to complete the worksheets and reading. It is safe to assume that participants who were highly motivated and enjoyed the content were more likely to complete the research. Figuring out how to create self-help interventions that are enjoyable and palatable to a wide variety of people is pertinent. In future research it will be advantageous to establish how participant's individual needs can be met, and how they can be supported through the research in a way that suits them. However, while simplification of self-help interventions may increase readability for a wider audience, it is important that content isn't oversimplified, and the underlying content and concepts blurred, as this can also lead to misinterpretation and therefore mean that the intervention is not useful.

The results of this research suggest that ACT is a useful framework in the management of disordered eating behaviour, which is complemented by the findings of other research. Another interesting delivery method of ACT programmes is that of a face-to-face workshop, which have also been previously used in the management of disordered eating and body dissatisfaction with reasonable success (Pearson, Follette & Hayes, 2012). Like the present study, the intervention was delivered over the course of 6-8 weeks, and included discussion, education on behaviour

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change strategies, and values clarification. The results were positive, and participants made statistically significant increases on measures of body dissatisfaction, which were maintained at a three month follow up. However, longer term follow up measures indicated that treatment gains tend to regress. Unlike the present research, subject attrition was not a major issue in the workshops, and this could be due to the social accountability that a workshop format provides. However, the question of how to maintain treatment gains still stands. These findings suggest that ACT may be a potentially suitable intervention for both sub-clinical disordered eating and clinically significant eating, and it can be an effective adjunctive treatment to other interventions and psychoeducational programs.

Future Research

Due to the limitations of this research, findings should be interpreted with caution. Larger sample sizes with broader demographic variability is an important next step for research of this nature. Despite its limitations, the present study fills an important gap in the literature in terms of strategies for early intervention and widely accessible treatment, and has justified further research and development. Longer and extended follow up data would have provided valuable evidence of the intervention's lasting effects, and should be included in further research. In summary, the results of this research support the hypothesis that self-help interventions can be a useful for mitigating disordered eating pathology. Further research is warranted into the development of ACT based interventions for subclinical disordered eating, and in particular, the efficacy of a psychoeducational workshop delivery model, which is widely available, empirically validated and appropriate for use in a cultural context.

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Appendices

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C.....	Participant Consent Form
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G.....	Counselling Helplines
H.....	Action Plan
I.....	Workbook

ACT BASED INTERVENTIONS IN DISORDERED EATING

Appendix B

School of Psychology
School of Arts & Social Sciences
The University of Waikato
Private Bag 3105
Hamilton, New Zealand



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Information Sheet

The effectiveness of an ACT based intervention in the management of disordered eating

My name is Katie Babbott and I would like to invite you to participate in a project which is concerned with how an Acceptance and Commitment Therapy (ACT) intervention can help manage problematic eating behaviour. The project is part of my master's degree at the University of Waikato.

What does the research involve? You will be asked to read sections of an ACT based book, and complete related exercises. You will also be asked to complete a set of questionnaires at four different points; at the beginning, after a two week baseline phase, after completion of the intervention, and six weeks later. The questionnaires will take no longer than 10 minutes total. While completing the intervention, I will chat with you once a week to talk about how you found each section of the book. This is to assess your view of the value of the information that is provided.

Am I eligible to take part? If you are over the age of 16, have eating related concerns, and are not currently under the care of a psychologist, you meet the criteria for participation.

What will happen to my data? Your name will not be associated with the data; it is anonymous and confidential. The data will be stored on a password protected computer for 5 years. The findings will be written up for my master's thesis and may be submitted for publication in a peer reviewed journal or presented at conferences. You are able to withdraw your data from the project at any time in the three-week period after participating in the research. The publications will not identify you in any way.

If you agree to take part, you will be able to withdraw from the research at any time without providing a reason. All participants who enrol in the study will be automatically entered into the draw to win a \$50 voucher, and are able to keep all resources provided throughout the research. A summary of the findings will be provided to you.

ACT BASED INTERVENTIONS IN DISORDERED EATING

This research project has been approved by the Human Research Ethics Committee (Health) of the University of Waikato under HREC(Health)#2017-38. Any questions about the ethical conduct of this research may be addressed to the Secretary of the Committee, email humanethics@waikato.ac.nz, postal address, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

This research is supervised by Nicola Starkey and Armon Tamatea. Feel free to contact myself or my supervisors throughout the study any time you need.

Katie Babbott

kmb77@waikato.students.ac.nz

021 174 5044

Nicola Starkey

nstarkey@waikato.ac.nz

07 838 4080 - Ext. 9230

Armon Tamatea

armon.tamatea@waikato.ac.nz

07 858 5157

ACT BASED INTERVENTIONS IN DISORDERED EATING

Appendix C

Department of Psychology
School of Arts & Social Sciences
The University of Waikato
Private Bag 3105
Hamilton, New Zealand



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

APPENDIX C

PARTICIPANT ID:.....

CONSENT FORM PARTICIPANT'S COPY

Research Project: Acceptance and Commitment Therapy: A Self-Help Intervention for Disordered Eating

Name of Researcher: Katie Babbott

Name of Supervisor: Nicola Starkey

I have received an information sheet about this research project or the researcher has explained the study to me. I have had the chance to ask any questions and discuss my participation with other people. Any questions have been answered to my satisfaction.

I understand that my name will not be recorded on the questionnaires and the information will not be disclosed to other parties. My responses to the questions will be used for the purpose of this project only, and I & my responses will remain completely anonymous.

I agree to participate in this research project and I understand that I may withdraw at any time. If I have any concerns about this project, I may contact the Research and Ethics Committee (humanethics@waikato.ac.nz).

This research project has been approved by the Human Research Ethics Committee (Health) of the University of Waikato under HREC(Health)#2017-38. Any questions about the ethical conduct of this research may be addressed to the Secretary of the Committee, email humanethics@waikato.ac.nz, postal address, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Participant's Name: _____ Signature: _____ Date: _____

ACT BASED INTERVENTIONS IN DISORDERED EATING

Appendix D

Week	Start Date	Required Reading	Title	Completed
1		NO READING - complete questionnaires	-	
2		NO READING - complete questionnaires	-	
3		Introduction, Chapter 1, Chapter 2	What is ACT and why do we suffer?	
4		Chapters 3 & 4	Avoidance & Letting Go	
5		Chapter 6	Cognitive fusion: Having a thought vs. buying a thought	
6		Chapter 8	Mindfulness	
7		Chapters 11 & 12	What are your values?	
8		Chapters 13 & Conclusion. (Tests completed again as part of the final week)	Committing to doing it: Living a valued life	

Weekly phone call:

DAY:

TIME:

ACT BASED INTERVENTIONS IN DISORDERED EATING

Appendix E**What is your gender?**

- Male
- Female
- Other

What is your age?

- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65+

What is your ethnicity/race?

- NZ European
- Māori
- Pacific Islander
- Asian
- Indian
- Other:.....

Do you currently have any mental health concerns/diagnoses?

.....

.....

.....

Are you currently seeing a psychologist/mental health professional?

- YES
- NO

What is the highest degree or level of school you have completed? *If currently enrolled, highest degree received.*

- None
- High School
- Trade/Tech/Vocational training
- Bachelor's Degree
- Graduate Degree
- Other:.....

ACT BASED INTERVENTIONS IN DISORDERED EATING

Appendix G

Free Counselling Services

If at any time you feel that your participation in this research has caused distress, upset, or concern, I would urge you to reach out to any of these counselling resources, which are available 24/7 and free of charge.

- Samaritans - 0800 726 666
- Lifeline - 0800 543 354
- Anxiety Phone Line - 0800 269 4389
- Depression Helpline – 0800 111 757 - or free text 4202
- Healthline – 0800 611 116

ACT BASED INTERVENTIONS IN DISORDERED EATING

Appendix H

The Effectiveness of an ACT Based Intervention in the Management of Disordered Eating

Kathryn Babbott

HREC (Health) # 2017-38

Action Plan

In the event of disclosure of distress, or the occurrence of the following risk factors which are indicators of distress, participants will be encouraged to reach out for support. Participants will be actively supported in engaging with whanau, and finding professional services and support groups (see below). While referrals to specialist services are unable to be made in this context, participants will be directed to a GP or community mental health services. Participants are provided with a list of counselling services and resources upon enrolment to this study. For the purpose of this study, the action plan is split into two parts, stipulating specific management protocols for participants who are of concern to the researcher, as well as participants who are at risk of immediate harm to themselves or others.

Risk Factors
<ul style="list-style-type: none"> • Disclosure of depression -- deep sadness, loss of interest etc • Eating behaviours that get significantly worse • Losing interest in things one used to care about • Making comments about being hopeless, helpless, or worthless • Saying things like "it would be better if I wasn't here" or "I want out" • Sudden, unexpected switch from being very sad to being very calm/ happy • Sustained low mood • Talking about death, suicide, or killing one's self • Sudden or dramatic changes in daily rating trajectory • displaying speech patterns that seem pressured, racing or confused

Concern

In instances where participants display signs of significant and increasing psychological distress but are not an immediate risk to themselves or others, the researcher will explain to the participant that they are concerned about them, and will also ask the participant if they have spoken to anyone about these experiences, and encourage them to visit their GP. The researcher may seek permission from the participant to contact their GP on their behalf. The supervisors of this research will be contacted regarding these concerns. If the participant or other person does not agree for their GP to be contacted or does not have a GP, they should be advised to arrange to see their GP themselves or to register with a GP. This advice should be included in a report which will be given to the supervisors and included in the participant's file.

The participant will continue to be supported through the study if they wish, however their data will be omitted from reported findings. Participants are considered to be 'at risk' if they score 8

ACT BASED INTERVENTIONS IN DISORDERED EATING

or above on the Daily Rating ‘suffering’ scale, or 2 or below on the Daily Rating ‘workability’ scale for three consecutive weeks. In this case, they will be encouraged to see their GP, and a short report of what happened, who was involved, and any further action taken will be written by the researcher within 48 hours, and given to the supervisor. Reports will be written for all incidences and will be included in the participant’s file.

In the event that a participant answers 5 (Extremely) on two consecutive SA-45 batteries to any of the following questions, it will be recommended that they seek the advice of a GP. Question 5 (The idea that someone else can control your thoughts), Question 8 (Hearing voices that other people do not hear), Question 11 (Temper outbursts you could not control), Question 13 (Other people are aware of your private thoughts), Question 20 (Having to check and double check what you do), Question 27 (feeling hopeless about the future), Question 33 (having thoughts are not your own), Question 38 (Spells of terror or panic), Question 34 (having urges to beat, injure or harm someone).

Similarly, if participants scores on the Eating Attitudes Test (EAT-26) are beyond 20 on two consecutive batteries, it will be recommended that they seek the advice of a GP. If participants indicate that they have engaged in any of the behavioural components listed in the EAT-26 and ticked (binge, vomit, laxatives, diuretics, exercise), then they meet the criteria for referral and the researcher will explain to the participant that they are concerned about them, and will also ask the participant if they have spoken to anyone about these experiences, and encourage them to seek professional evaluation and guidance.

	Never	Once a month or less	2-3 times a month	Once a week	2-6 times a week	Once a day or more
A) Binge			✓	✓	✓	✓
B) Vomit		✓	✓	✓	✓	✓
C) Laxatives, diuretics		✓	✓	✓	✓	✓
D) Exercise						✓
Lost 20 pounds or more	Yes	✓	No			

Risk of Immediate Harm

In the event that suicidal ideation is evident, or if the participant discloses that they are feeling suicidal in a face-to-face meeting or a phone call, then it is appropriate to contact the Adult Mental Health Service (Crisis Assessment Team ‘CAT’) on 0800 50 50 50 (available 24/7). If the meeting is face-to-face, the participant will be given the option to either call the CAT themselves, or have the researcher call on their behalf. The participant will not be left alone if a situation arises wherein there are significant and immediate concerns for their safety and well-being. The supervisor will also be called immediately to make recommendations.

If a situation arises where either the researcher, participant, or another person is at immediate risk, the emergency services will be contacted immediately on 111. The supervisor will be informed as soon as possible.

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Appendix I

Support Groups

Promoting Mental Wellness This group exists to educate, promote, support and organise mental wellbeing initiatives to benefit the lives of people in the community. It uses self-help principles and operates from a recovery and strengths-based focus. Located in Hamilton East. Email: pmwellness@ihug.co.nz

GROW Offers a supportive environment to help those who struggle to live well in the world. We are a community mental health movement with groups suitable for people recovering from mental illness, anyone suffering a crisis, and for those who need support to self-manage their daily lives. We offer friendship and support at weekly group meetings that are open to all. The meetings follow a routine format and embrace a 12-step program.

The GROW community are people who have been in your shoes and know how you feel. We have found our way back to wholeness and our passion is to help you do the same. No referrals are required, no fees are charged, however a small donation to meet group expenses is usual and voluntary.

Phone: Nationwide enquiries: 09 846 6869 or 021 049 1360

Email: auckland@grow.org.nz

EVOLVE – depression and anxiety support A strength-based, recovery-focused support group that enables, empowers and reclaims life within an atmosphere of unity and acceptance. EVOLVE is a weekly support group that is facilitated by people who walk the talk. This group has been created because there are power in numbers. You are not alone. This is a place where we learn from each other, where we are able to share, discuss and help along the way. Our philosophy is “ We are the same, we just wear different shoes on different sized feet, taking different strides”. This captures the journey and the vastness of experiences where we learn from each other and grow with each other.

No Charge. Phone: 07 838 0199 or 020 411 31815

306 Tristram Street, Hamilton / Tuesdays, 5pm–6pm, Saturdays, 1pm–2pm

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PARTICIPANT WORKBOOK

BASED ON

‘HOW TO GET OUT OF YOUR MIND AND INTO YOUR LIFE’

BY STEVEN HAYES

APPENDIX J

The University of Waikato 2018

ACT BASED INTERVENTIONS IN DISORDERED EATING

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ACT BASED INTERVENTIONS IN DISORDERED EATING

Exercise ONE**Chapter One, Week Three - Worksheet Exercises**

Write down a list of all the issues that are currently psychologically difficult for you. Use the left hand side of the space provided below. In this book we will focus on how you react. Some of your psychological issues will be clearly related to specific situations; others may not be. For example, “my boss” would not be a good example of a difficult situation you experience, but “feeling put down by my boss” might be. The left hand column can include any of your thoughts, feelings, memories, urges, bodily sensations, habits, or behavioural dispositions that may distress you, either alone or in combination with external events. Don’t overthink it. Just write down what causes you pain. Be honest and thorough and create your “suffering inventory in the space below. After you’ve completed your list, go back and think about how long these issues have been a problem for you. Write that down as well.

Painful and difficult issues I experience	How long this has been the case

Now we would like to ask you to organize this list. First, go back and rank these items in terms of the impact that they have on your life. Then, in the space provided below, write down the same items, but rank them in order. The order should range from those items that cause you the most pain and difficulty in your life to those that cause you the least trouble. You will use this list as a guide throughout the remainder of this book. We’ll ask you to refer back to this list as your touchstone for the events and issues that cause you pain.

Painful and difficult issues I experience - <i>ranked from most severe to least severe</i>

ACT BASED INTERVENTIONS IN DISORDERED EATING

Finally, in the area to the right of this list, draw arrows between every item on the list that is related to another item. You will know that two items are related if changes in one might alter another. For example, suppose one of your items is “self-criticism” and another is “depression.” If you think the two are related (that is, the more self-critical you are, the more likely you are to feel depressed, or vice versa), draw a two-headed arrow between self-criticism and depression.

You may find that this area becomes cluttered with arrows. That’s fine. There is no right or wrong way to do this. If everything is related, it’s important to know that. If some items relate to only a few others, that is useful information too. The higher on your list the items are and the more other items they connect to, the more important they become.

This may suggest a reranking of your problems and you may find that you now want to combine some items or to divide them into smaller units. If that is so, you can create your final working list on the following page, ranked from highest to lowest in order of impact on your life.

This is your personal suffering list. For you, it is what this book is about.

ACT BASED INTERVENTIONS IN DISORDERED EATING

Exercise TWO**Chapter One, Week Three - Worksheet Exercises**

If _____ weren't such a problem for me, I
would _____.

If I didn't have _____, I would _____
_____.

We would like you to fill in the blank lines above in the sentences you've just read. Take an item from your suffering inventory. It could be any item, but it might be best to start with an item high on your list and connected to other items. This is probably an issue that greatly inhibits your life. Go ahead and fill in your problem, and think about what you would do if that pain were suddenly lifted. The point of this exercise is not to think about what you might like to do on a given day if your problems weren't plaguing you. The idea isn't to celebrate by saying, "My depression is gone, I'm going to Disneyland!" The point is to think more broadly about how your life course would change if your constant struggle with emotional pain was no longer an issue.

Here are two examples to give you an idea of what we mean: "If I didn't have so much stress, I would work harder at my career, and I would try to find the job I always dreamed of having", or "If I wasn't so anxious, I would travel and participate more fully in life." Now, go back and fill in the blank lines about what you would do if your pain disappeared. Be honest with yourself and think about what you really want. Think about what has value to you. Think about what gives your life meaning. Now, let's do that again but this time, let's use a different area of suffering. This time, choose an item that appears to affect a different area of your life than the first one you chose. (Although you may find that they are not as different as they seem to be.)

If _____ weren't such a problem for me, I
would _____
_____.

If I didn't have _____, I would _____
_____.

ACT BASED INTERVENTIONS IN DISORDERED EATING

You can test the idea that you develop arbitrary relationships all the time quite easily. To do so, **try the following:**

Write down a concrete noun here (any type of object or animal will do): _____

Now write another concrete noun here: _____

Now answer these questions:

How is the first noun like the second one? _____

How is the first noun better than the second one? _____

How is the first one the parent of the second one? _____

Finding an answer to this final question may not be straightforward. Stick with it. It will come. That last question may have been the hardest, but if you do stick with it, you will always find an answer. And note that the good answers somehow seem to be “real” in the sense that the relation you see seems to be actually in or justified by the related objects.

ACT BASED INTERVENTIONS IN DISORDERED EATING

Exercise THREE**Chapter Two, Week Three - Worksheet Exercises**

Consider this simple problem. Watch carefully what your mind does with it. Suppose you have a slotted screw in a board and you want to get it out. You can use only a normal toothbrush and a cigarette lighter to do so. What will you do? Take a moment to think about it and write down your thoughts, even if they are fragmentary:

If nothing comes to mind yet, remember that the toothbrush is plastic (watch carefully what your mind does now, and write down your thoughts, even if fragmentary):

If nothing comes to mind yet, remember that plastic is made from oil. Now write down any thoughts, even if fragmentary:

If nothing comes to mind that would work yet, remember that plastic can melt (watch carefully what your mind does now):

If nothing comes to mind yet, remember that when melted, plastic is pliable. Now write down any thoughts this fact evokes:

ACT BASED INTERVENTIONS IN DISORDERED EATING

If nothing comes to mind yet, remember that pliable plastic can form a shape (watch carefully what your mind does now):

If nothing comes to mind yet, remember that melted plastic hardens when cooled. Write down your ideas for removing the screw using only a toothbrush and lighter:

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Exercise FOUR**Chapter Two, Week Three - Worksheet Exercises**

Let's try an experiment and see whether suppressing a thought can work.

1. Get a clear picture in your mind of a bright yellow Jeep. How many times during the last few days have you thought of a bright yellow Jeep? Write down your answer in the space provided:

2. Now get your watch out and spend a few minutes trying as hard as you can not to think even one single thought of a bright yellow Jeep. Really try hard. Return to this page when you are finished.

3. Write down how many times you had a thought about a bright yellow Jeep, however fleetingly, during the last few minutes while you were trying so hard not to think of it.

4. Now get your watch out and spend a few minutes allowing yourself to think whatever thoughts come to your mind. Return here when you are finished.

5. Write down how many times you had a thought about a bright yellow Jeep, however fleetingly, during the last few minutes while you were allowing yourself to think of anything.

If you are like most people, the number of times you thought about a bright yellow Jeep went up over time. You might have been able to keep the thought of a yellow Jeep out of your mind while directly suppressing it, but sometimes even that breaks down, and the number of times such thoughts occur soars.

Even if you were able to suppress the thought for a short period of time, at some point, you will no longer be able to do so. When this happens, the occurrence of the thought tends to go up dramatically. That is not simply because you were reminded of a yellow Jeep. In controlled research studies, when participants are told about the Jeep but are not instructed to suppress thinking about it, the number of thoughts does not increase.

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Exercise FIVE**Chapter Two, Week Three - Worksheet Exercises**

Psychological problems of any kind become entangled with our thoughts, and as a result, if you are struggling psychologically, you probably also have recurring thoughts that cause you pain.

For example, if you are depressed, you may have the thought, “I’m worthless and no one loves me” or even just “When will this depression go away?” If you are suffering from generalized anxiety disorder, you may have the thought, “Vigilance is the only way to be safe.”

Now, try to isolate a single thought that contributes to your current suffering. You can use the examples above as models. If you can, deconstruct your thought until you have it in the form of a short sentence or simple phrase. When you have this sentence or phrase in mind, complete the exercise.

1. Write down a thought that contributes to your suffering in the space below.

How many times have you had this thought in the last week? (If you don’t know exactly how many times, make an approximation.)

3. Now, get out your watch again, and try as hard as you can not to think that thought for the next few minutes. Return here when you are finished.

4. Write down the number of times you had your thought, however fleetingly, while you were trying not to think about it. _____

5. Now, take another five minutes, and again allow yourself to think anything you want. Come back here when you are finished.

6. How many times did you think your thought when you allowed yourself to think about anything at all? Go ahead and write down your answer here: _____

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Exercise SIX**Chapter Two, Week Three - Worksheet Exercises**

In the column on the left, first write down a painful thought or feeling. (This can be taken from the Suffering Inventory you generated in chapter 1 if you wish.) Then, in the second column, write down one strategy you've used to cope with this painful thought or feeling. Once you've done this, please rank your coping strategy for two sets of outcomes.

Think about how much of your total pain is caused by your painful thought or feeling. Has your coping behaviour reduced your pain over time? Rate each short- and long-term strategy on a scale from 1 to 5 where 1 is not effective at all and 5 is incredibly effective. We will look at what they mean in greater detail later in this chapter. For example, suppose someone writes a thought like this: "I'm not sure life is worth living" in the "Painful thought or feeling" column. The coping technique the person uses may be to have a beer, watch sports, and try not to think about it.

While watching TV, the short-term effectiveness of the strategy may be ranked a 4; but later, the thoughts may be stronger than ever and the long-term effectiveness may be ranked a 1.

COPING STRATEGIES WORKSHEET

Painful Thought or Feeling	Coping Technique	Short Term Effectiveness	Long Term Effectiveness

If you find that you aren't sure what you've been doing to cope, it may be help to note it down when it occurs. Note the situation (what happened that evoked a difficult private experience); what your specific reactions were (thoughts, feelings, memories, or physical sensations); and the specific coping strategy you used then (e.g., distracting yourself, trying to argue your way out of your reactions, leaving the situation). This should help you have a better understanding of what coping strategies you have been using and how effective they are.

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Exercise SEVENChapter Three, Week Four - Worksheet Exercises

So, what am I supposed to do? First, give yourself a break. Given all of the reasons discussed earlier, it's no surprise that you've been focusing on experiential avoidance strategies. You're doing exactly what logical, reasonable people are taught to do: to take care of themselves. It's a rigged game but you didn't know it was rigged, and it's certainly not your fault that it isn't working. So now, put a checkmark next to the ways that you would be willing to try to give yourself a break.

- I could face the possibility that my avoidance strategies will never work.
- I could have compassion for myself for how hard I've tried to deal with my pain.
- I could stop blaming myself for not being able to make my avoidance strategies work.

Now, list any other ideas you might have for how to give yourself a break:

In the space provided below, write down some examples of blaming yourself or others for any negative events that you've experienced. Then, on a scale of 1 to 10, rate how well your examples worked to motivate and empower you to live your life in a more vital, fulfilling, and liberated way. (In this scale, 1 means not empowered at all and 10 means empowered to the max.)

Blaming examples	Empowerment Ratings

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Exercise EIGHT**Chapter Three, Week Four - Worksheet Exercises**

Up until now, it's likely that you've rarely experienced thoughts or feelings you didn't want without trying to control them in some way. One of our goals is to show you what happens when you let go of your efforts to control your unwanted thoughts or feelings. This is not easy, because controlling is what the human mind is programmed to do. At this point, we ask only that you begin to really examine what your experience is telling you. To do this, for the next two weeks fill out the following form. At the end of each day, rate the following three items:

1. How much psychological pain you experienced this day. (If your pain is due to a specific problem, such as anxiety or depression, use that more precise label instead of the word "pain.") When you do your rating for the day, use a scale where 1 means no pain and 100 means extreme pain.
2. After you have rated your pain for the day, then rate how much effort and struggle you needed to exert to control the pain you felt this day. Use the same scale, where 1 means no effort and 100 means an extreme level of effort and struggle.
3. The final step is to rate how workable the day was. That is, if every day were like today, how much overall vitality and aliveness would characterize your life? Again, use the same 1 to 100 scale.

Day	Pain	Struggle	Overall Success
_____	_____	_____	_____

Any notes about painful events felt today? _____

Day	Pain	Struggle	Overall Success
_____	_____	_____	_____

Any notes about painful events felt today? _____

Day	Pain	Struggle	Overall Success
_____	_____	_____	_____

Any notes about painful events felt today? _____

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Day	Pain	Struggle	Overall Success
_____	_____	_____	_____

Any notes about painful events felt today? _____

Day	Pain	Struggle	Overall Success
_____	_____	_____	_____

Any notes about painful events felt today? _____

Day	Pain	Struggle	Overall Success
_____	_____	_____	_____

Any notes about painful events felt today? _____

Day	Pain	Struggle	Overall Success
_____	_____	_____	_____

Any notes about painful events felt today? _____

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Exercise NINE**Chapter Three, Week Four - Worksheet Exercises**

We've found that when people start looking more carefully at their own experiences, without running away or covering up, that, occasionally, experiences that were below their threshold of awareness percolate up to their conscious mind. So, to end this chapter, in the space provided below, list any thoughts and feelings you're having right now about the difficulties that motivated you to pick up this book. If you begin to see some issues that have been buried below the surface, take this opportunity to describe them; put them out on the table where they can be seen in the light of day.

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Exercise TEN**Chapter Four, Week Four - Worksheet Exercises**

Before you start reading this chapter, get a watch and sit somewhere where you won't be disturbed for a minute. When you are seated, take a deep breath and hold it as long as you can. When you're finished, write down how long you held your breath:

I held my breath for _____ seconds.

In chapter 2 we said that perhaps the rule that applies to private experience goes something like this: "If you aren't willing to have it, you will." We implied that this rule is important for dealing with your suffering, although we didn't say exactly where its importance lies. So, let's take a look at what the human mind does with such an idea. Suppose that the rule is true (if you aren't willing to have it, you will). Given that you've already suffered a great deal, what can you logically do that would apply that rule to your suffering? Take a moment now to write down any ideas about this that come to your mind.

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Exercise ELEVEN**Chapter Four, Week Four - Worksheet Exercises**

Read the excerpt from pages 46-48. Write down three or four of your own responses that come to mind. If you feel resistance, just notice that, and in a kind, compassionate way allow yourself to feel resistant, and then return to the question, bringing your sense of resistance with you.

Why willingness?

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Exercise TWELVE**Chapter Four, Week Four - Worksheet Exercises**

Read the bulleted list on page 49 and fill in the blanks.

Before beginning to hold your breath, list one or two other actions you might do during this exercise that might help you to be aware of all of your feelings, thoughts, sensations, and urges while you are holding fast to the goal of holding your breath. Write down only acceptance strategies, not experiential control or suppression strategies.

Read the bulleted list several times, until you feel you completely understand the instructions. You can leave the book open as you do the exercise, so you can glance at pages 49 and 50 and remind yourself of things to do while really feeling what it feels like to want to breathe while not breathing. You are ready to see if it is possible to better control your behaviour (holding your breath) by learning to accept and make room for your thoughts and feelings. Now, start: Take a deep breath and hold it as long as you can. When you are finished, write down how long you held it: _____ seconds. Describe your experience during this exercise.

Did the aversiveness of not breathing tend to come and go? When did it go up or down?

How did your mind try to persuade you to breathe before you really had to?

What was the sneakiest thing your mind did?

Do you see any possible implications this simple exercise might have for how your life has been going, especially in the area you've been struggling with? If so, what do you see?

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Now look back at the amount of time you were able to hold your breath before you started reading this chapter. If you weren't able to see any possible applications for this exercise in the areas you've been struggling with, does this comparison open up any new doors for you?

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Exercise THIRTEEN**Chapter Four, Week Four - Worksheet Exercises**

Read the section titled 'Willingness to Change' on page 51.

Suppose that in order to live a healthy, vital, meaningful, and satisfying life you needed to give up trying to control your internal thoughts and feelings before you could move in the direction you want to go. If that was what was required, to what degree would you be willing to do that? (We are not assuming that you know how to do that yet, we are only asking about your openness to that path.) If 1 means totally unwilling and 100 means totally willing, how willing would you be to begin to experience what your history gives you, focusing your control strategies on your actions rather than your insides? Write that number here: _____

A lower number doesn't mean less pain, it mean less room to live. We aren't asking if you believe that willingness will work. We are asking if willingness is needed in order to live a healthy, vital, meaningful, and satisfying life, would you move in that direction? If you still find yourself writing down a low number, reconsider your answer and see if you want to stick to it. What shows up for you when you think about this? In the space provided below, write your thoughts on this matter:

If you had been willing to experience fully what your personal history gave you while you were engaged in actions that were important to you, how would your life have been different than it has been?

We don't expect this to make a difference yet. Your mind may be telling you that kind of willingness is impossible or that it would condemn you to constant misery. If so, just thank your mind for its input and don't argue back. It could be that pain is not really synonymous with suffering. It could be that pain plus unwillingness to feel that pain equals suffering. We won't argue it either way; your own experience is the final judge.

Exercise FOURTEEN

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Chapter Six, Week Five - Worksheet Exercises

To begin, read the chapter up until page 71. We would like you to think about milk. What is milk like? What does it look like or feel like? Write down a few of the attributes of milk that come to your mind:

Now, see if you can taste what milk tastes like. Can you do that? If so, write down what it tastes like as best you can. If not, you probably can do it this way: What does sour milk taste like? Can you get a little taste of that?

It's unlikely that there is any milk in your mouth right now, but most of you can taste it. That is the transformation of function effect built into human language. Now, here is a simple exercise, almost one hundred years old, that has proven very effective for catching the word machine in action.

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Exercise FIFTEEN**Chapter Six, Week Five - Worksheet Exercises**

Complete the exercise described on page 72. Start saying the word “milk” out loud and as fast as you can for twenty to forty-five seconds. Say it as fast as you can while still clearly pronouncing the word. Time yourself and watch what happens. Make sure that you don’t do the exercise for less than twenty seconds, and that you don’t do it for longer than forty-five seconds. Studies have shown this is the right time frame to establish the point we are making (Masuda et al. 2004).

Start saying it now, “milk, milk, milk, milk ...” How did this feel to you? What was your experience with saying “milk” over and over again? Now, in the space below, jot down some notes on your response:

After saying “milk” over and over again as rapidly as you could, what happened to the meaning of the word? Did the word still invoke the image the same way that it might have before you did the exercise? Finally, did you notice anything new that might have happened? For instance, it is common to notice how odd the word sounds, how the beginning and end of the word blend together, or how your muscles moved when saying it. If so, note these effects below:

For most people, the meaning of the word begins to fall away temporarily during this exercise. Noticing that words may be, at their core, just sounds and sensations, is very hard to do when you are swimming in the stream of literal meaning. For example, a baby would see the paragraphs of print you are reading now as visual patterns. You don’t see those patterns. You normally can’t just see them; as your eyes move across this page notice that you keep seeing words, whether you like it or not. In the same way, adults normally cannot hear language as pure sound; they hear only words.

Now try something slightly different. Take a negative thought you often have about yourself and put it into one word, the shorter the word, the better. It could be something from your Suffering Inventory in chapter 1. Whatever it is, try to reduce your negative self-evaluation down to a single word.

Now, write down the negative word that best describes you when you are being really hard on yourself: _____

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Next, you'll rate this word for two characteristics.

Right now, how distressing is it to think that this word applies to you? 1 means not at all distressing and 100 means maximally distressing: _____

Right now, how literally true or believable does this word seem as it applies to you? 1 means not at all believable and 100 means maximally believable: _____

Now take your word and do the exact same thing you did earlier with the word "milk." Say your word for yourself as fast as you can while still pronouncing it, and do this for twenty to forty-five seconds. Again, don't go under or over the time limit. What was your experience? Did the word have the same emotional impact when you said it fast? How did it change? If the word didn't have the same emotional impact, how did it change? Right now, how distressing is it to think that this word applies to you? 1 means not at all distressing and 100 means maximally distressing:

Right now, how literally true or believable does this word seem as it applies to you? 1 means not at all believable and 100 means maximally believable: _____

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Exercise SIXTEEN**Chapter Six, Week Five - Worksheet Exercises**

Read through pages 73-75 and then fill in the blanks on this worksheet.

The point of the last exercise was to help you understand the nature of language. In addition to whatever they may be about, words are also just words. When you understand the idea that words are just words and you make use of that idea as a skill that you can develop, it becomes easier to understand and modify the words' relationship to your pain and to your life. Otherwise, you stand helpless as the target of whatever your verbal conditioning sets up in your head. After all, do you really know where all those words your mind throws at you come from?

Complete the following phrases with whatever comes to mind.

Blondes have more _____

Eeny, Meeny, Miny, _____

There's no place like _____

Why do you think you wrote what you wrote? Isn't it because those phrases are a part of your history? Now, let's see if we can eliminate the effects of this history easily. Suppose it was really important that the phrase "Blondes have more _____" didn't evoke "fun" or anything having anything at all to do with "fun." Suppose it is critical that you not even think "fun" for a second. Let's see if that's possible.

Write down a word, but make sure what comes up has nothing to do with "fun," not even for a second.

Blondes have more _____

Now, notice what your mind did and ask yourself: Did you do the task (circle one): Yes / No

If you circled no, you probably observed what actually happened. If you circled yes, pause for a minute and ask yourself how it was that you knew to circle yes? Remember we said, "It is critical that you not even think 'fun' for a second." If you circled yes wouldn't you have had to think, "I should circle yes because I wrote down _____ (whatever you just wrote)? But that is thinking of "fun!" Our point is that once your history establishes a relational network, you can only elaborate on that network. You cannot make it go away. We are creatures of our histories, and our every moment adds to that history. Our nervous system works by addition, not subtraction. To some degree, things we learned once are still part of us. Words just rumble around within the verbal networks that comprise our minds. Typically, there they stay. When we try to get rid of them, they stick to us like sticky tape we've grabbed with the intention of throwing it away, but it won't let go. Maybe that's fine, if the words rumbling around on their own are like "blondes have more fun" (as stupid and perhaps as sexist as that

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phrase may be). But language is not always so harmless. For example, complete the following phrases:

I'm not a good person, I'm _____

I'm so sad I think I will just _____

The worst thing about me is that I'm _____

Some of those are words that can hurt you. But you know how to write them. You just did. They are in your history too somewhere and they come out from time to time. And history is very easy to create. Suppose we were to say to you, "We plan to ask you a question. If you get the right answer, we will give you a million dollars on the spot. All you have to do is remember this: "Gub-gubs go 'wooo.'" Don't forget that sentence. It could be worth a million dollars to you.

One day, we'll knock on your door and ask you to complete this line: "Gub-gubs go ____?" And if you say "wooo," you'll get a million dollars! So let's say it again so you won't forget. "Gub-gubs go ____." Good. Now, do you suppose that if we magically we knocked on your door tomorrow and said, "Gub-gubs go ____?" that you might remember what to say? That seems likely. (If you think not, your next assignment is to read the previous paragraph twenty more times.) How about next week? Might you remember that gub-gubs go "wooo"? Maybe even a year from now? Isn't it possible, that if we asked you on your deathbed about these stupid gub-gubs you might know they go "wooo"? Isn't that silly? Here you are wasting precious brain space for the rest of your life for no other reason than you happen to read a silly example of the way language works in a weird little book written by odd-thinking people you don't even know? But that is how language works. It's very easy to build a relational network that might last your lifetime. But if some of your history hurts, it's very easy to bring that to mind as well, and that too will last a lifetime.

Some of the words in your head may be negative evaluations, like "Deep down I'm afraid I'm _____." Who knows where the rest of the sentence that you just thought of came from? Maybe it came from your parents, or TV, or a book, or just the logic of language itself. But it could make all the difference in the world to you if, when you struggle with your darkest thoughts, you were able to also see the words that hurt as just words. Milk, milk, milk ... The Say the Word "Milk" as Fast as You Can exercise punctures the illusion of language for just a moment. But with practice you can develop the skills you need to free yourself whenever you become entangled in your own conditioned network of words and they are leading you in a direction that will not work for you. You don't need to do this all the time. Sometimes cognitive fusion is helpful. For example, when doing your taxes, there is no point in remembering that words are just words while you try to follow the complex rules involved in preparing a tax return. But when you are struggling with psychological pain, you need methods that will help you see the process of language, not just its products.

Exercise SEVENTEEN

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Chapter Six, Week Five - Worksheet Exercises

One approach that can help you catch your thoughts, feelings, memories, and bodily sensations' as they pass by, is to label them for what they are. Call out aloud exactly what it is you are doing, rather than just thinking the thought.

For example, if you are thinking that you have things to do later today, instead of saying, "I have things to do later today," add a label to the type of event that just took place: "I am having the thought that I have things to do later." If you feel sad, make note of it by saying to yourself, "I am having the feeling of sadness." When you apply your labels, they should take the following form:

I am having the thought that ... *(describe your thought)*

I am having the feeling of ... *(describe your feeling)*

I am having the memory of ... *(describe your memory)*

I am feeling the bodily sensation of ... *(describe the nature/location of your bodily sensation)*

I am noticing the tendency to ... *(describe your behavioural urge or predisposition)*

Now you are ready to try your hand at labelling. Let your experiences flow, and label them appropriately, as they arise.

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Exercise EIGHTEEN**Chapter Six, Week Five - Worksheet Exercises**

This will be an eyes-closed exercise. First, read the excerpt on page 77 of the book and then when you are sure you understand them, close your eyes and do the exercise.

How long did you go until you got caught by one of your thoughts?

If you got the stream flowing and then it stopped, or if you went somewhere else in your mind, write down what happened just before that occurred:

If you never got the mental image of the stream started, write down what you were thinking while it wasn't starting:

You can think of the moments when the stream wouldn't flow as moments of cognitive fusion, while the moments when the stream does flow are moments of cognitive defusion. Many times we become fused to a thought without even being aware of it. Thoughts about this exercise can be especially "sticky." If you thought "I'm not doing this right" or "this exercise doesn't work for me," these too are thoughts that you may become fused to quite easily. In many cases, you may not even notice them as thoughts. Other particularly sticky thoughts are emotional thoughts, comparative ones, and temporal or causal ones.

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Exercise NINETEEN**Chapter Six, Week Five - Worksheet Exercises**

Pick out one of the painful items you noted in your Suffering Inventory in chapter 1, or your Daily Pain Diary in chapter 5. Take a minute to get into experiential contact with it. Now in your mind's eye, put that painful item out on the floor in front of you, about four or five feet away. When you get it out there, answer the following questions about it:

If it had a colour, what colour would it be? _____

If it had a size, how big would it be? _____

If it had a shape, what shape would it be? _____

If it had power, how much power would it have? _____

If it had speed, how fast would it go? _____

If it had a surface texture, what would it feel like? _____

Now, look at this object you've created. This is a symbolic manifestation of your pain outside of your mind. See if you can let go of any struggle you have with it. Must this thing with that shape, colour, texture, and so on be something you can't have? What, really, is in this experience that you have thought you can't have as it is? Must this creature be your enemy? Now, take a few minutes and write down some of the impressions that you have about your "pain creature" below. Note particularly any thoughts or emotions that you might have about it, and see if you can make progress in letting go of your struggle with it.

If you find you have a sense of resistance, fighting, loathing, judgment, and so on about this pain creature, leave it out there (several feet away from you) but move it off to the side. Now, find your sense of resistance and when you find it, place it in front of you, next to the pain creature. When you get it out there, answer the following questions about it

If it had a colour, what colour would it be? _____

If it had a size, how big would it be? _____

If it had a shape, what shape would it be? _____

If it had power, how much power would it have? _____

If it had speed, how fast would it go? _____

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If it had a surface texture, what would it feel like? _____

Now, look at this second object you created. This is a symbolic manifestation of your resistance. See if you can let go of any struggle with it. Letting go doesn't mean buying into the struggle. It means experiencing this symbolic object made up of this shape, colour, texture, and so on. Is there anything in this experience that you have that you think you can't bear to have? Must this resistance creature be your enemy? Can you accept it as a private experience you sometimes have? After all, this poor thing also has nowhere else to go. If you can drop the tug-of-war rope with this second object, take a peek now at the first one. Does it look any different in size, shape, colour, and so on? If so, write down what you notice:

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Exercise TWENTY**Chapter Six, Week Five - Worksheet Exercises**

In this exercise we would like you to try to make some distinctions of your own between descriptions (primary attributes) and evaluations (secondary attributes). Read the excerpt on page 81 and fill in the blanks below.

Now, list some attributes of a tree: Primary Attributes: (leaves, colour, etc.)

Secondary Attributes: (ugly, ominous, beautiful, etc.)

List some attributes of a recent movie you've seen: Primary Attributes: (ninety minutes long, Cameron Diaz was the lead actress, etc.)

Secondary Attributes: (boring, exciting, too long, could've used more drama, etc.)

List some of the attributes of a close friend of yours: Primary Attributes: (height, hair colour, etc.)

Secondary Attributes: (smart, dumb, beautiful, ugly, good, bad, etc.)

Now try to distinguish the difference between the primary and secondary attributes of your emotional experience. First jot down your painful emotion here:

Now list the attributes of this experience, just the way you did above. Remember that primary attributes are the direct qualities of the experience, while secondary attributes are the way you judge or evaluate the experience. For example, people who have had a panic attack may list increased heart rate and light-headedness as primary attributes of the experience, and they may

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list “This was the worst experience of my life” as a secondary attribute of the attack. Primary attributes:

Secondary Attributes:

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Exercise TWENTY-ONE**Chapter Six, Week Five - Worksheet Exercises**

If you've done the work and practiced the techniques in this chapter to the degree that you understand cognitive defusion, you should be able to create your own techniques. Being able to do this will empower you to use cognitive defusion as you wish. Start with a thought you are struggling with. Write it down here:

Now imagine a context in which those same words would not be something you had to believe or disbelieve, but would be only something you would notice. For example, when are you more likely to read, hear, or listen to words without struggling over their content? When are you more likely to read, hear, or listen to words with amusement or when their literal truth is not a big issue? Write down some examples here (for example, when I read stories in the National Enquirer, when I listen to a comedian, etc.):

Now construct a defusion technique that links the thought you are struggling with and your answers to the last question. Describe how you might think _____
[write down the problem thought] in this way (e.g., the way the National Enquirer would handle this thought, or the way a comedian would treat this thought):

Now, let's use this technique. Bring the problem to mind and give it a good try. Don't stop until you are sure you have done it long enough to assess its impact. Write down what happened when you did that here:

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After you used the technique:

- Were you better able to see the thought as a thought?
- Did the believability of the thought go down?
- Did the distress caused by the thought go down?

If you have two or more no answers, try it one more time. If you still have two or more no answers, this is not an effective defusion technique for you. Try again and develop something else. If you have mostly or all yes answers (especially to the first two questions), you are practicing defusion.

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Exercise TWENTY-TWO**Chapter Eight, Week Six - Worksheet Exercises**

Read the excerpt on page 107-108 and complete the exercise. Take a few minutes to comment on it below. If you wish, you can continue this practice of writing your responses in a journal after the completion of the book, but it is not necessary.

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Exercise TWENTY-THREE**Chapter Eight, Week Six - Worksheet Exercises**

Raisins are a funny little fruit, and when we eat them, we tend to just pop them into our mouths without much thought. You might be amazed to discover how much deeper your experience of a raisin can be if you treat it mindfully.

First, take a raisin and eat it the way you normally do, that is, just pop it into your mouth. Now, get another raisin. Put it down on the table in front of you and examine it. Notice the wrinkles on its skin. Look at the various shapes the wrinkles form. Take out a second raisin and place it next to the first, and notice how unlike they are. No two raisins are identical. Are the two raisins the same size? Think about the raisins in terms of the space they take up in the room, in the world, in the universe. Think about their size in relation to one another.

Now pick up one of the raisins and roll it around between your fingers. Feel the texture on the outside of the fruit. Feel the slightly sticky traces it leaves on your fingers as you move it back and forth. Place the raisin in your mouth. Roll it around inside your mouth, over and under your tongue. Hide it in the crevices between your jaws and your cheeks. Don't chew it for at least thirty seconds or so. When you are ready, eat the raisin and note the way it tastes. Note the way it feels on your teeth as you chew. Feel it as it slides down your throat when you swallow it.

Now eat the second raisin, but this time, eat it super slow. Chew the raisin as many times as you can, until it turns into liquid mush in your mouth. Is the flavour different when it is eaten this way than it was last time? How is it different? What does it feel like in your mouth as it falls apart? How does it feel as you swallow it? How does it compare with the last raisin? What's different when you eat the raisin mindfully rather than simply popping it in your mouth and slurping it down? Write down your answers to these questions in the space below:

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Exercise TWENTY-FOUR**Chapter Eight, Week Six - Worksheet Exercises**

Now we will try a similar exercise with a cup of tea. 1. Boil a pot of water. 2. Get a tea bag or a tea-leaf strainer filled with tea leaves and put it into a cup. 3. Pour the boiled water over the tea bag or the strainer. Fill the cup. 4. Let it steep. As the tea steeps, watch the water change colours. When you first pour the water over the tea, the water will turn a light brown, green, or red (depending on the kind of tea you are using). Soon it will darken. Let it steep for a few minutes and remove the tea from the water. Look closely at the colour of the tea. Is there anything you didn't notice about the colour before? If so, you might want to jot down your observation below:

Now place your hands around the outside of the warm cup. Have you ever felt a cup of tea like this before? How does it feel? Is it quite hot, or just warm? Note the temperature. Bring the cup to your lips. Feel the steam as it touches your face. Blow into the cup and feel the steam rise up to your lips. Smell the tea. Take a good long whiff. Ninety percent of your sense of taste is controlled by your nose. If you aren't smelling your tea, you aren't tasting it. Now take a sip. Does it burn your lips? Is it too hot? Or is it nice and warm? What does it taste like? Try to note your experiences without judging them. Then, describe your experience below:

If you don't like tea, that doesn't really matter. Just try the exercise. Note how much you dislike tea as you taste it. And write down that experience. It's folly to think that you should practice present awareness only in moments of pleasure. That would eliminate half of your life. You know that you will have some unpleasant experiences, so you might as well experience them fully and take them for what they are worth.

ACT BASED INTERVENTIONS IN DISORDERED EATING

Exercise TWENTY-FIVE**Chapter Eight, Week Six - Worksheet Exercises**

The exercises in chapter eight are actually tiny subsets of a much larger practice that is known as mindful eating. There are as many ways to practice mindful eating as there are schools that practice mindfulness. Some ways require you to eat slowly, some to chew each mouthful of food fifty times, some to eat a limited number of meals, some ask you to test for your hunger responses while you're eating, and so forth.

In many Western cultures, we don't pay a great deal of attention to the food we eat. In a world where everything is supersized and the burger is king, we tend to think of food as not much more than a necessary factor of survival. What's worse, we tend to believe that this factor is as much a given as the air we breathe. We take our food for granted. In the context of this book, the point of eating mindfully is not the activity of eating itself. It is used as a means to practice mindfulness. Becoming aware of your eating behaviour rather than just rushing through it is an excellent way to bring yourself back to the present moment. Observing yourself while you eat is a great way to practice removing yourself from the conceptualized self. It doesn't matter whether you like the activity of eating. The important thing is to practice connecting to the present moment.

To practice eating mindfully, you can use many of the same techniques and much the same attitude as you did while doing the exercises above, only you continue the practice for an entire meal. Set aside some extra time for yourself at your next meal and try it out.

To start, move through the meal slowly. Take your time performing every action and notice what your experience is, as you go through it. When you lift a fork or cut your meat, note what that is like for you. As you place a bite of food in your mouth and chew it, think about the flavours and the texture of the food. Is it enjoyable or repulsive? Don't get hung up in judging it. Just notice it. Do you find that particular thoughts or feelings come up during the course of the meal? If so, simply note those as well. You might want to use some of the techniques used throughout this book to help you do that. Are you eating with a friend or partner? Are you eating alone? It may be interesting to watch your mind as you interact with the people with whom you take your meals. It may also be interesting to note the kinds of thoughts and emotions that come up when you are eating alone. Because we all have to take the time to eat in order to live, eating mindfully is an excellent way to practice staying in contact with the present moment and make the most of your time.

Write down your answers to these questions and make note of your experiences in the space below:

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Exercise TWENTY-SIX**Chapter Eleven, Week Seven - Worksheet Exercises**

In order to practice choosing, let's start with something trivial. There are two letters below. Choose one.

A**Z**

Now for the tricky part. Watch what your mind does as this question is asked: "Why did you choose the one you chose?" For most of you, your mind will now generate a "reason." But bring all of your defusion skills into this moment. Would it be possible to notice that thought and still pick the other? Remember the exercises we did in chapter 2 when we read a verbal rule and deliberately did something else? Let's do that again. This time, we'll give you lots of "reasons" to be aware of. There are two letters below. Read the sentences below and then choose one. (Not as a judgment! Just notice all of the reasons in a defused, accepting, mindful, open way and pick one or the other for no reason at all and with all of the reasons you may have).

Here are all of the reasons to be aware of:

Pick the one on the left. No, pick the one on the right. No, pick the one on the left. No, pick the one on the right. No, pick the one on the left. No, pick the one on the right. No, pick the one on the left. No, pick the one on the right. No, pick the one on the left. No, pick the one on the right. Here are two letters. Choose one.

A**Z**

Were you able to do it? Repeat this process until you can simply pick a letter without regard to all the chatter—undefended, naked, and in the wind, without compliance with the chatter or resistance to the chatter. If you pass this test with the simple commands in mind of "pick the one on the right" and "pick the one on the left," why can't you do the same with the reasons your mind gives you about more important choices?

If you apply your defusion skills, it is the same situation, despite the fact that one may be said to be "important" and one may be said to be "not important." Let's try it and see. Try to come up with "reasons" to pick one of the letters. Of course, this is a trivial choice, so, normally, there would be no reason to do such a thing. But for the purposes of the exercise, make your word machine come up with some reasons (for example, "I like the letter A better because it is in my name," or "Z reminds me of Zorro and I remember liking those reruns on the Disney channel when I was a kid," or "I like right better than left because I'm right-handed," or "Left in Latin is 'sinister' and I don't want to pick something sinister," and so on). Now, write down some reasons to pick one of the two choices below:

Reasons to pick A on the left**Reasons to pick Z on the right**

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Now, you will make this silly little choice again. Read the list of reasons you generated and think about them all again. If your mind gives you any other reasons, deliberately think about those too. Notice them all as thoughts. Do not resist them. Do not comply with them. Simply notice them. Now, pick one of the two letters again.

A**Z**

Repeat this process until you are clear that you can pick either letter no matter what your mind is saying. That doesn't mean disobeying your mind. In that case, your mind is still in control; it's just the form that has changed (this is why we say that neither rebelliousness nor compliance are, at their core, forms of independence). It means noticing all of these mental events and simply picking one of the letters, with these reasons, but neither for nor against these reasons. Minds hate this exercise! Minds can't understand it because minds generate and apply verbal reasons to all alternatives. But humans can do this. That's because humans are more than their verbal repertoire. This small exercise was done with a meaningless choice. Values, however, are anything but meaningless. So the chatter will be louder, and the reasons will be stronger. But the action will be the same. We can be about anything we want to be about. Who can stop us?

ACT BASED INTERVENTIONS IN DISORDERED EATING

Exercise TWENTY-SEVEN**Chapter Twelve, Week Seven - Worksheet Exercises**

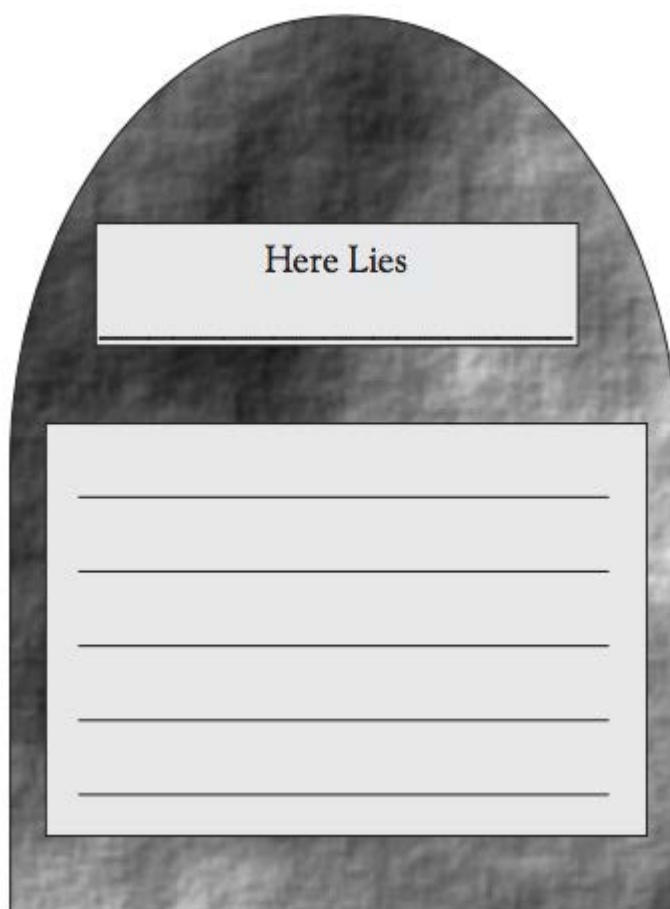
Read chapter 12 and the supplementary text for this exercise in the book starting on page 166, and then complete the exercise in the space below.

In the space below, imagine that a family member or friend is at your funeral. They have been asked to stand up and say a few words about what you stood for in your life; about what you cared about; about the path you took. First write down what you are afraid might be said if the struggle you are currently engaged in continues to dominate in your life, or even grows. Suppose you back off from what you really want to stand for, and instead you follow a path of avoidance, mental entanglement, emotional control, and self-righteousness. Picture your family member or friend. What might he or she say? Write it down, word for word:

Now suppose you could see inside this person's head in that moment. If no censoring was going on, no playacting, and this person's thoughts were visible to you, what else would be said (this time just privately to himself or herself) that might not have been said publicly. Write it down, word for word:

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What was doing this exercise like for you? Besides the strangeness of watching your own funeral, what else came up for you in this exercise? Now, go back and read what you wrote. If you said anything that seems incomplete, or off the mark, you can rewrite it. Hey, it's your funeral. If you really reached for it, you might see inside the words you wrote something of what is already inside you. Can you see some of that which you want to manifest in your life? The way you would want to be remembered once your life is over should give you a very good idea about what you value now. We don't know what anyone would say at your funeral, but we do know that your actions today can make a profound difference in how your life works from here. It is not your thoughts, feelings, or bodily sensations that your loved ones will remember you by, but the choices you make and the actions you take each day of your life. Couldn't that begin today? Couldn't that begin now? Let's see if we can use the method of looking back at your life to dig out what is most dear one more time. Let's try to distill all of this down to a shorter version. Choosing Your Values 169 When people are buried, an epitaph is often written. They say things like "Here lies Sue. She loved her family with all her heart." If the headstone below was yours, what inscription would you like to see on it? How would you most like your life to be characterized? Again, this is neither a description nor a prediction; it is a hope; an aspiration; a wish. It is between you and the person in the mirror. What would you like your life to stand for? Think about it for a moment, and see if you can distill your innermost values into a short epitaph and write it out on the illustration of the tombstone below:



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Exercise TWENTY-EIGHT**Chapter Twelve, Week Seven - Worksheet Exercises**

Read chapter 12 and the supplementary text for this exercise in the book starting on page 171, and then complete the exercise in the space below.

Marriage/Couple/Intimate Relationship

For most people, intimate relationships are very important. This is the relationship you have with your “significant other”: your spouse, lover, or partner. If you are not in such a relationship right now, you can still answer these questions in terms of what you aspire to find in such a relationship. What kind of person would you most like to be in the context of an intimate relationship? It might help to think about specific actions you would like to take, and then use those to dig down to the underlying motives for such actions. What are those underlying motives? How do they reflect what you value in your relationship? Do not put down goals (like “getting married”); there will be an opportunity for those later.

Parenting

Think about what it means to you to be a mother or father. What would you like to be about in this role? If you don’t have children, you can still answer this question. What do you want to be about in supporting this role in others?

Family Relations (Other Than Intimate Relations and Parenting)

This domain is about family, not about your husband or wife or children, but about other areas of family life. Think about what it means to be a son, daughter, aunt, uncle, cousin, grandparent, or in-law. What would you like to be about in your family relationships? You may think about this broadly or only in terms of your nuclear family. What values would you like to see manifest in your life in this area?

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Friendship/Social Relations Friendships are another area of personal relations that most people value. What kind of friend would you like to be? Think about your closest friends and see if you can connect with what you would like to have manifest in your life regarding your friends.

Career/Employment Work

and careers are important for most people because that area is where a great deal of your life is spent. Whether your work is humble or grand, the question of values in work pertains. What kind of an employee do you most want to be? What do you want to stand for in your work? What kind of a difference do you want to make through your job?

Education/Training/Personal Growth and Development

This area can cover all kinds of learning and personal development. School-based education is one. But this area includes all the things you do to learn, as well. Working through this book could be an example. What type of learner do you want to be? How would you like to engage with that area of your life?

Recreation/Leisure

Recreation, leisure, and relaxation are important to most of us. It is in those areas that we recharge our batteries; the activities in this area are often where we connect with family and friends. Think about Choosing Your Values 173 what is meaningful to you about your hobbies, sports, avocations, play, vacations, and other forms of recreation. In these areas, what would you like to have manifest in your life?

Spirituality

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By spirituality, we don't necessarily mean organized religion, although that could certainly be included in this section. Spirituality includes everything that helps you feel connected to something larger than yourself, to a sense of wonder and transcendence in life. It includes your faith, spiritual and religious practices, and your connection with others in this domain. What do you most want to be about in this area of your life?

Citizenship

How would you like to contribute to society and be a member of the community? What do you really want to be about in social/political/charitable and community areas?

Health/Physical Well-Being

We are physical beings, and taking care of our bodies and our health through diet, exercise, and sound health practices is another important domain. What do you want to have revealed in your life in these areas?

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Exercise TWENTY-NINE**Chapter Twelve, Week Seven - Worksheet Exercises**

Read chapter 12 and the supplementary text for this exercise in the book starting on page 175, and then complete the exercise in the space below.

<u>Domain</u>	<u>Value</u>	Importance	Manifestation	Life Deviation
Marriage/Couple/ Intimate Relationships				
Parenting				
Other Family Relations				
Career/ Employment				
Education/Training Personal Growth				
Recreation/ Leisure				
Spirituality				
Citizenship				
Health/Physical Well being				

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Exercise THIRTY**Chapter Thirteen, Week Eight - Worksheet Exercises**

Read chapter 13 and the supplementary text for this exercise ('Goal Setting') in the book starting on page 179, and then complete the exercise in the space below.

Be bold. But be real. Don't be too easy on yourself, but be realistic and decide on something you can achieve. Once you have your goal firmly in mind, write it down in the space below:

Now check your goal for the following items:

- Is it practical?
- Is it obtainable?
- Does it work with your current situation?
- Does this goal lead you in the direction of your stated value?

If you answered yes to these questions, then you have successfully created a goal for yourself. If you couldn't answer yes to whatever you wrote down in the space above, go back over chapters 11 and 12 and try to get clearer on what a goal is. The next step is to figure out whether this is a long-term goal or a short-term goal and whether or not you will need to complete additional goals to get there. Next, on the following time line, plot a point where this goal would fall for you. The far left of the time line is your life, starting today. The end of the time line is your death, some reasonable amount of time in the future. Where on this line does your goal fall?

Life Today

End of Life

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Exercise THIRTY-ONE**Chapter Thirteen, Week Eight - Worksheet Exercises**

Read chapter 13 and the supplementary text for this exercise ('Goal Setting') in the book starting on page 179, and then complete the exercise in the space below.

Value:

This value will be manifested in the following long-term goal:

A: _____

Which, in turn, will be manifested in these short-term goals:

1. _____ 2.

3.

This value will be manifested in the following long-term goal:

B: _____

Which, in turn, will be manifested in these short-term goals:

1. _____ 2.

3.

Repeat this process until you have a good working set. (It need not be comprehensive; you can always add and subtract from these at any time.)

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Exercise THIRTY-TWO**Chapter Thirteen, Week Eight - Worksheet Exercises**

Read chapter 13 and the supplementary text for this exercise ('Making Goals Happen Through Action, and 'Barriers') in the book starting on page 183, and then complete the exercises in the space below.

Short-term goal:

Actions and sub-actions:

1. _____ 2.
- _____ 3.
- _____
4. _____
5. _____

What could you do right now (today) from this list? Focus on what is possible. If you are ready to do it, great!

Focus in on one of the specific actions you wrote down above that you could do today, and choose one that you have some psychological resistance toward doing. Write that behaviour below:

If you were to do this right now, what would you expect to encounter psychologically that would slow you down? Look for difficult thoughts, feelings, bodily sensations, memories, or urges. If you aren't sure yet, close your eyes and picture engaging in this behaviour and watch for indications of the barriers. Don't allow avoidance to get in the way of this process!

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If you find your mind wandering, or you think, “Damn, I don’t care about this anyway,” or you suddenly get hungry or have to pee, be suspicious! Avoidance comes in myriad forms. Stay with this process and in the space below write down each barrier you can detect:

1. _____ 2.
- _____ 3.
- _____
4. _____
5. _____

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Thank you!

This concludes the participant workbook. If you have any questions about the content of this workbook, feel free to contact me at kmb77@students.waikato.ac.nz.

I appreciate the time and effort you have put into this research and I hope you have benefited from it as well.