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# SELF COMPASSION, INTUITIVE EATING, AND DISORDERED EATING

Does being kind to yourself affect your relationship with food? The relationship between self-compassion, intuitive eating and disordered eating among emerging adults in Aotearoa New Zealand.

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Carly Raquel Owen

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### Abstract

Emerging adults (18-25 years) have been identified as an at-risk group for disordered eating. Despite this, research regarding eating behaviours among this group in Aotearoa New Zealand is scant. Intuitive eating — the practice of honouring hunger and satiety cues — has been identified as an adaptive weight-neutral eating style associated with decreases in disordered eating and increases in well-being. Self-compassion — the ability to take a kind and accepting stance to oneself — has shown promise as a strategy that facilitates adaptive eating behaviours. However, the relationship between self-compassion, intuitive eating and disordered eating has yet to be examined in emerging adults in the Aotearoa New Zealand context. We predicted that self-compassion and intuitive eating would be negatively related to disordered eating attitudes and behaviours, and self-compassion would be positively related to intuitive eating. We also predicted that intuitive eating would mediate the relationship between self-compassion and disordered eating. A sample of 170 emerging adults in Aotearoa New Zealand completed self-report measures of self-compassion, intuitive eating and disordered eating online via Qualtrics. Pearson-moment correlations were run between variables of interest, and mediation hypotheses were tested using Hayes PROCESS macro in SPSS, entering self-compassion as the predictor, disordered eating as the outcome variable, and intuitive eating as the mediator. Results indicated that self-compassion was related to increases in intuitive eating and decreases in disordered eating; and intuitive eating was related to decreases in disordered eating. In addition, intuitive eating was a significant mediator in the relationship between self-compassion and disordered eating, such that increases in self-compassion reduced disordered eating partially through increases in intuitive eating. In other words, those that take on a more self-compassionate stance towards themselves may experience reductions in disordered eating due to increased engagement in intuitive eating practices. The outcomes of this study highlight self-compassion and intuitive

eating as potentially useful constructs to integrate into prevention and treatment efforts for disordered eating among emerging adults in Aotearoa New Zealand.

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## Chapter 1: Introduction

Research has indicated that disordered eating behaviours have doubled worldwide since the year 2000 (Galmiche et al., 2019; Simone et al., 2021), including severe restriction (i.e., limiting one's caloric intake), bingeing (i.e., uncontrolled consumption of large amounts of food), and purging (i.e., self-induced vomiting) (Chiurazzi et al., 2017; Dalen et al., 2010; Forney et al., 2016). Increases in disordered eating represent a significant public health concern due to the physical and psychological impairments associated with these behaviours (Neumark-Sztainer et al., 2006; Simone et al., 2021). These include but are not limited to eating disorders (Jacobi et al., 2012), anxiety (Herpertz-Dahlmann et al., 2008), depression (Liechty & Lee, 2013), low self-esteem (Brechan & Kvalem, 2015), malnutrition (Dennard & Richards, 2013), and increased mortality (Pereira & Alvarenga, 2007).

Emerging adults (18-25 years) have been identified as a group that is at increased risk for the development of disordered eating and eating disorders (EDs) (Potterton et al., 2020). Due to the explorative and often turbulent nature of this developmental stage (e.g., moving out of the family home, beginning employment), they are at risk of developing various mental health issues, including disordered eating (Olenik-Shemesh et al., 2018; Potterton et al., 2020). The conditions caused by the 2019 pandemic (e.g., elevated stress, prolonged home confinement, isolation and increases in uncertainty) have exacerbated this risk (Hansen et al., 2021; Touyz et al., 2020). Despite increased risk among this cohort, their treatment needs are generally less well met than those of adolescents (Mitrofan et al., 2019; Potterton et al., 2020). Although a few interventions have been developed specifically for emerging adults, the findings are preliminary, and research on emerging adults with disordered eating continues to be scant (Knatz Peck et al., 2021).

ED research predominantly focuses on reducing psychopathological symptoms (e.g., reducing binge episodes), rather than enhancing adaptive behaviours (e.g., honouring your

hunger cues) and protective factors (e.g., self-esteem) (de Vos et al., 2018; Taylor et al., 2015; Tylka & Kroon Van Diest, 2015; Tylka & Wilcox, 2006). This preoccupation with reducing maladaptation in ED research may limit the efficacy of current interventions in returning clients to full wellness, as comprehensive recovery requires both the absence of psychopathology and the presence of adaptive eating behaviours (Cardoso et al., 2020; Voica et al., 2021; Wood & Tarrrier, 2010). Furthermore, weight-normative approaches to health (the practices of the health care system that position weight as a main determinant of health), act as a significant barrier to adaptive eating behaviour, making dieting normative and perpetuating weight stigma and weight bias — variables that have shown to predict disordered eating (Clark et al., 2021; Tylka et al., 2014). Weight-centred wellness regimes also stigmatise indigenous populations by imposing western ideals of body weight and shape on communities who may have different body-related norms and values (Houkamau et al., 2021). This is exemplified by New Zealand public health experts raising the alarm about high rate of obesity among Māori populations, perpetuating the notion that fat indigenous bodies are morally inferior (Ringel & Ditto, 2019; Warbrick et al., 2016, 2019). As a result, there is a need for more research investigating how positive psychological constructs may allow greater engagement in adaptive eating behaviours (regardless of weight status) and as a result reduce disordered eating tendencies among emerging adults.

Intuitive eating is an weight-neutral anti-diet approach that has shown promise as an adaptive eating style (Tylka & Kroon Van Diest, 2013). The concept of intuitive eating is grounded in the assumption that our bodies have a natural capacity to indicate the quantity and types of food we need to maintain an appropriate weight, nutritional health, and overall well-being (Van Dyke & Drinkwater, 2014). This approach promotes eating in response to hunger cues as a way to mitigate unhealthy restriction, maladaptive weight-management techniques, and emotional eating (Gast et al., 2012). Intuitive eating emphasises an

individual's connection to and respect for their own internal needs, regardless of weight status (Bacon & Aphramor, 2011). Intuitive eating has been associated with various positive psychosocial outcomes, including decreased engagement in disordered eating (Denny et al., 2013; Madden et al., 2012), decreased eating pathology (Shouse & Nilsson, 2011; Tylka, 2006; Tylka & Kroon Van Diest, 2013) and lower levels of depression (Iannantuono & Tylka, 2012) and body dissatisfaction (Dittmann & Freedman, 2009; Tylka, 2006), suggesting this eating style is an adaptive and safe way to regulate food consumption (Bruce & Ricciardelli, 2016).

As research has shown support for the effectiveness of intuitive eating in reducing disordered eating and promoting good health (Bruce & Ricciardelli, 2016), it is important to understand how individual factors may enable greater engagement with this adaptive eating style. Self-compassion, which refers to one's ability to take a non-judgmental stance towards oneself, has been identified as a potential protective factor for maladaptive eating behaviour (Neff, 2009; Stutts & Blomquist, 2018; Taylor et al., 2015; Tylka et al., 2015). Although several studies have explored the relationship between adaptive eating styles and disordered eating (Denny et al., 2013; Schoenefeld & Webb, 2013; Taylor et al., 2015; Tylka & Wilcox, 2006), to our knowledge, no studies have been conducted on how self-compassion may be related to intuitive eating and disordered eating in Aotearoa New Zealand. Since food consumption and culture are heavily intertwined and thus differs from culture to culture (Axelson, 1986; Simone et al., 2022) and disordered eating behaviours are common among emerging adults in Aotearoa New Zealand (Cleland et al., 2023), this study will contribute to the literature by examining these relationships within an Aotearoa New Zealand context.

It follows that the purpose of the current research project is to explore the relationship between self-compassion, intuitive eating and disordered eating among emerging adults in Aotearoa New Zealand. I hypothesised that self-compassion and intuitive eating would be

negatively related to disordered eating attitudes and behaviours, and self-compassion would be positively related to intuitive eating. Furthermore, I predicted that intuitive eating would mediate the relationship between self-compassion and disordered eating, such that increases in self-compassion may reduce disordered eating through increased engagement in intuitive eating. If it is the case that self-compassion is related to increases in intuitive eating and decreases in disordered eating behaviours, the promotion of these concepts in clinical practice may be promising in the treatment and prevention of eating disorders among emerging adults in Aotearoa New Zealand.

The current study used a cross-sectional quantitative research design. An anonymous survey was administered online via Qualtrics to 170 participants between the ages of 18 and 25 years who live in Aotearoa New Zealand and are fluent in English. The survey included demographic questions (i.e. age, ethnicity, gender) as well as psychometric measures of self-compassion (Self-Compassion Scale—Short Form; [Raes et al., 2011](#)), intuitive eating (Intuitive Eating Scale—2; [Tylka & Kroon Van Diest, 2013](#)) and disordered eating (Eating Attitudes Test—26; [Garner et al., 1982](#)).

The remainder of this thesis will be organised as follows: Chapter 2 will review the relevant literature that informed the hypotheses for the current study. Chapter 3 will discuss the methodology used for the study. Chapter 4 will outline the results of the study in relation to each hypothesis. Chapter 5 will outline and discuss the findings in relation to previous research, implications, future directions and the limitations of the current study. Finally, Chapter 6 will summarise the central findings of the current study and their implications for eating disorder prevention and treatment for emerging adults in Aotearoa New Zealand.

## Chapter 2: Literature Review

### 2.1 Disordered Eating Among Young Adults

#### 2.1.1 *What is Disordered Eating?*

Over the last decade, there has been a marked increase in the global prevalence of disordered eating (Galmiche et al., 2019; Hay et al., 2008; Nagata et al., 2018). The term disordered eating refers to a variety of maladaptive eating and weight control behaviours and attitudes, including dietary restriction, bingeing, purging, food preoccupation and diuretic use (Hart et al., 2020; McGuinness & Taylor, 2016; Nagata et al., 2018; Pereira & Alvarenga, 2007; Yannakoulia et al., 2004). Eating disorders (EDs) recognised by the DSM-5, such as anorexia nervosa (AN), bulimia nervosa (BN) and binge eating disorder (BED), represent extreme manifestations of such behaviours (McGuinness & Taylor, 2016; Pereira & Alvarenga, 2007; Yannakoulia et al., 2004).

Although EDs have traditionally been considered rare psychiatric illnesses (Hay et al., 2008), research has indicated that the global prevalence has more than doubled since 2006, from 3.6% to 7.8% (Galmiche et al., 2019). There has been a growing consensus that disordered eating is more common than previously assumed (Nagata et al., 2018). In a community study conducted in South Australia analysing change in prevalence of disordered eating behaviours over a 10-year period, researchers found that although AN and BN rates remained rare in their population sample, there was a two-fold increase in bingeing, purging and extreme dieting for weight or shape control (Hay et al., 2008). These findings suggest that while full-threshold eating disorders may be relatively uncommon, disordered eating behaviours and subclinical eating disorders are rising and prevalent.

In response to the increasing prevalence of disordered eating behaviours and “atypical” eating disorder presentations, the recent revision of the DSM classification has included new residual categories, including “other specified feeding or eating disorder”

(OSFED) and “unspecified feeding and eating disorder” (UFED) (Mustelin et al., 2016; Qian et al., 2022). OSFED refers to eating disorders that result in clinically significant functional impairment but do not meet the full criteria for AN, BN or BED, including atypical AN, atypical BN, atypical BED, purging disorder and night eating syndrome (Mustelin et al., 2016; Osipov, 2019; Qian et al., 2022; Silén et al., 2020). Similarly, a UFED diagnosis applies to disordered eating presentations that cause clinically significant distress but do not meet full diagnostic criteria for any specified eating disorder, including those under the OSFED category (Mustelin et al., 2016; Qian et al., 2022). It is worth noting that these categories were formerly captured by “eating disorder not otherwise specified” (EDNOS) in the DSM-IV (Hay et al., 2015).

Previous work has suggested that OSFED/UFED are the most common eating disorders, accounting for 50% of people receiving treatment for disordered eating (Machado et al., 2013; Mustelin et al., 2016; Santomauro et al., 2021; Wade & O’Shea, 2015). Despite this, the Global Burden of Diseases, Injuries and Risk Factors 2019 (a comprehensive systematic review that estimates health loss from diseases, injuries and risk factors to inform healthcare initiatives) did not include this category (Santomauro et al., 2021; Steiner et al., 2015). In addition, due to their heterogeneous nature, OSFED and USFED are often unaccounted for and undertreated (Osipov, 2019; Santomauro et al., 2021). As a result, the prevalence and burden of disordered eating are likely to be grossly underestimated (Solmi et al., 2014). Although some consider these subthreshold variants of disordered eating milder versions of eating pathology, evidence shows that they are an issue in and of themselves; associated with significant psychological and physiological impairment (Liechty & Lee, 2013; Osipov, 2019; Stephen et al., 2014; Thomas et al., 2009).

### ***2.1.2 Psychosocial Correlates of Disordered Eating***

Even in the absence of full DSM-5 criteria, increases in disordered eating are a significant public health problem due to the physical and psychological impairments associated with these behaviours (Nagata et al., 2018; Neumark-Sztainer et al., 2006; Simone et al., 2021). These include but are not limited to anxiety (Gadalla & Piran, 2008), depression (Mond et al., 2006), low self-esteem (Stephen et al., 2014), substance use (Piran & Robinson, 2011), post-traumatic stress disorder (Hirth et al., 2011), blunted stress reactivity (Ginty et al., 2012) and suicidality (Crow et al., 2008).

Not only are eating disorders associated with significant comorbidity, but they are also linked with increased mortality risk — the highest rates of mortality among all mental disorders (Berkman et al., 2007; Lipson & Sonnevile, 2020; Santomauro et al., 2021). Studies have shown that after inpatient treatment of AN and BN, mortality risks are five times (van Hoeken & Hoek, 2020) and two times (Arcelus et al., 2011) greater than the general population, respectively. It is not surprising then that eating disorders are associated with increased healthcare utilisation and costs (Ágh et al., 2016; Iwajomo et al., 2021). Overall, disordered eating behaviours are associated with a significant reduction in health-related quality of life (Hart et al., 2020). Perhaps as a result of some of these findings, there is increased recognition of the importance of early intervention in this population, such that in order to prevent the severe impact of EDs on wellbeing, it is critical to identify and address disordered eating attitudes and behaviours among at-risk groups before a full diagnosis is warranted (Pereira & Alvarenga, 2007; Sanlier et al., 2017).

### ***2.1.3 Emerging Adults as an At-Risk Group***

Emerging adults (18-25) appear to be at increased risk of disordered eating (Bailey et al., 2014; Baranauskas et al., 2022; Pikó et al., 2022). Although the onset of eating disorder symptoms typically begins in adolescence (Frank, 2016), disordered eating behaviours and

unhealthy weight control tactics tend to track within individuals over time and increase in the transition from adolescence to young adulthood (18-25) (Larson et al., 2021; Miller & Golden, 2010). Research has suggested that AN, BN and OSFED typically arise between the ages of 15 and 19 years and BED between 23 and 24 years (Favaro et al., 2019; Hudson et al., 2007; Kessler et al., 2013; Steinhausen & Jensen, 2015). Furthermore, studies have shown that the 12-month prevalence estimates of eating disorders are much larger for university students (typically ages 18-22 years) than the general population, whereby approximately 14% of female and 4% of male (Eisenberg et al., 2011) university students screen positive for an ED, compared to 2.2% and 0.7% (Galmiche et al., 2019) in the general population (Potterton et al., 2021). Indeed, it has been recognised that disordered eating has become normative among emerging adults. Estimates suggest that over 25% of female emerging adults have engaged in disordered eating in the previous 12 months and between 11-20% have a probable eating disorder (Pennesi & Wade, 2016; Potterton et al., 2020; Wade et al., 2012). In addition, there has been increasing recognition that disordered eating behaviours are a growing issue among young men (Lavender et al., 2017), demonstrating comparable levels of dietary restraint (Striegel-Moore et al., 2009), compulsive exercise (Lavender et al., 2010) and binge eating (Lydecker & Grilo, 2018).

It is important to note that emerging adulthood represents a time in which health behaviours are negotiated, consolidated and established long-term (Nelson et al., 2008). As a result, engagement in maladaptive eating behaviours during this period could have serious long-term consequences (Nelson et al., 2008). Given this information, there has been increasing support for the notion that emerging adulthood is a critical developmental period for the establishment of adaptive and/or maladaptive eating behaviours, and therefore an important cohort to target for the treatment and prevention of eating pathology (Liechty & Lee, 2013; Nelson et al., 2008).

To understand why emerging adults are at increased risk for disordered eating, it is important to consider the developmental characteristics of this cohort. Although some researchers consider the transition from adolescence to adulthood as an “extended adolescence”, there has been growing support that this period should be considered a distinct developmental stage characterised by unique challenges (Potterton et al., 2020). Traditionally, developmental psychologists have understood that adulthood is achieved at 18 years of age (Hochberg & Konner, 2020). However, technological improvements have made it clear that the human brain is still developing until the mid-twenties (Hochberg & Konner, 2020; Potterton et al., 2020). In addition, social and economic changes in the past decade have meant that milestones characteristic of adulthood (e.g., home ownership, marriage, children) are attained much later (Potterton et al., 2020). As a result, several researchers have suggested that those between the ages of 18-25 are in the life phase of “emerging adulthood,” a transitional period marked by distinct social and psychological features (Arnett, 2000; Hochberg & Konner, 2020).

Arnett (2000) proposed that there are five features that characterise emerging adulthood. These include identity exploration, negativity/instability, self-focus, feeling in-between, and multiple possibilities (Arnett, 2000; Gonidakis et al., 2018). *Identity exploration* refers to the development of self-identity, where people begin to explore who they are, ascertain possibilities in love, work, and romantic relationships and establish individuality and autonomy (Arnett & Mitra, 2020; Gonidakis et al., 2018; Nelson et al., 2008). In exploring these possibilities, young people experience a significant amount of *instability* in navigating a new life structure, marked by repeated residential, relationship and job changes (Arnett, 2000). Emerging adulthood is also characterised by increasing self-focus (Arnett & Mitra, 2020; Gonidakis et al., 2018). Free from the confines of school, parental control and long-term commitments, emerging adults can better focus on themselves and make decisions

according to their wants and needs (Arnett & Mitra, 2020; Gonidakis et al., 2018). Many emerging adults experience a *feeling of being in between*, no longer a teenager but also not quite an adult (Arnett & Mitra, 2020). Finally, most emerging adults believe they will get what they want in life having *multiple possibilities*, but few believe that their future may involve some failure and disappointment (Gonidakis et al., 2018).

Although many young people experience emerging adulthood as an exciting time in life, the turbulent and socially explorative nature of this period makes it a particularly vulnerable time for the development of various mental disorders, including eating pathology (Olenik-Shemesh et al., 2018; Potterton et al., 2020). One notable study investigated the relationship between Arnett's five features of emerging adulthood and eating pathology and found that all but one (self-focus) were significantly associated with disordered eating behaviours (Arnett & Mitra, 2020). It follows that during this stage of life, individuals are at increased risk of engaging in disordered eating behaviours partly due to the growing independence and autonomy from parental control commonly experienced during this period, whereby maladaptive eating habits can no longer be easily monitored and corrected (Hoerr et al., 2002). Furthermore, as emerging adulthood is characterised by the exploration of uncharted territories, young people during this stage often experience significant stress and uncertainty as they begin to tackle the difficulties that come with the transition to adulthood (Olenik-Shemesh et al., 2018; Potterton et al., 2020). High levels of stress (performance, relationship, education, financial and family) have been shown to be associated with greater engagement in disordered eating behaviours among young people (Blodgett Salafia & Lemer, 2012). Thus, it may be that lack of parental monitoring and high levels of stress during this transition may exacerbate eating-related problems.

#### ***2.1.4 Impact of COVID-19 on Emerging Adult Eating Behaviours***

In addition to emerging adulthood heightening the risk of disordered eating behaviour, the conditions caused by the COVID-19 pandemic have exacerbated this risk (Branley-Bell & Talbot, 2020). Currently, the global prevalence of ED risk for young adults stands at 10.4%, and is expected to substantially increase in part due to the social and psychological impacts of COVID-19 (Baranauskas et al., 2022; Simone et al., 2021). Some researchers have likened the pandemic to “the perfect storm” for disordered eating behaviours among emerging adults (Katzman, 2021). It has been suggested that the prolonged home confinement, social isolation, altered routines, uncertainty, social media pressures and loss of accessibility to treatment due to COVID-19 have led to increased psychological distress, enhancing the risk for engagement in maladaptive eating behaviour (Baranauskas et al., 2022; Hansen et al., 2021; Mason et al., 2021; Pompili et al., 2022).

Studies worldwide have investigated the relationship between the pandemic and disordered eating and have reported substantial increases in disordered eating behaviours in both clinical and community settings (Flaudias et al., 2020; Hansen et al., 2021; Phillipou et al., 2020). Several studies have investigated the impact of the pandemic on eating disorders within emerging adult samples specifically. For example, Lin et al. (2021), using interrupted time series regression, compared pre and post-pandemic summary data of inpatient admissions, hospital day beds, and outpatient care inquiries in a tertiary care children’s hospital in the USA (Katzman, 2021). Researchers observed significant increases in inpatient and outpatient eating disorder needs post-pandemic among adolescents and emerging adults (Katzman, 2021; Lin et al., 2021). Similarly, Taquet et al. (2022) analysed the electronic health records of 5.2 million young people (under 30) and found that eating disorders increased by 15.3 per cent in 2020 relative to previous years.

Aotearoa New Zealand statistics appear to reflect this global trend. Hansen and colleagues (2021) retrospectively analysed eating disorder admissions and referrals for children and adults during 2019 and 2020 in Waikato, Aotearoa New Zealand, and found significant increases in first-ever eating disorder hospital admissions for both children and adults, as well as significant increases in outpatient referrals for young people during the pandemic. Researchers concluded that there had been increased demands for eating disorder services in Waikato due to the pandemic. Although minimal research has been conducted regarding the relationship between the pandemic and disordered eating among emerging adults in Aotearoa New Zealand specifically, Hansen et al.'s (2021) study sheds light on how the pandemic has contributed to the global eating disorder crisis and has exacerbated eating-related issues in both youth and adults. Overall, the COVID-19 pandemic has made it evident that disordered eating is a significant public health issue that needs to be addressed; deserving of the same priority as other illnesses (Allison et al., 2022). Considering the milieu caused by the pandemic and the rising service demands among young people, it is essential that this cohort is prioritised in research efforts to develop effective prevention and treatment programmes for disordered eating (Allison et al., 2022).

## **2.2 Current Approaches to the Treatment of Disordered Eating for Emerging Adults**

### ***2.2.1 First Line Treatment for Adults with Disordered Eating***

As individuals over the age of 18 are considered to be adults by law, emerging adults experiencing disordered eating typically receive conventional adult (rather than adolescent) treatments (Arcelus et al., 2008; Potterton et al., 2020; Winston et al., 2012). It is important to note that although clinicians should base treatment plans off empirically supported evidence and recommended first-line treatments, the unique needs of the individual should be prioritised, and treatment plans should be tailored accordingly (Hay et al., 2014). It follows, then, that some first-line treatments may not be appropriate for certain individuals. However,

for the purpose of brevity, the following section will outline the most common and supported treatment modality for adults with eating disorders.

Cognitive behavioural therapy enhanced (CBT-E) is considered the first line treatment for adults with eating disorders (Atwood & Friedman, 2020; Hay et al., 2008). CBT-E was first developed by Fairburn and colleagues (2003) in response to the limitations of cognitive behavioural treatment for bulimia nervosa (CBT-BN) (e.g. only 30% to 50% of patients exhibit significant improvements in binge eating and purging after treatment; CBT-BN is specifically geared towards treating BN) (Agras et al., 2000; Atwood & Friedman, 2020; Cooper & Steere, 1995). Based on the transdiagnostic theory that delineates common maintenance factors of all eating disorders, CBT-E was designed to be suitable for addressing the spectrum of eating related problems including AN, BN, BED and EDNOS/OSFED (Atwood & Friedman, 2020; Byrne et al., 2011). According to this theory, disordered eating behaviours are maintained by dysfunctional levels of overvaluation of eating, shape and weight that are exacerbated by high levels perfectionism, low self-esteem, mood intolerance and interpersonal difficulties (Fairburn et al., 2003; Jong et al., 2020).

A growing body of literature has suggested that CBT-E yields the greatest impact on the reduction of disordered eating behaviours (Hay, 2020). For example, Jong and colleagues (2020) conducted a randomised controlled trial comparing the efficacy of CBT-E and treatment as usual (TAU; i.e., traditional CBT) for treating adults with eating disorders. They found that the CBT-E condition reduced symptoms sooner, had a significantly higher recovery rate at 20 weeks, was more effective at improving self-esteem, and was less intensive than the TAU condition (Jong et al., 2020).

Despite evidence demonstrating the efficacy of CBT-E for the treatment of disordered eating, there has been recognition that first-line eating disorder therapies are limited in efficacy, with evidence consistently indicating that eating disorders are associated with

poorer treatment response relative to other psychiatric illnesses (Espel-Huynh et al., 2021; Romano et al., 2020). For example, for AN, studies have shown that among first-line behavioural treatments, effects are modest and treatment adherence is low (Knatz Peck et al., 2021). Five decades of research has suggested that fewer than 50% of adults will recover from AN and BN (Eddy et al., 2017; Knatz Peck et al., 2021; Steinhausen, 2002; Steinhausen & Weber, 2009). Although treatments for BN and BED have yielded more promising outcomes, effects continue to be limited (Hagan & Walsh, 2021; Knatz Peck et al., 2021). Indeed, most individuals with a clinical ED diagnosis do not achieve recovery until 10-20 years after initial assessment (Romano et al., 2020). Results from a series of longitudinal studies tracking the treatment outcomes of inpatients with eating disorders across 10-20 years, further highlight the limitations of current eating disorder treatments (Fichter et al., 2008, 2017; Quadflieg & Fichter, 2019; van Hoeken & Hoek, 2020). Researchers found that 64% (Fichter et al., 2017), 53% (Quadflieg & Fichter, 2019) and 30% (Fichter et al., 2008) of those diagnosed with AN, BN and BED respectively, still met diagnostic criteria for an eating disorder at follow-up (10-20 years) (van Hoeken & Hoek, 2020). In light of evidence that highlights the poor rates of recovery among individuals experiencing eating related difficulties, it is clear that more research is needed to enhance treatments for disordered eating.

### ***2.2.2 Appropriateness of Adult Treatments for Young Adults***

Not only has research demonstrated the poor efficacy of current adult treatments (Espel-Huynh et al., 2021; Fichter et al., 2008, 2017; Knatz Peck et al., 2021; Quadflieg & Fichter, 2019; van Hoeken & Hoek, 2020; Yannakoulia et al., 2004), questions have been raised regarding the appropriateness of adult treatments for emerging adults, suggesting that typical treatments administered to children and adolescents with eating disorders may be more suitable (Loeb & le Grange, 2009). Adult ED services are informed by different models

than that of children and adolescents (Potterton et al., 2021; Winston et al., 2012). While children and adolescent ED services predominantly focus on family-based treatment (FBT), which prioritises parent/caregiver involvement in addressing eating disorder symptoms and treatment adherence (Dimitropoulos et al., 2019; Lock & Le Grange, 2013, 2019; Winston et al., 2012), adult ED services tend to focus on individual psychotherapy, with a greater emphasis on personal responsibility in recovery (Arcelus et al., 2008; Treasure & Ward, 1997; Winston et al., 2012).

Although adult ED services may be developmentally appropriate for some emerging adults, it has been noted that there is often an incongruence between treatments administered and the developmental needs specific to emerging adults (Dimitropoulos et al., 2013; Mitrofan et al., 2019). Literature has indicated that emerging adults are a heterogeneous group, diverse in their social context, level of development, and needs (Dimitropoulos et al., 2013). It follows that while it may be appropriate for some emerging adults to take full ownership of their treatment and recovery needs (a philosophy inherent in adult services), others may not be ready to do so safely and may instead benefit more from an intervention that involves family (Dimitropoulos et al., 2013). In other words, being an adult “legally” does not necessarily align with readiness to take on individual responsibility for ED treatment and recovery (Dimitropoulos et al., 2013; Potterton et al., 2020). As a result, treatment plans that place full responsibility on the individual may be developmentally challenging and contribute to poor treatment outcomes. Paradoxically, the emphasis on family involvement, which is characteristic of child and adolescent services, may be equally difficult for this cohort (Potterton et al., 2020). As emerging adulthood is characterised by the desire for greater autonomy and individual identity, young adults may experience resistance to the heavy parental involvement that is required for FBT, which may be why FBT has been shown to be less effective for older adolescents (Hay et al., 2014).

Due to the unique developmental characteristics of emerging adults, it is important to have developmentally specific considerations that inform tailored treatment plans for this cohort. Garland et al. (2019) outlined a number of important clinical considerations for emerging adults with eating disorders. They suggested that although familial involvement is often critical to the success of ED treatment, the autonomy and individual needs of the emerging adult are equally important for treatment adherence. Thus, while degrees of familial involvement may be important, treatments that focus on enhancing the young person's autonomy and self-efficacy may be more empowering, enhancing motivation and treatment outcomes. Considering this, it is likely that FBT, as it is delivered to children and adolescents, may also be developmentally inappropriate for emerging adults, highlighting the need for interventions that are adapted for emerging adults.

In response to the critical need for more ED treatments that specifically target the unique challenges faced by emerging adults, a few interventions have been developed, and preliminary results have shown promise. For example, Dimitropoulos and colleagues (2015) adapted FBT for transition-aged youth (a term synonymous with emerging adulthood) (FBT-TAY) (Arnett, 2000; Dimitropoulos et al., 2019). FBT-TAY expands on the model of FBT for adolescents with disordered eating by incorporating important differences that meet the needs of emerging adults specifically (e.g., leaving greater room for negotiation around parental involvement to respect autonomy and independence) (Dimitropoulos et al., 2018a; Freeman et al., 2016; Garland et al., 2019). In an open trial of FBT-TAY for emerging adults with anorexia nervosa, researchers found that participants experienced significant improvement at the end of treatment as well as three months after treatment (Dimitropoulos et al., 2018b). Knatz Peck et al. (2021) investigated the effectiveness of young adult temperament-based treatment with support (YA-TBT-S) in treating disordered eating among emerging adults (an approach that aims to educate patients and their family on how biology

and temperament impact eating behaviours) (YA-TBT-S). Like FBT-TAY, YA-TBT-S tailors the degree of parental involvement to the specific developmental needs of the emerging adult (Knatz Peck et al., 2021). Researchers found that FBT-TAY was rated as highly satisfactory by both the emerging adults and their parents and more than half of the participants were in either partial or complete remission at 1-year follow up (Knatz Peck et al., 2021). Finally, the first episode of rapid early intervention for eating disorders (FREED) was designed for young people aged 18-25 with recent onset eating disorders (Allen et al., 2020; Fukutomi et al., 2020). This service model was created to address the barriers that young adults face in regards to eating disorder treatment and aims to facilitate prompt, person-centred and individualised treatment, customised for young adults, their families and social networks (Allen et al., 2013; Fukutomi et al., 2020). In a two year follow-up study investigating the efficacy of FREED, researchers found that FREED led to a more complete recovery than treatment as usual (e.g. FREED patients were more likely to achieve complete weight restoration). Although these interventions have shown promise in the treatment of emerging adults experiencing difficulties with their relationship with food, they have yet to be subjected to a gold-standard test of treatment efficacy (randomised controlled trial) and thus more work is needed to understand the impact of these interventions on the well-being of emerging adults with disordered eating.

### ***2.2.3 Barriers to Care for Emerging Adults with Disordered Eating***

Despite some developments in eating disorder treatments for emerging adults, ED research on this cohort is in its infancy and their treatment needs continue to be less well met than that of adolescents (Mitrofan et al., 2019; Potterton et al., 2020). These unmet needs are reflected in increasing hospital admissions, self-reported treatment dissatisfaction, and poorer clinical outcomes among this cohort (Mitrofan et al., 2019; Potterton et al., 2020; Weigel et al., 2014).

Furthermore, several barriers to help seeking among this cohort have been highlighted. Ali et al. (2020) investigated the barriers to help-seeking during emerging adulthood and found that the desire to be self-sufficient, fear of losing control, refusal to recognise illness severity and concern for others, were frequently cited as barriers. These barriers make sense considering emerging adulthood is characterised by an increasing desire for autonomy from parental control and individual identity (Arnett, 2000). In addition, as many emerging adults are accessing services on their own for the first time, they may not know how to do so. Indeed, research has suggested emerging adults have difficulty accessing help due to lack of knowledge and awareness of mental health services available to them (Salaheddin & Mason, 2016). It is not surprising, then, that emerging adults are less likely to seek treatment and, if so, engage with eating disorder services at later stages of illness compared to adolescents (Regan et al., 2017; Weigel et al., 2014).

Systemic issues also pose additional barriers to help-seeking. As demands for ED services rise in Aotearoa New Zealand, public healthcare systems are increasingly under strain, resulting in alarmingly long wait lists (Eating Disorders Association of New Zealand, 2018; Hansen et al., 2021; Wilkinson, 2020). ED treatment is also particularly expensive, requiring multiple levels of care and a multidisciplinary team (e.g., physician, nutritionist, mental health professional) (Hay et al., 2014; Joy et al., 2003). Indeed, research has suggested that AN is as costly as schizophrenia to treat (where schizophrenia has been associated with the highest societal cost per patient worldwide) and the costs of other eating disorders are becoming more apparent (Agras, 2001; Christensen et al., 2020; Hay et al., 2014).

Furthermore, ED specialist services are under-resourced and underfunded, meaning that the level of severity required to access care is so high that many people with lower or even moderate levels of disordered eating must go private (Every-Palmer et al., 2022; Surgenor et al., 2022). Indeed, in a recent study investigating the financial impacts for carers of those

with EDs in Aotearoa New Zealand, researchers found that the majority of carers reported having difficulty accessing treatment and 45% reported having to pay for private treatment (Surgenor et al., 2022). However, due to lack of personnel specialising in ED treatment in Aotearoa New Zealand, young people presenting with disordered eating attitudes and behaviours are often turned away when attempting to access private treatment (Every-Palmer et al., 2022; Universities New Zealand, 2018). Thus, lack of help-seeking during emerging adulthood as well as systematic issues that make timely treatment difficult, are likely to contribute to poor treatment outcomes for this group.

Overall, due to the current limitations of first line eating disorder treatments, and the unique challenges in treating disordered eating among emerging adults, more research is needed to explore the variables that may enhance and improve current prevention and treatment efforts for this cohort.

### **2.3 A Paradigm Shift: Integrating Adaptive Eating Behaviours and Positive Psychology in Eating Disorder Treatment**

There has been growing recognition that good mental health is not just marked by the elimination of psychopathology and maladaptive functioning, but also the presence of positive functioning including adaptive behaviours and positive emotions (Voica et al., 2021). This notion is conceptualised by the two continua model of mental health, which posits that mental health (or mental wellness) and mental illness are related but distinct (Westerhof & Keyes, 2010). This theory suggest that mental health and mental illness, rather than being two ends of single spectrum, comprise two separate continua (i.e. from low to high mental health and from low to high mental illness). This distinction was made in part due to the study of constructs such as languishing which refers to the absence of mental health; “a disorder intermediate along the mental health continuum experienced by people who describe their lives as “hollow” or “empty”” (Fredrickson & Losada, 2005, p. 1; Keyes, 2002). A person

who is languishing by definition may not be “high” in mental illness, but they are not high in mental health (Westerhof & Keyes, 2010). Furthermore, research has suggested that the majority of people who experience the absence of mental illness only experience moderate levels of mental health (Provencher & Keyes, 2011). Therefore, interventions that seek to eliminate or reduce mental illness (psychopathological symptoms) may not also be increasing mental well-being (an essential component for optimal human functioning) (Fredrickson & Losada, 2005). From a positive psychology lens then (a psychological paradigm that focuses on enhancing human strengths and assets in the promotion of health) (Voica et al., 2021), a goal of an intervention is not only to reduce psychopathological symptoms but to help the client flourish, that is to experience high levels subjective well-being as well as optimal levels of social and psychological functioning (Westerhof & Keyes, 2010).

In light of evidence suggesting that mental health is more than the absence of pathology, researchers have recognised the importance of a comprehensive approach to recovery; that is to bridge the gap between mental illness and positive mental health (the combination of emotional wellbeing, psychological wellbeing and social wellbeing) (Bardone-Cone et al., 2010, 2018; Provencher & Keyes, 2011). This approach not only recognises the importance of treating illness but also the importance of enhancing human strengths, assets, and positive psychological constructs (self-esteem, body image, identity coherence, resilience) in optimising health outcomes (Koller et al., 2020; Rashid, 2009; Voica et al., 2021). Specifically, psychological treatments should not only seek to reduce psychopathology but also enhance positive mental health, that is “a state of well-being in which the individual realises his or her own abilities, can cope with normal stresses of life, can work productively and fruitfully, and is able to make contribution to his or her community” (World Health Organization, 2004, p. 12). Indeed, studies have shown that the vast majority of practitioners surveyed said that they agree with this all-encompassing

definition of mental health, calling for psychology to move from an illness-oriented approach to a health-oriented approach (Galderisi et al., 2015; Koller et al., 2020; Slade, 2010).

In response to evidence supporting the utility of strength-based models in psychology, efforts have been made to incorporate and promote adaptive attributes (e.g. optimism, happiness, self-esteem, resilience, self-efficacy) in psychological research and practice (Tylka & Wilcox, 2006; Voica et al., 2021). However, within ED research and practice, efforts to apply positive psychology have been less successful (Slade, 2010). Accordingly, ED research has continued to mainly focused on alleviating psychopathological symptoms rather than enhancing adaptive behaviours and protective factors (de Vos et al., 2018; Tylka & Wilcox, 2006)(de Vos et al., 2018; Tylka & Wilcox, 2006).

Integrating positive psychology into eating disorder prevention and treatment efforts may be essential to improving rates of remission and decreasing lives lost to these conditions. ED-specific research supports the aforementioned theory that mental well-being and mental illness exist on different dimensions (de Vos et al., 2018; Voica et al., 2021). Indeed, a growing body of literature suggests that changes in ED symptoms do not sufficiently capture ED recovery, and additional measures related to well-being should be included to better reflect a complete mental health model (de Vos et al., 2017; Keyes, 2002) — an approach that would likely be better aligned with Māori models of health like Te Whare Tapa Wha (Rochford, 2004).

Integrating positive psychology into ED treatments may also be particularly beneficial for emerging adults specifically. Not only is ED research on this cohort scant, but limited studies have focused on positive psychological constructs that may enhance treatment outcomes for this group. Indeed, emerging adults and their parents have echoed this concern, calling for the need to move away from weight-focused treatment to a more holistic, psychologically oriented approach (Mitrofan et al., 2019). Although emerging adult ED

studies have focused on addressing degrees of parental involvement and barriers to treatment access, little research has been conducted on how positive psychology could enhance treatment outcomes for this cohort. As a result, more research is needed to investigate how adaptive behaviours and positive intra-individual factors may be related to disordered eating among emerging adults, to inform prevention and treatment efforts.

#### **2.4 Cultural Barriers to Facilitating Adaptive Eating Behaviours: The Harm of a Weight-Normative Approach to Health**

Before presenting ways in which strengths-based variables can contribute to the prevention and treatment of disordered eating, it is important to comment on sociocultural factors that impact our relationship with food and body. It has been argued that disordered eating is heavily influenced by social forces that are outside of the control of individuals (Fitzsimmons-Craft, 2011). The well established sociocultural model of eating disorders posits that disordered eating behaviours arise in part to the internalisation of western ideals of appearance and what is considered a ‘normal’ or ‘appropriate’ weight (Vander Wal et al., 2008). Indeed, within western society, remaining within a ‘normal weight’ (a body mass index (BMI)<sup>1</sup> between 18.5 and 25 kg/m<sup>2</sup>) is prioritised, and heavily promoted by health experts and the health sector at large (Tylka et al., 2014). In this way, health professionals have contributed to the perpetuation of what is considered to be the ‘ideal’ body, further fuelling society’s focus on the importance of body image and weight (Tylka et al., 2014).

As mainstream health guidelines continue to be concerned with fat bodies, it is not surprising that weight-concern and maladaptive eating behaviours are common, where many individuals engage in disordered eating behaviours in order to achieve an ‘appropriate’ weight or socially acceptable aesthetic at the expense of actual health enhancing behaviours (Mauldin et al., 2022). It follows that the focus on weight loss and maintenance has been

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<sup>1</sup> BMI is a tool commonly used to measure body fat (Hall, 2006).

ethically questioned, with a growing body of research demonstrating that weight-focused paradigms are causing much more harm than good (Mauldin et al., 2022; Memon et al., 2020).

#### ***2.4.1 Weight-Normative Approach to Health***

The weight-normative approach to health refers to the practices of the health system that centralises weight as the main determinant of health (Tylka et al., 2014). This approach is based on the assumption that weight and health indices are inextricably linked; where increases in weight give rise to greater disease (Bacon & Aphramor, 2011). Under this paradigm, responsibility is rested upon the individual to maintain a “normal weight” (Tylka et al., 2014).

The weight-normative approach to health is engrained in western society. Indeed, it has been noted that society’s obsession with weight and body size is only growing (O’Hara & Gregg, 2006, 2012). Public health discourse highlights this preoccupation, where terms such as “obesity” and “epidemic” are frequently used in tandem — despite the fact that body fat is not infectious as the term “epidemic” might suggest (O’Hara & Gregg, 2006). These terms reflect societal views on weight, framing fatness as an urgent disease to eliminate.

Despite the common view that weight is a determinant of health, research has highlighted that this notion is unsubstantiated and exaggerated (Bacon & Aphramor, 2011; Bombak et al., 2019; Gaesser & Angadi, 2021; Tylka et al., 2014). Although there is an association between obesity and health risk (Mokdad et al., 2003), researchers have argued that this association is largely to do with confounding variables rather than the weight itself (Bacon et al., 2005). It follows that the link between BMI and health can be partially or even fully explained by other factors such as nutrition (Tylka et al., 2014), weight-cycling (Brownell & Rodin, 1994; Field et al., 2004; Thompson & McTiernan, 2011), insulin resistance (Vgontzas et al., 2000) and stigma (Bacon et al., 2005; Muennig, 2008; Tylka et

al., 2014). Furthermore, research has challenged the assumption that obesity increases mortality risk (Marks et al., 2020; Tylka et al., 2014). For example, studies investigating the relationship between hypertension and BMI found that people in larger bodies lived longer compared to their thinner counterparts (Marks et al., 2020). Indeed, many epidemiological studies have found that those with higher BMI live just as long and if not longer than those with lower BMIs (Marks et al., 2020; Tylka et al., 2014).

It is not surprising then that research has indicated that not only can health improvements be made without weight loss, but also traditional weight loss methods (e.g., dietary restriction, weight-monitoring) yield suboptimal and even maladaptive outcomes. For example, Bacon et al. (2005) conducted a study comparing groups who either took part in a “non-diet” weight neutral, health at every size (HAES) intervention or a traditional diet program. The HAES intervention challenged the weight-normative approach to health and instead encouraged body acceptance, intuitive eating (non-restrictive eating that is responsive to one’s body’s satiety and hunger cues), and life enhancing exercise (e.g., physical activity that is enjoyable regardless of weight-status) (Humphrey et al., 2015). In contrast, the traditional diet intervention required participants to restrict their caloric intake (i.e., diet), keep food diaries, and regularly monitor their weight, encouraging cognitive restraint to guide food choices (Bacon et al., 2005). They found that the HAES group demonstrated long-term behavioural change above that of the diet group (Bacon et al., 2005). Although both groups experienced improvements in depression, eating behaviours, attitudes toward weight and food, metabolic functioning, and energy expenditure, the HAES group maintained these improvements at a two-year follow-up, while the diet group returned to baseline on all measures except for disinhibition (a loss of control around food consumption that is often experienced by individuals after breaking self-imposed diet rules) (Bacon et al., 2005). In addition, although both groups experienced initial improvements in self-esteem, the diet

group experienced significant reductions in self-esteem at follow-up (Bacon et al., 2005). The results from this study indicate that health improvements can be made independent of weight loss and that the benefits yielded from traditional diet programmes may be short-lived and psychologically harmful (Bacon et al., 2005).

As demonstrated by Bacon et al. (2005), it appears that traditional dieting methods may not be as health promoting as we are commonly told. A large body of research demonstrates that dieting slows metabolisms (Amigo & Fernández, 2007; Foster et al., 1999; Wyatt et al., 1999), reduces bone mass (Schafer, 2016), and ironically leads to increases in BMI (Neumark-Sztainer et al., 2006; Sares-Jäske et al., 2019; Siahpush et al., 2015). Given this information, it has been suggested that we are in a society that has declared an unnecessary war on fatness, where the importance of remaining within ‘normal’ weight range is prioritised over actual health and well-being outcomes (Bombak et al., 2019). Indeed, dieting and weight-centred messaging has shown to promote a plethora of maladaptive outcomes including disordered eating and weight-stigma — two factors that are particularly relevant to the current study.

#### ***2.4.2 The Impact of the Weight-Normative Approach on Disordered Eating***

As the weight-normative approach prevails in much of western clinical practice (Tylka et al., 2014) and validates bodily manipulation through dieting and exercise (Mauldin et al., 2022), it has become normative to engage in dieting and other restrictive eating regimes to maintain a socially acceptable weight (Mauldin et al., 2022; Memon et al., 2020). However, research has indicated that dieting is not only ineffective for long term weight-management but also carries detrimental effects, including being strongly linked to the development of eating pathology. For example, Neumark-Sztainer et al. (2006) found that adolescents who engaged in dieting and/or maladaptive weight control behaviours at baseline showed greater increases in disordered eating behaviours compared to non-dieters five years

later. Indeed, a large body of research has supported the notion that individuals who are attempting to lose or maintain weight are at risk for developing binge eating disorder and bulimia (Liechty & Lee, 2013; Polivy & Herman, 1985; Stice, 2002; Tylka et al., 2014).

COVID-19 and social media use has only exacerbated the impact of weight-normative rhetoric's on the wellbeing of emerging adults particularly (Parcell et al., 2023; Rounsefell et al., 2020). During the pandemic, a large amount social media content emerged that was aligned with mainstream diet culture, heavily focused on weight and shape (Parcell et al., 2023). This social media messaging has shown to have a negative impact on eating behaviours among emerging adults in community settings. For example, Rounseffel and Colleagues (2020) found that among healthy young adults, engagement with social media and image-related content was related to poor body image and maladaptive eating behaviours. Indeed, social media content, body image and eating disorders are highly intertwined in western cultures, such that social media use predicts body image concerns and psychological distress (Marks et al., 2020). It appears that social media only magnifies underlying societal values regarding weight and shape, where harmful weight-normative ideals are perpetuated (Clark et al., 2021). As emerging adults are heavy users of these platforms (Shannon et al., 2022) and are in an impressionable life stage (Neundorf et al., 2013), it is not surprising that disordered eating is a significant problem among this cohort.

#### ***2.4.3 Weight-Normative Approach and Weight-Stigma***

Weight-normative interventions not only put people at risk for disordered eating due to restrictive food regimes but also perpetuate weight stigma, a variable shown to predict increased disordered eating severity (Monaghan et al., 2013; Russell-Mayhew & Grace, 2016; Yong et al., 2021). Weight-stigma refers to negative perceptions regarding weight that result in the social devaluation of those who do not represent what is a 'normal' body weight (Mauldin et al., 2022; Tylka et al., 2014). Weight-stigma is insidious and ultimately results in

weight-bias; that is the unfair and inequitable treatment of those in bodies that deviate from what is considered normative (Mauldin et al., 2022; Tylka et al., 2014). Ironically, significant weight-bias has been observed among practitioners who treat eating disorders (Puhl et al., 2014). For example, Puhl et al. (2014) found that among a group of 329 health professionals that treat eating disorders, the majority observed other colleagues expressing negative sentiments regarding patients classified as obese. Furthermore, eating disorder practitioners that exhibited higher levels of weight bias were more likely to blame obesity on the individual's behavioural choices and assume poorer treatment outcomes for these patients. These biases have material effects, negatively impacting the quality of ED services that higher weight individuals receive (Mauldin et al., 2022; Tylka et al., 2014). Furthermore, it has been well documented that weight stigma and weight bias are associated with a variety of unfavourable health outcomes including physiological distress (Huang et al., 2022), emotional distress (Lin et al., 2020), and (as mentioned) disordered eating (Hunger et al., 2020; Mauldin et al., 2022). As weight-stigma and weight bias are established as significant risk factors for disordered eating (Hunger et al., 2020), it is a concern that professionals working in the eating disorder field are contributing to the perpetuation of these constructs.

#### ***2.4.4 Weight Stigma in the Aotearoa New Zealand Context***

Weight stigma is particularly important in the Aotearoa New Zealand context as it serves to perpetuate racism that has been experienced by Māori people at the hands of colonisation (Warbrick et al., 2016, 2019). Māori are the indigenous people of Aotearoa New Zealand (Rochford, 2004), making up approximately 17.1% of the population (Clark et al., 2023; Crengle et al., 2022). Traditionally, within Māori communities, the concept of weight-loss and weight-gain were essentially non-existent until the arrival of white colonisers who harmfully interfered with the Māori way of life (Rochford, 2004; Warbrick et al., 2019). As the British took over the nation, Māori people were forced to part with their ancestral lands

and traditional social and cultural values (Marques et al., 2021). Not only did colonisers impose their legal systems onto Māori, but also their societal norms, including notions about what constitutes an ‘appropriate’ weight; privileging thinness over fatness (Klaczynski et al., 2004; Warbrick et al., 2019).

As a large proportion of Māori people do not fall into the ‘recommended weight range’ per western standards, racist sentiments are justified and strengthened (Warbrick et al., 2019). Thus, weight stigma represents institutional and societal racism, where those that are in the ‘normal’ weight range are advantaged, while those that deviate from this ideal are subjugated (Warbrick et al., 2019). It follows that public health messaging regarding weight are disproportionately targeted at Māori in Aotearoa New Zealand, further stigmatising indigeneity and often incongruent with Māori holistic values (Warbrick et al., 2016). Instead of providing health care informed by indigenous knowledge, health services in Aotearoa New Zealand continue to be informed by weight-centred individualistic notions of health, emphasising the importance of a remaining with a normal BMI range; perpetuating white supremacy and the oppression of Māori (Warbrick et al., 2016, 2019).

This reductionist concept of health further invalidates and stigmatises Māori values and identities and may act to diminish cultural efficacy; that is, the capability to express oneself as Māori (Houkamau et al., 2021; Warbrick et al., 2016). Importantly, higher levels of cultural efficacy, have shown to be associated with higher levels of body satisfaction among Māori females, a significant predictor of reduced disordered eating (Houkamau et al., 2021; Londoño-Pérez & Moreno Ruge, 2017). Thus, weight-centred approaches to health may be particularly harmful to Māori. As a result, it is of critical importance to explore the efficacy of alternative ways in which food, nutrition and healthy eating can be conceptualised to minimise weight-stigma and mitigate the risk of disordered eating. Weight-neutral approaches to eating behaviour that focus on the promotion of health and well-being —

regardless of size or weight status — may be a safer alternative to traditional dietary practices, particularly for marginalised communities (Bacon & Aphramor, 2011).

#### ***2.4.5 Adaptive Eating and Eating Disorder Recovery as Countercultural***

In a society that is becoming increasingly concerned with fat bodies and saturated by unregulated media outlets promoting harmful diet practices to achieve an “ideal” body (Marks et al., 2020), it is not surprising that the incidence of disordered eating behaviour is on the rise and that eating disorder recovery is particularly challenging (Haines & Neumark-Sztainer, 2006; McGuinness & Taylor, 2016). Dominant social discourses in the community and clinical settings that validate the weight-normative approaches to health ultimately promote the pursuit of often unrealistic body ideals, where individuals may turn to disordered eating to maintain a socially acceptable aesthetic (Rodgers, 2016).

It has been argued that adaptive eating behaviours and disordered eating recovery represent countercultural processes (contradicts normative societal standards of behaviour) within western society (Erhardt, 2021; LaMarre & Rice, 2016). Indeed, developing a relationship with food without considerations of weight or restriction is difficult when our systems are imbued with notions diet culture and anti-fat agendas (O’Hara & Gregg, 2006). Although it may be challenging to practice adaptive eating within a culture that promotes restriction, weight-neutral approaches to eating behaviour have been associated with various positive health outcomes and may be an important target for the prevention and treatment of disordered eating (Bruce & Ricciardelli, 2016).

### **2.5 An Adaptive Eating Style: Intuitive Eating**

One adaptive, weight-neutral eating style that has shown promise is intuitive eating, a health-centred non-dieting approach to food (Braun et al., 2016; Linardon et al., 2021; Román et al., 2021). Intuitive eating, as conceptualised by nutritionists Tribole and Resch (2017), comprises 10 core principles. These include (i) reject the diet mentality; (ii) honour

your hunger (i.e., listening to hunger cues); (iii) make peace with food (i.e., viewing food as a neutral stimulus, rather than “bad”); (iv) challenge the food police (i.e., rejecting unhelpful self-imposed rules about eating); (v) feel your fullness (i.e., listening to satiety cues); (vi) discover the satisfaction factor (i.e., eating foods that are satisfying, rather than just nutritional); (vii) cope with emotions without using food; (viii) respect your body; (ix) exercise: feel the difference (i.e., engaging in exercise that is enjoyable to the individual, rather than self-punishing); and (x) honour your health (i.e., practicing gentle nutrition by adding in healthful foods) (Tribole & Resch, 2017).

The concept of intuitive eating is grounded in the assumption that our bodies have a natural capacity to indicate the quantity and types of food we need to maintain an appropriate weight, nutritional health, and overall well-being (Van Dyke & Drinkwater, 2014). This approach promotes eating in response to hunger cues in order to mitigate unhealthy restriction, maladaptive weight-management techniques, and emotional eating (Gast et al., 2012). Intuitive eating posits that disordered eating behaviours can be partially explained by individuals making food choices in response to non-physiological external cues (e.g., self-imposed diet rules) (Denny et al., 2013; Gast et al., 2012). Factors that act as barriers to our ability to respond appropriately to satiety and hunger signals include dieting, parental enforcement (e.g., “you must clear your plate before you leave the dinner table”), and body image concerns (Carrard et al., 2021; Van Dyke & Drinkwater, 2014). Intuitive eaters do not experience food preoccupation, label foods as “good” or “bad,” or ignore hunger, but instead consume foods that they enjoy while respecting their natural bodily signals to optimise health (Linardon, 2021).

### ***2.5.1 Tenants of Intuitive Eating Operationalised***

Tylka and Kroon Van Diest (2013), developed the Intuitive Eating Scale—2 (IES-2) to improve upon the original Intuitive Eating Scale (IES) (Tylka, 2006). Through their

psychometric evaluation, researchers proposed four central tenants of intuitive eating, which include unconditional permission to eat (i.e. tendency to eat what is desired when experiencing hunger), eating for physical rather than emotional reasons (i.e., an individual's tendency to eat when hungry rather than in reaction to emotions such as boredom), reliance on hunger and satiety cues (i.e., the extent to which individuals honour their bodily signals to guide food consumption), and body-food choice congruence (i.e., the extent to which an individual consumes foods for their health) (Van Dyke & Drinkwater, 2014). This approach ultimately encourages people to trust their innate ability to regulate food consumption based on intuitive or internal cues and discourages dietary restraint that often results in disordered eating behaviours (Bacon et al., 2005).

Although it may be easy to assume that intuitive eating is simply the opposite of eating disorder symptomology, this eating style has been shown to contribute uniquely to well-being (Schaefer & Magnuson, 2014; Tylka & Wilcox, 2006). Specifically, studies have demonstrated that eating for physical rather than emotional reasons and honouring your hunger and satiety cues, contribute to well-being indices beyond the variance accounted for by eating disorder symptomology (Schaefer & Magnuson, 2014; Tylka & Wilcox, 2006). This evidence supports the idea that intuitive eating is a distinct construct, representing a positive and adaptive eating style that goes beyond the mere absence of eating disorder symptomology (Schaefer & Magnuson, 2014; Stapleton & Nikalje, 2013).

### ***2.5.2 Theoretical underpinnings of the impact of intuitive eating on disordered eating***

There are several theories that can explain how intuitive eating may ameliorate disordered eating attitudes and behaviours, two of which include the Attunement Representation Model and the Restraint Hypothesis.

**2.5.2.1 The Attunement Representation Model.** Cook-Cotton (2006) developed the Attunement Representation Model of eating disorder etiology and maintenance, which

addresses individual, cultural and interactive issues inherent in disordered eating. This model posits that there are two interactive systems that contribute to disordered eating: the inner aspects self and the outer aspects of self (Cook-Cottone, 2006, 2015). The inner system comprises the physiological self (body), emotional self (feeling) and the cognitive self (thinking) (Cook-Cottone, 2006, 2015). The outer system comprises the microsystem (family), the exosystem (community) and the macrosystem (culture) (Cook-Cottone, 2006, 2015). These systems reciprocally interact with each other through a process called attunement (Cook-Cottone, 2006). Attunement is facilitated by the representational self; the socially constructed self that is presented to the outside world and determines one's expression in their milieu (Cook-Cottone, 2006).

Those with a healthy relationship with food are said to have healthy attunement (Cook-Cottone, 2006). That is, they can have an ability to be aware of and honour their internal needs, while simultaneously engaging with the family, community and culture in a functional way (Cook-Cottone, 2015). In contrast, those that experience disordered eating are said to be “mis-attuned”. It follows that individuals who engage in disordered eating submit to external ideals at the expense of their internal needs (Cook-Cottone, 2006, 2015). The disordered self is cultivated as a way to attune, albeit maladaptively, to the ecological contexts that they are situated in, where healthy internal needs are ignored and left without representation (Cook-Cottone, 2006, 2015). Thus, the internal system becomes attuned to eating disorder symptoms, where the body and food choices are seen to be something to be controlled to align with cultural ideals (Cook-Cottone, 2006, 2015). In the context of this hypothesis, intuitive eating represents healthy attunement. It is not judging the body or ignoring the body, nor is it restricting or bingeing (Cook-Cottone, 2015; Cook-Cottone et al., 2013). Instead, intuitive eating represents flourishing in food and body relations (Cook-Cottone, 2015).

Most of the principles of intuitive eating reflect aspects of the internal system comprised of thoughts (reject the diet mentality, make peace with food, challenge the food police), feelings (cope with emotions without using food) and physiology (honour your hunger, respect your fullness, discover satisfaction, exercise, honour your health with gentle nutrition) (Tribole, 2010). However, the last two principles of intuitive eating (exercise, honour your health with gentle nutrition) demonstrate the integration of the internal and external systems (Tribole, 2010). For example, a person can take on recommendations and guidelines regarding exercise while simultaneously honouring the unique needs of their own body (Tribole, 2010). Similarly, one can practice gentle nutrition to honour health in specific cultural contexts (Tribole, 2010). For example, a family may want to engage in a plant-based diet based on their own values (Tribole, 2010). A person who is attuned will be able to take on this value without resorting to disordered eating or a disordered mindset (Tribole, 2010). Ultimately, intuitive eating aims to nurture and respect a healthy internal self, deconstructing the disordered self to move towards healthy attunement with food, mind and body.

**2.5.2.2 Restraint Theory.** Restraint theory also explains how intuitive eating works to ameliorate disordered eating behaviours. Restraint theory posits that dietary restraint (the behavioural and cognitive efforts by individuals to eat less or restrict caloric intake) is a significant risk factor for inhibited and disinhibited eating patterns (Anderson et al., 2016; Linardon, 2018; Schaumberg et al., 2016). Several studies have highlighted the relationship between dieting, dietary restraint, and disordered eating behaviours and attitudes (Haines & Neumark-Sztainer, 2006). For example, Evans et al. (2013) found that among a sample of 7-11-year-old girls, dieting predicted disordered eating attitudes. Bulik et al. (1997) found that within a group of women between the ages of 17 and 45 with BN, 80.5% reported dieting before the onset of binge eating or vomiting behaviours, and 96% reported dieting before the onset of bulimia nervosa. Patton et al. (1999), in a 3-year cohort study, found that dieting was

the most significant predictor of eating disorder symptomology. More specifically, females who reported engagement in “severe dieting” were 18 times more likely to develop a new eating disorder than those who did not diet, and those that reported “moderate dieting” were five times more likely to develop a new eating disorder six months later (Patton et al., 1999). Finally, Delinsky and Wilson (2008) found that dieting predicted disordered eating behaviours among first-year college females.

The studies above implicate dietary restraint as a transdiagnostic risk and maintenance factor for eating disorder symptomology, supporting the restraint hypothesis of eating disorders. The connection between inhibited eating and restraint is relatively straightforward, as restriction is the core issue in disorders characterised by inhibition (Tribole, 2010). For example, in AN, efforts to restrict food intake are the central focus, and those with this disorder are often “successful” in maintaining restriction (Fairburn et al., 1999). The initial success of restriction brings a sense of self-control that acts as a potent reinforcer of further restriction, leading to dangerously low body weight (Fairburn et al., 1999).

Various mechanisms have been proposed to explain how dietary restraint may lead to and maintain disinhibited eating and compensatory behaviours (Anderson et al., 2016). Firstly, it has been suggested that hunger inevitably supersedes cognitive control over eating, resulting in episodes of binge eating (Linardon, 2018). Secondly, prolonged cognitive control regarding food leaves individuals susceptible to over-eating when this control is disrupted (i.e. stress, low mood) (Linardon, 2018). Finally, strict food rules used to control eating behaviour have been said to be unsustainable over time, and when an individual eventually “breaks” these rules, an all-or-nothing reaction ensues, leading to binge eating (Linardon, 2018).

As mentioned, intuitive eating is an anti-diet or anti-restraint approach to eating. It favours listening to your own unique bodily cues in favour of external influences (diet rules,

strict food regimes) and decentres weight in food choice (Tylka & Kroon Van Diest, 2013). The philosophy of intuitive eating strongly rejects restrictive food practices and aims to foster a relationship with food that is unrestrained and mindful (Hawks et al., 2005). As a result, intuitive eating is incongruent with restrictive eating, which may explain how it may act as a protective and ameliorative factor for disordered eating behaviours (Linardon, 2021).

### ***2.5.3 Intuitive Eating and Disordered Eating among Community Samples***

Numerous studies have shown support for the strong negative association between intuitive eating and disordered eating in community settings (Anderson et al., 2016; Bruce & Ricciardelli, 2016; Linardon, 2021; Linardon & Mitchell, 2017; Tylka, 2006; Tylka & Kroon Van Diest, 2013). Specifically, intuitive eating has been negatively associated with binge-purge symptoms (Denny et al., 2013; Linardon et al., 2021), eating restraint (Linardon et al., 2021), emotional eating (Carbonneau et al., 2021; Linardon et al., 2021), external eating (Linardon et al., 2021), internalisation of appearance ideals (Linardon et al., 2021), weight stigma internalisation (Braun et al., 2021), poor interoceptive awareness (Linardon et al., 2021; Richard et al., 2019), shape and weight concerns (Bruce & Ricciardelli, 2016; Linardon, 2021; Linardon & Mitchell, 2017), and consistently associated with decreases global levels of eating psychopathology (Bruce & Ricciardelli, 2016; Linardon, 2021; Linardon et al., 2021; Linardon & Mitchell, 2017).

However, there were some differences in the relationship with eating disorder symptoms depending on the specific subscale of intuitive eating. For example, unconditional permission to eat has been consistently associated with significant decreases in disordered eating (Anderson et al., 2016; Tylka, 2006; Tylka & Kroon Van Diest, 2013). In contrast, body-food choice congruence has been consistently found to have no significant relationship with disordered eating indices (Carrard et al., 2021; Koller et al., 2020; Tylka & Kroon Van Diest, 2013). The relationship between reliance on hunger and satiety cues, eating for

physical rather than emotional reasons and disordered eating has been more mixed. For example, while some studies have found that reliance on hunger and satiety cues does not account for significant variance in disordered eating (Anderson et al., 2016), others have reported a slight to strong negative association between this subscale and eating disorder indices (Tylka, 2006; Tylka & Kroon Van Diest, 2013). Similarly, the strength of the relationship between eating for physical rather than emotional reasons and disordered eating appears to depend on the study, where some report that this subscale shows a slight to moderate association with disordered eating (Tylka, 2006; Tylka & Kroon Van Diest, 2013), while others have reported that this subscale accounted for the most variance in disordered eating symptomology in their sample (Anderson et al., 2016; Tylka & Kroon Van Diest, 2013). These findings suggest that some dimensions of intuitive eating may be more relevant to disordered eating behaviours than others.

Germane to the present investigation, a few studies have investigated the relationship between intuitive eating and disordered eating among emerging adults in community settings specifically. Denny et al. (2013), conducted an large observational cross-sectional U.S.-based study to investigate the associations between aspects of intuitive eating (“I trust my body to tell me how much to eat” and “I stop eating when I am full”) and disordered eating behaviours (dieting frequency, unhealthy weight control behaviours and extreme weight control behaviours). Researchers found that among a sample of young adults (mean age: 25.3 years), measures of intuitive eating were inversely associated with disordered eating behaviours such as chronic dieting, extreme weight control behaviours, and binge eating. It is important to note that Denny et al.’s (2013) study only included two items from the original 21-item Intuitive Eating Scale (which, as noted, has since been developed and refined). In addition, researchers did not use a validated psychometric measure for disordered eating, and therefore did not include an exhaustive list of behaviours that may encompass different facets

of disordered eating. As a result, outcomes of this study may not fully capture the extent to which intuitive eating contributes to disordered eating behaviours.

Two studies expand upon Denny et al.'s (2013) research by examining longitudinal associations between intuitive eating and a variety of eating and weight-related behaviours within the same cohort (Christoph et al., 2021b; Hazzard et al., 2021). These longitudinal studies reveal that among adolescence and young adults, higher levels of intuitive eating at baseline predicted decreased engagement in dieting, unhealthy weight control behaviours and binge eating (Christoph et al., 2021b; Hazzard et al., 2021) 5-8 years later. Together these findings suggest that intuitive eating is negatively associated with eating disorder symptomology in community samples of emerging adults both cross-sectionally and longitudinally.

#### ***2.5.4 Intuitive Eating and Disordered Eating Among Clinical Samples***

A few studies have investigated the relationship between intuitive eating and disordered eating among clinical samples. Richard et al. (2019) found that female patients with AN reported lower levels of intuitive eating than normal weight controls. Furthermore, researchers found that among patients with AN, higher BMI related to higher levels of intuitive eating; however, BMI did not correlate with intuitive eating in normal weight controls. In addition, more days since admission was related to higher BMI and higher levels of intuitive eating among AN patients, suggesting that those who are in later stages of treatment and recovery experience increases in these variables. As this study was cross-sectional, it cannot be determined whether increases in intuitive eating promote weight gain or increases in intuitive eating are a result of weight gain. Nevertheless, this study implicates intuitive eating as an important marker of recovery in clinical samples.

Koller et al. (2020) explored how intuitive eating may be related to ED recovery status specifically. Researchers found that when intuitive eating was examined as a total

score, levels of intuitive eating did not differ between participants who had fully recovered from an eating disorder and controls; while those who had fully recovered from an eating disorder had significantly higher levels of intuitive eating than those with a current eating disorder and those who were partially recovered (Koller et al., 2020). This suggests that this subscale can help to distinguish levels of recovery from disordered eating.

However, when specific dimensions of intuitive eating were investigated, findings were mixed. In line with the outcomes in community samples, levels of Unconditional Permission to Eat distinguished between those with an eating disorder, those in partial recovery, those in full recovery and controls, demonstrating a strong relationship between full recovery and this component of intuitive eating (Koller et al., 2020). In contrast, body-food choice congruence did not differentiate between levels of recovery and controls, indicating the this subscale, as observed in community settings, may not significantly overlap with eating disorder symptomology in clinical samples (Koller et al., 2020). However, researchers did find a significant association between body-food choice congruence and stability in recovery (Koller et al., 2020). Like the unconditional permission to eat subscale, levels of reliance on hunger and satiety cues did not differ between those who were fully recovered and controls but significantly differed between levels of recovery (Koller et al., 2020). Finally, there was only a significant difference between those who were fully recovered compared to those that had a current eating disorder on the eating for physical rather than emotional reasons subscale (Koller et al., 2020). This outcome may be an indication that eating for physical rather than emotional reasons is more relevant for those recovering from an eating disorder; where emotional eating from time to time, may not have as much impact on those without a history of disordered eating (Koller et al., 2020). As in community samples, this study further emphasises the idea that specific subscales of intuitive eating may explain more variance in disordered eating indices than others.

### ***2.5.5 Intuitive Eating Interventions***

Several studies have investigated how intuitive eating interventions impact disordered eating behaviours in both community and clinical samples; and results have shown promise. Burnette and Mazzeo (2020) examined the efficacy of an eight-week intuitive eating intervention for college women in the U.S. (aged 18-25) who endorsed at least one fast, binge or compensatory behaviour but were below AN and BN thresholds. The intuitive eating intervention was guided by the 10 principles outlined by Tribole and Resch (2010) in their intuitive eating workbook, which was developed for the use in both clinical and community settings. Researchers found that the intervention improved intuitive eating and produced medium to large reductions in disordered eating behaviours from pre-to-post test, which held at follow-up (Burnette & Mazzeo, 2020). Bush et al. (2014) conducted a similar study investigating the efficacy of an educational intervention called Eat for Life, a 10-week workplace intervention designed to help adult employees in the mid-west who have problematic relationships with food and body (e.g., yo yo dieting) learn to eat intuitively. Researchers found that those that received the interventions were 3.65 times more likely to be asymptomatic for disordered eating than those in the waitlist condition (Bush et al., 2014). These studies demonstrate that intuitive eating interventions are effective in the context of community settings, and may be beneficial for the treatment of subthreshold disordered eating behaviours and the prevention of more serious pathology.

Although intuitive eating interventions have shown to be successful in the reduction of subthreshold eating pathology in community settings, there have been questions whether these interventions are appropriate or even effective for people with eating disorders. Richards et al. (2017) addressed this concern in a 2-year pilot study that evaluated the efficacy of an intuitive eating intervention for 122 women in the U.S. with an eating disorder diagnosis (AN, BN, EDNOS). Researchers concluded that patients with eating disorders can

learn to eat intuitively, where a significant increase in patients' intuitive eating scores from time of admission to discharge was observed (Richards et al., 2017). In addition, they found that higher levels of intuitive eating were associated with enhanced treatment outcomes for each diagnostic category, including less disordered eating, body image disturbance and psychological symptoms, as well as increased spiritual wellbeing (Richards et al., 2017). Overall, this study provided preliminary evidence that intuitive eating may be an important aspect in eating disorder recovery.

Not only has research implicated intuitive eating as an important aspect in eating disorder prevention and recovery, research has also indicated that intuitive eating is associated with improved cardiovascular risk (Hawks et al., 2005), increased fruit and vegetable intake (Christoph et al., 2021a), and a variety of good mental health outcomes such as better body image (Carrard et al., 2021), higher self-esteem (Van Dyke & Drinkwater, 2014), and lower levels of depression and anxiety (Carrard et al., 2021). Together these findings support intuitive eating as an adaptive way in which food consumption can be regulated safely and healthily.

## **2.6 Self-compassion**

As mentioned previously, intuitive eating and eating disorder recovery represent countercultural processes. It follows, that within a society that is imbued with weight-centric messaging, the practice of adaptive eating behaviours may be particularly difficult (Tylka et al., 2014). As a result, it is important to investigate variables that may help to facilitate intuitive eating in the face of social forces that encourage restriction.

### ***2.6.1 Defining Self-Compassion***

Self-compassion is an individual factor that is related to positive psychosocial outcomes (e.g.. positive affect (Sirois et al., 2015), well-being (Neff, 2011), adaptive coping (Leary et al., 2007) and better interpersonal functioning (Germer & Neff, 2013)), and has

been identified as a potential protective factor for maladaptive eating behaviours (Tylka et al., 2015). Self-compassion refers to one's ability to take a non-judgmental stance towards oneself, responding to personal challenges and shortcomings with self-kindness, common humanity, and mindfulness (de Carvalho Barreto et al., 2020; Neff, 2009; Stutts & Blomquist, 2018; Taylor et al., 2015). Self-kindness refers to the extension of kindness towards oneself rather than being overly judgemental; common humanity refers to one's ability to see their experiences as part of the common human experience rather than isolating; and mindfulness refers to being able to experience one's difficult thoughts and feelings in a balanced manner rather than overidentifying with them (Neff, 2003).

Self-compassion allows us to treat ourselves kindly despite our perceived inadequacy; to navigate the inevitable challenges in life in a more adaptive manner (Breines et al., 2014). Indeed, research has indicated that self-compassion is a stronger predictor than related constructs like self-esteem of various adaptive qualities such as less self-worth contingency, better self-worth stability, lower narcissism and more balanced responses to aversive events (Breines et al., 2014). Self-compassion has also been linked to adaptive emotional and cognitive responses to negative life events, reduced self-deprecating feelings when imagining triggering social events, reduced negative emotions in the face of ambivalent feedback and the ability to recognise one's perceived failure without being overwhelmed by negative feelings (Leary et al., 2007). These findings highlight the power of self-compassion in influencing people's reactions to unpleasant internal and external experiences in a beneficial way (Kelly et al., 2016). Those that are more self-compassionate may be more inclined to act kindly towards themselves during difficult times, rather than engage in punishing behaviours (Leary et al., 2007). Ultimately, self-compassion allows individuals to navigate the challenges they face mindfully without attempting to ignore, suppress, shame or change them (Kelly et al., 2016; Neff, 2009). By taking a compassionate stance towards ourselves, we are

better able to kindly recognise our struggles as part of the human experience without overly identifying with them and therefore better able to soothe, nurture and regulate ourselves in a positive manner (Germer & Neff, 2013). Indeed, strong empirical evidence has supported the idea that self-compassion acts as effective tool for affect regulation and coping (Braun et al., 2016; Neff et al., 2005; Sirois et al., 2015).

### ***2.6.2 How Self-Compassion Facilitates Adaptive Eating Behaviours***

It is therefore unsurprising that self-compassion appears to facilitate adaptive eating behaviours by influencing people's reactions to negative or triggering events (Germer & Neff, 2013). As noted, there are many triggers in our social environment around weight and food. As a result, those who struggle with their relationship with food and body may be more vulnerable to messages regarding weight, dieting and bodies. Those who have a self-compassionate attitude however, may be better able to respond to these triggers in an adaptive manner (Leary et al., 2007). Indeed, research has indicated that people who are more-self compassionate tend to be less self-critical when exposed to thin-ideal stimuli or when their diets 'fail,' allowing for healthy regulation and responses in the aftermath of perceived inadequacy and failure (Adams & Leary, 2007; Gobin et al., 2022).

As self-compassion centres around the concept of common humanity, that is the recognition that suffering, inadequacy and failure are experiences shared by all humans, triggering body and food related experiences may feel less isolating, and therefore less stressful (Breines et al., 2014; Kalika et al., 2022). Self-compassion allows us to embrace imperfections as a part of what makes us human, and as a result should reduce the distress associated with failing to meet the culturally prescribed beauty standards or ideals (Breines et al., 2014). Thus, those who practice self-compassion may be more equipped to respect and value their inner needs and act kindly towards themselves in the face of unpleasant eating/body related triggers (Augustus-Horvath & Tylka, 2011; Taylor et al., 2015). As a

result, those that are more self-compassionate may experience less disordered eating through increased engagement in adaptive eating behaviours such as intuitive eating.

### ***2.6.3 Self-Compassion and Disordered Eating among Community Samples***

An accumulation of research studies have demonstrated the negative relationship between self-compassion and disordered eating among community settings (Braun et al., 2016; Pullmer et al., 2019; Taylor et al., 2015; Turk & Waller, 2020; Webb & Forman, 2013). For example, self-compassion has shown to be negatively related to global levels of eating pathology (Braun et al., 2016; Pullmer et al., 2019; Taylor et al., 2015; Turk & Waller, 2020), binge eating severity (Webb & Forman, 2013) and dietary restraint (Kelly et al., 2014b).

Not only has research consistently demonstrated the inverse relationship between self-compassion and disordered eating, but it has also shown that self-compassion may buffer the impacts of a variety of well-established risk factors for disordered eating in community settings (Braun et al., 2016). Breines et al. (2013) conducted a study investigating the impacts of self-compassion in the face of negative appearance related events and perceived body flaws on subsequent eating behaviour among college aged women. Results indicated that when participants experienced greater levels of self-compassion, they reported less disordered eating behaviours (Breines et al., 2013). They also found that body shame was a significant mediator in this relationship; that is to say that higher levels of self-compassion reduced disordered eating through decreases in body shame (Breines et al., 2013). Self-compassion has also been associated with decreases thinness-related pressures (Tylka et al., 2015), lower thin-ideal internalisation (Tylka et al., 2015) and has shown to buffer the impact of thinness related media pressure (Braun et al., 2016; Tylka et al., 2015), image/weight concerns (Geller et al., 2015) and physical appearance perfectionism (Bergunde & Dritschel, 2020) on disordered eating behaviours. The findings outlined above suggest that taking a kind

and non-judgemental stance towards oneself may mitigate the impact of a variety of risk factors related to maladaptive eating behaviours, reducing the likelihood that one will engage in punishing dietary practices in response to triggering experiences regarding body and food (Braun et al., 2016).

#### ***2.6.4 Self-compassion and Disordered Eating among Clinical Samples***

The potential benefits of self-compassion for the prevention and treatment of disordered eating have been observed among populations with clinical levels of disordered eating (e.g., Kelly et al., 2014a). In a large sample that included 295 participants with BN or BED and 286 healthy controls, self-compassion was significantly and negatively associated with disordered eating scores (Messer et al., 2021). Interestingly, self-compassion scores for the BN and BED group were lower than the healthy control group (Messer et al., 2021). Together these findings suggest that self-compassion may be an important variable to target in the treatment of individuals experiencing clinical levels of eating pathology.

Importantly, it has been suggested that those with more severe eating disorder symptomology may have a particularly difficult time developing a self-compassionate stance towards themselves due to higher levels of fear towards self-compassion (Gilbert et al., 2011; Kelly et al., 2013). For example, Kelly et al.'s (2013) found that after 12-weeks of treatment, ED patients lower on trait self-compassion and higher in fear of self-compassion at base-line experienced no significant change in eating disorder symptoms, while those who had lower scores on trait self-compassion at baseline only experienced improvements if they were not as fearful of developing a self-compassionate stance towards themselves (Kelly et al., 2013). By contrast, patients who scored higher on trait self-compassion experienced decreases in eating disorder symptoms regardless of fear of self-compassion (Kelly et al., 2013). These findings not only show the importance of developing self-compassion in eating disorder recovery, but also highlights the importance of addressing the fears that people may experience when

attempting to take on a self-compassionate stance. Given the promise of self-compassion as contributor towards wellness, fear of self-compassion represents an important barrier to consider for those who may need self-compassion the most (i.e., individuals experiencing severe levels of eating pathology).

### ***2.6.5 Self-compassion Interventions for Disordered Eating***

Self-compassion has been utilised in Compassion-Focused Therapy (CFT) for the treatment of disordered eating and results have shown promise. Kelly et al. (2014a) examined the impact of CFT on the treatment outcomes of 97 ED patients, and found that eating disorder symptoms decreased faster in patients who experienced decreases in shame and increases in self-compassion early on in the treatment (Kelly et al., 2014a). Similarly, Kelly and Carter (2015) investigated the efficacy of a CFT self-help intervention for 41 adults with BED. Researchers compared three conditions including food planning plus self-compassion exercises; food planning plus behavioural strategies and a waitlist control group (Kelly & Carter, 2015). Results indicated that the self-compassion intervention increased levels of self-compassion and reduced eating pathology more than the other conditions (Kelly & Carter, 2015). Finally, Mullen et al. (2020) conducted a qualitative study investigating the experiences of a CFT intervention for eating disorder patients. Researchers found that most participants experienced positive change that was attributed to the self-compassion intervention (Mullen et al., 2020). Specifically, participants reported developing a more compassionate attitude towards themselves and others, greater feelings of self-belief, strengthened relationships, and feelings of greater control over their eating disorder (Mullen et al., 2020). Together these findings support the notion that self-compassion can be developed by and be of benefit to those that experience clinical levels of eating pathology.

## **2.7 Putting It All Together: Self-compassion, Intuitive eating and Disordered Eating**

### ***2.7.1 Self-Compassion and Adaptive Eating***

Not only has self-compassion been shown to reduce eating disorder symptomology in both community and clinical settings, but research has suggested, albeit to a lesser extent, that self-compassion is linked to a variety of adaptive eating styles (Schoenefeld & Webb, 2013; Shaw & Cassidy, 2022; Taylor et al., 2015). For example, studies have shown that self-compassion predicts increased engagement in mindful eating (Keyte et al., 2022; Taylor et al., 2015). Furthermore, research has shown that self-compassion and mindful eating interact to predict eating attitudes and well-being among emerging adults; where those who were both more self-compassionate and engaged in mindful eating were less likely to endorse disordered eating attitudes (Shaw & Cassidy, 2022). Although the direction of these relationships cannot be fully elucidated due to their cross-sectional design, these findings suggest that self-compassionate individuals may be more likely to engage in adaptive eating behaviours and as a result engage in less disordered eating.

### ***2.7.2 Self-Compassion and Intuitive Eating***

Several studies have investigated the relationship between self-compassion and intuitive eating specifically, using a range of cross-sectional, daily diary, and longitudinal designs. Cross-sectionally, there is evidence for a strong positive relationship between self-compassion and intuitive eating among women, which may be partially explained by greater body image acceptance (Schoenefeld & Webb, 2013). That is to say that those who take a self-compassionate stance may be better able to manage body image concerns that can interfere with eating intuitively (Schoenefeld & Webb, 2013). In a one-week daily diary study among a sample of university women, researchers found that high daily self-compassion predicted higher levels of intuitive eating, and lower levels of restrained eating (Kelly & Stephen, 2016). Furthermore, higher mean levels of self-compassion over the week

were associated with better body image and adaptive eating behaviours (Kelly & Stephen, 2016). In a follow-up study, levels of self-compassion influenced responses to daily body image threats, such that on low self-compassion days, interactions with body-focused others resulted in increases in body dissatisfaction and negative affect, and decreases in intuitive eating, while on high self-compassion days these relationships were absent or inversed (Kelly & Stephen, 2016). In other words, self-compassion protected individuals from the negative impacts of body image threats, enhancing their ability to eat in an adaptive manner. Finally, a longitudinal study (Linardon, 2021) study, found that baseline levels of self-compassion, intuitive eating and positive body image components protected individuals from eating disorder symptoms at 8-month follow-up.

Although the studies outlined above shed light on the relationship between self-compassion, intuitive eating and disordered eating behaviours, the contributions of specific intuitive eating subscales were not investigated. In addition, these studies did not investigate the nature of these relationships among emerging adults specifically. Thus, the current study will add to the literature by exploring the impacts of the intuitive eating and its subscales on the relationship between self-compassion disordered eating, among emerging adults in Aotearoa New Zealand.

## **2.8 Summary and Hypotheses**

Although there have been many studies that have explored the individual impacts of self-compassion and intuitive eating on disordered eating, minimal research has been conducted on how self-compassion and intuitive eating work together to influence disordered eating attitudes and behaviours. To our knowledge, there are no studies that have been conducted in Aotearoa New Zealand regarding these specific relationships.

Furthermore, existing research on these topics have been predominantly focused on cohorts of college women, while studies regarding these specific constructs among emerging

adults of all genders are scarce. As emerging adults have been identified as an at-risk group for eating disturbances, it is important to explore the efficacy of other ways in which eating-related issues can be addressed among this cohort.

Finally, eating disorder research has predominantly focused on deficit-based models, where pathological symptom alleviation is prioritised. However, as mentioned, a comprehensive definition of recovery and well-being not only entails the absence of symptoms but also the presence of adaptive attitudes and behaviours. As result, there is a need for more strengths based research in the eating disorder field.

It follows that the aim of the current study is to explore the relationship between self-compassion, intuitive eating and disordered eating among emerging adults between the ages of 18-25 in Aotearoa New Zealand. This study will address the aforementioned gaps in the literature by investigating how positive psychological and behavioural constructs (self-compassion and intuitive eating) may ameliorate disordered eating among emerging adults within a New Zealand context.

In light of previous research, we had two main hypotheses about the relationship between self-compassion, intuitive eating and disordered eating.

H1: First, we predicted that self-compassion and intuitive eating would be negatively related to disordered eating attitudes and behaviours, and self-compassion would be positively related to intuitive eating.

H2: Second, we hypothesised intuitive eating would mediate the relationship between self-compassion and disordered eating. Based on existing research that has yielded mixed findings on the relationship between the intuitive eating subscales and disordered eating, we hypothesised that some dimensions of intuitive eating, would explain greater variance in this relationship than others. Specifically, we predicted that unconditional permission to eat would explain the most variance, while body-food choice congruence would explain the least.

Given the mixed findings related to the eating for physical rather than emotional reasons and reliance on hunger and satiety cues subscales, we had no a priori hypotheses for these subscales. However, overall, we expected that those that take a more self-compassionate stance towards themselves would experience reductions in disordered eating due to increased engagement in intuitive eating practices.

If it is the case that intuitive eating and self-compassion are related to decreases in disordered eating behaviours, the promotion of these concepts in both community and clinical settings may be promising in enhancing the prevention and treatment of disordered eating among emerging adults in Aotearoa New Zealand.

## **Chapter Three: Methodology**

### **3.1 Research Design**

The current study used a cross sectional quantitative survey design (see Appendix A). The survey data were collected online via Qualtrics from August 2 to October 20, 2022 (80 days) via a single anonymous survey that took approximately 20 minutes to complete.

### **3.2 Recruitment**

A multipronged approach to recruitment was employed. Given the target age range of participants, 18 student/youth groups (i.e., student clubs, student associations) based at tertiary institutions in Aotearoa were contacted via email with study details (see Appendix B) and a request to share an advertising flyer with their members. The advertising flyer (see Appendix C) contained general information about the study as well as a link and QR code that would take prospective participants to the information sheet and survey. Three student groups agreed to assist with recruitment (Auckland University Psychology Students' Association, Massey@Distance and Youth Development Opportunities NZ). Accordingly, the advertising flyer was posted to the Facebook platforms affiliated with each student/youth group. Through these Facebook groups the flyer was exposed to a total of 11,911 followers. In addition, the researcher shared the advertising flyer on their personal social media platforms (Instagram and Facebook).

### **3.3 Participants**

Of the 216 participants who consented to undertaking the survey, 46 participants were removed from analyses based on exclusion criteria. Participants were excluded if they indicated that they were not between the ages of 18-25 ( $n = 11$ ), did not live in Aotearoa, New Zealand ( $n = 3$ ) and/or did not speak fluent English ( $n = 1$ ). In addition, participants who had incomplete surveys (at least one full questionnaire missing) were removed from the dataset ( $n = 31$ ). This left a final analytic sample of 170 participants. Demographic

characteristics of the participants are presented in Table 1. Briefly, participants had an average age of 22.3 years ( $SD = 2.2$ ); the majority (87.6%) identified as women, female, or girls; 85.9% identified as New Zealand European and 14.7% identified as Māori.

**Table 1**

*Demographic Characteristics of the Sample (N = 170)*

Sample Characteristics	<i>n</i>	%
Live in NZ	170	100
Fluent in English	170	100
Ethnicity		
New Zealand European	146	85.9
Māori	25	14.7
Samoan	4	2.4
Cook Islands Māori	3	1.8
Niuean	1	0.6
Chinese	1	0.6
Indian	4	2.4
Not listed	18	10.6
Gender		
Female/Woman/Girl	149	87.6
Cisgender female	1	0.6
Trans female	1	0.6
Male/Man/Boy	16	9.4
Nonbinary	2	1.2
Genderfluid	1	0.6

Note. Age range 18-25 years; Mean age = 22.29 (2.18); For ethnicity, sum of columns exceed 100% as participants could select as many as applied; Not listed includes: Asian European, British, Canadian, Continental European (German), Danish, European, Filipino. French, German, Japanese/European, Korean, Mexican/Latino and South East Asian.

### 3.4 Measures

#### 3.4.1 Demographics

In order to evaluate participant eligibility for the study, participants answered questions about their age, country of residence, and English language proficiency (“Are you fluent in English?” yes/no options). Gender and ethnicity data was also collected to better characterise the sample and therefore ascertain generalisability of the data. To collect gender data, an open-response text box was used. For ethnicity, eight options were given and an open-response text box was provided if individuals identified with any other ethnicity that was not provided.

#### 3.4.2 Self-Compassion

Self-compassion was measured using the Self-Compassion Scale—Short Form (SCS-SF; Raes et al., 2011). The SCS-SF is a 12-item self-report measure that assesses six facets of self-compassion, including self-kindness (“I try to be understanding and patient towards aspects of my personality I don’t like”), self-judgement (“I’m disapproving and judgemental about my own flaws and inadequacies”), common humanity (“I try to see my failings as part of the human condition”), isolation (“When I’m feeling down, I tend to feel like most other people are happier than I am”), mindfulness (“When something painful happens I try to take a balanced view of the situation”) and over-identification (“When I fail at something important to me I become consumed by feelings of inadequacy”) (Raes et al., 2011). This measure uses a 5-point Likert scale where *Almost never* = 1 and *Almost always* = 5, such that higher scores reflect higher levels of self-compassion.<sup>2</sup> Subscale scores are computed by calculating the mean of subscale item responses, and the mean of the six subscale scores yields the total self-compassion score. The current study only looked at total self-compassion scores. The

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<sup>2</sup> Negatively-worded items (items 1, 4, 8, 9, 11 and 12) are reversed-scored to ensure higher scores reflect higher levels of self-compassion

decision to use total scores was made as there were no previous studies on the impact of the subtypes of self-compassion on eating behaviour and as a result a substantiated hypothesis was difficult to form. Total scores can range from 1-5 (Neff, 2003). The SCS-SF demonstrated good internal consistency in prior studies (Cronbach's  $\alpha = .84 - .87$ ; Hayes et al., 2016; Kelly et al., 2013; Raes et al., 2011; Taylor et al., 2015), as well as in the current sample (Cronbach's  $\alpha = .81$ ).

The SCS-SF is a condensed version of the original 26-item Self-Compassion Scale (SCS) created by Neff (2003). Research has indicated that the SCS-SF yields a near perfect correlation with the original SCS when looking at total self-compassion scores (Neff, 2003). The decision to use SCS-SF over the original self-compassion scale was made to reduce unnecessary burden on participants as this study only examined total self-compassion scores (Neff, 2003; Raes et al., 2011).

### ***3.4.3 Intuitive Eating***

Intuitive eating was measured using the Intuitive Eating Scale—2 (IES-2; Tylka & Kroon Van Diest, 2013). The IES-2 is a 23-item measure that assesses the four dimensions of intuitive eating including unconditional permission to eat (“I try to avoid certain foods high in fat, carbohydrates, or calories.”), eating for physical reasons rather than emotional reasons (“I find myself eating when I’m feeling emotional (e.g., anxious, depressed, sad), even when I’m not physically hungry”), reliance on hunger and satiety cues (“I trust my body to tell me when to eat”) and body-food choice congruence (“Most of the time, I desire to eat nutritious foods”) (Tylka & Kroon Van Diest, 2013). Items are scored on a 5-point Likert scale where *Strongly disagree* = 1, *Disagree* = 2, *Neutral* = 3, *Agree* = 4, *Strongly agree* = 5, such that higher scores reflect higher levels of intuitive eating.<sup>3</sup> Subscale scores are computed by

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<sup>3</sup> Negatively-worded items (items 1, 2, 3, 7, 8, 9, 10) are reversed scored to ensure higher scores reflect more intuitive eating.

calculating the mean of the subscale item responses. The mean of the subscale scores yields the total intuitive eating score. The IES-2 has demonstrated good internal consistency in prior studies (Cronbach's  $\alpha = .86 - .89$ ; [Babbott et al., 2022](#); [Coimbra & Ferreira, 2021](#); [Schoenefeld & Webb, 2013](#); [Tylka & Kroon Van Diest, 2013](#)) as well as in the present investigation (Cronbach's  $\alpha = .88$ ).

#### **3.4.4 Disordered Eating**

Disordered eating was measured using the Eating Attitudes Test—26 ([EAT-26](#); [Garner et al., 1982](#)). The EAT-26 is a 26-item measure that assesses a range of disordered eating attitudes with 3 subscales including dieting (“Aware of the calorie content of foods that I eat.”), bulimia and food preoccupation (“Have the impulse to vomit after meals.”) and oral control (“Avoid eating when I’m hungry.”). Items are scored on a 6-point scale, where *never* = 0, *rarely* = 0, *sometimes* = 0, *often* = 1, *usually* = 2, and *always* = 3, such that higher scores reflect more disordered eating<sup>4</sup>. Both subscale and total scores are computed by summing the relevant items and total scores can range from 0 (lowest level of disordered eating) to 78 (highest level of disordered eating). The current study only looked at total disordered eating scores. The decision to use total scores was made as the current study sought to investigate the impacts of self-compassion and intuitive on disordered eating broadly, rather than any one type of eating pathology. The EAT-26 has demonstrated good internal reliability (Cronbach's  $\alpha = .84 - .91$ ; [Pikó et al., 2022](#); [Taylor et al., 2015](#); [Tylka et al., 2015](#); [Tylka & Kroon Van Diest, 2013](#)) as well as in the current sample (Cronbach's  $\alpha = .91$ ).

The EAT-26 is a 26-item shortened version of the original 40 item scale (EAT-40: [Garner & Garfinkel, 1979](#)). Research has indicated that the EAT-26 is highly correlated with the EAT-40 ([Pikó et al., 2022](#); [Taylor et al., 2015](#); [Tylka et al., 2015](#); [Tylka & Kroon Van](#)

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<sup>4</sup> Item 26 is reverse scored.

Diest, 2013). The decision to use EAT-26 over the original self-compassion scale was made to reduce unnecessary burden on participants as this study only examined total disordered eating scores (Neff, 2003; Raes et al., 2011).

### **3.5 Procedure**

As described previously, prospective participants were provided with an advertising flyer with a QR code and a link to the information sheet and survey (which are hosted on Qualtrics). Once the link was accessed, participants were first taken to the study's information sheet (see Appendix D). The information sheet provided more detailed information about the researcher and supervisor, the aims of the study, participant eligibility, implications of participation and the contact details of several relevant helplines (e.g., Youthline) in case of distress. As suggested by the Massey University Ethics Committee, the information sheet specified that survey completion implied consent. Accordingly, at the end of the information sheet participants were asked to consent to the collection of their responses at survey completion (see Appendix D). If participants selected 'Yes,' they were able to proceed to the main survey. The survey sections were as follows: demographic information, self-compassion, intuitive eating, and disordered eating. At the conclusion of the survey participants were thanked for their participation and reminded of the contact details of the helplines mentioned in the information sheet. Participants were then given the opportunity to enter a prize draw to win one of ten \$40 electronic vouchers and/or receive a summary of the results at the completion of the study. If 'Yes' was selected for the prize draw and/or summary, participants were redirected to a separate survey to provide their preferred email address. This separate survey collected no linking identifier, so that participants' email addresses could not be linked with their survey responses. Participants were again thanked for their participation and closed out of the survey. The prize draw was completed on November 24, 2022. Winners were selected using a random number generator. The prize draw winners

were notified via email on December 2, 2022 and asked to respond within two weeks to claim their prize. Winners were also asked to choose a preferred digital voucher from gift station (link was provided). Gift vouchers were sent out as soon as the winners responded with their preferred contact details and voucher of choice.

### **3.6 Ethics**

The study was approved by the Massey Human Ethics Committee on the 7<sup>th</sup> of July 2022 (Human Ethics Northern Committee – NOR 22/27). There were several ethical issues specific to the present study that were discussed and addressed in the ethics application.

#### ***3.6.1 General Considerations***

**3.6.1.1 Risks and Benefits.** **3.6.1.1 Risks and Benefits.** Firstly, although not anticipated, we recognised that some of the survey questions (particularly those related to disordered eating) may cause distress to some individuals. To address this, the possibility of distress was explicitly stated in the information sheet so that participants could make an informed decision about whether to participate in the study. Relevant support lines were provided in the information sheet (see Appendix D) and presented again at the conclusion of the survey, in case of any distress (see Appendix A).

Participation in this study may have yielded several benefits. Firstly, participation exposed respondents to the concepts of self-compassion, intuitive eating and eating distress, giving them an opportunity to reflect on their own personal experiences regarding these constructs. As a result, some respondents may have experienced participation as a positive learning exercise. In addition, participation in this study may have given people the opportunity to contribute to research that could lead to interventions developed to enhance adaptive eating behaviours and ameliorate maladaptive eating behaviours in a meaningful way. Participants also had the opportunity to go into the prize draw to win a \$40 supermarket voucher.

Finally, upon completion of the project, it will be written up as a journal article and submitted for publication. If the findings are eventually published, they may contribute to the knowledge of those who are interested in exploring the concepts of self-compassion, intuitive eating and disordered eating.

Although the current study did not pose questions in relation to ethnicity and gender identity, this information was collected in order to better characterise the study population and to determine the extent to which the results are generalisable. To determine the generalisability of results, the ethnic and gender diversity of the sample was analysed and compared to national estimates in Aotearoa New Zealand. This data also enabled us to determine some strengths, limitations, and future directions of this project. Thus, although there were no hypotheses that implicated demographic characteristics, the collection of this data was done to ensure that conclusions and generalisations can be made appropriately and conservatively.

**3.6.1.2 Consent.** The study's information sheet stated that the completion and the return of the questionnaire implies consent. Following the information sheet, participants answered a question consenting (or not) to the collections of their responses.

**3.6.1.3 Privacy and Confidentiality.** As this was an anonymous online survey, no identifiable data was collected that could be linked to the participants' responses. If participants opted into a prize draw and/or receive a summary of results, they were redirected to a separate survey to provide their email address so as to maintain the anonymity of the participants. Qualtrics was used to store data collected from the questionnaire. Qualtrics is a secure software that Massey University has approved as the School of Psychology's primary platform for collecting survey data. Once the research is completed the data will be securely stored on Massey University servers.

### **3.6.2 Cultural Considerations**

As this project's participants live in Aotearoa New Zealand, it was expected that there would be a significant proportion of people who identify as Māori in the study's final sample. Indeed, 14.7% of participants in the final sample identified as Māori, which is slightly below national population estimations of Māori living in Aotearoa New Zealand (17.1%) (Clark et al., 2023; Crengle et al., 2022). As with any research that is conducted in Aotearoa New Zealand, it is essential that the principles of partnership, participation and protection are upheld; and Aotearoa New Zealand's status as a bicultural nation is recognised and respected. Ethical considerations pertaining to the values of partnership, participation and protection were made in reference to Te Ara Tika guidelines for Māori research ethics (Hudson et al., 2010). These guidelines contain four principles that must be upheld to ensure culturally safe research practice and are described in the following section (Hudson et al., 2010).

**3.2.2.1 Whakapapa (relationships).** This principle was upheld by cultural consultation with Dr. Pikihuia Pomare (a Kaupapa Māori lecturer at Massey University and a Registered Clinical Psychologist). During the consultation the impacts, benefits, and risks that this project may have on Māori communities were critically evaluated and discussed. Dr. Pikihuia Pomare peer-reviewed the information sheet, survey, and advertising email and issues of relevance to Māori communities were discussed.

Dr. Pikihuia Pomare agreed to be in correspondence throughout the research project if any questions pertaining to cultural issues arose. In this way, the values outlined by Te Tiriti o Waitangi were upheld and the involvement of prospective Māori participants was managed.

**3.2.2.2 Tika (purposefulness).** This principle was upheld using scientifically thorough and valid research methods. The experience of both the researcher and supervisor made it possible to conduct this type of project safely and with scientific rigour. The researcher completed her Postgraduate Diploma in Arts (Psychology) at Massey University in

2021. Relevant to the current research, as part of researcher's Postgraduate diploma, she completed the 700 level papers: 175.738 Psychological Research: Principles of Design and 175.730 Professional Practice in Psychology. The supervisor is a Senior Lecturer in Clinical Psychology at Massey University. She has experience in experimental and longitudinal research (described in 20+ peer-reviewed journal articles) and experience as a licensed clinical psychologist, using evidence based methods to treat internalising disorders in youth, as well as working with LGBTQ young people and families. Germane to the current project, the supervisor has experience treating eating disorders in both inpatient and outpatient psychiatric settings.

**3.2.2.3 Manākitanga (cultural and social responsibility).** This principle will be upheld by ensuring the dignity and respect of all people. As participation was voluntary and anonymous, autonomy, privacy and confidentiality was maintained. During the cultural consultation for this project, some issues were discussed that were relevant to manākitanga. These included having awareness of limitations regarding the psychometrics used and controversies and issues regarding the use of BMI measures. As food consumption is typically culturally imbued and specific to one's milieu, it is important not to assume the normativity or appropriateness of any specific eating behaviour (Axelsson, 1986; Hormes & Niemiec, 2017; Rozin, 1996). It is also important to note that within Māori culture, Kai (food) is a pivotal part of Tikanga (customary practices) guiding interpersonal and environmental behaviour (Lacey et al., 2020). Food is used to mark the sacredness of both formal and informal occasions; where serving food is a significant part of manākitanga and contributes to the mana (prestige) of those serving it (Lacey et al., 2020). Thus, as the measures used in this study have not been normed within Māori populations specifically, it is important to be conservative and thoughtful in the interpretation of results and the conclusions that can be made.

Issues of weight-stigma and the impacts of BMI measures on Māori communities specifically were also discussed. BMI measures were intentionally omitted from the current study to reduce any harm caused by weight-normative paradigms. Indeed, research indicates that BMI has limited use in measuring health outcomes and can also be harmful in perpetuating weight-stigma and racial inequities (Bacon & Aphramor, 2011; Bombak et al., 2019; Warbrick et al., 2019). As intuitive eating is a weight-neutral approach to food, and disordered eating is often exacerbated by weight-normative ideologies, we decided that the use of BMI measures would be inappropriate and potentially harmful in this context.

**3.2.2.4 Mana (justice and equity).** This principle was upheld as the current study is expected to yield benefits to Māori peoples by exploring ways in which adaptive eating behaviours can be enhanced for emerging adults in Aotearoa New Zealand. As this project is predominantly strengths-based (focusing on how self-compassion may enhance well-being by facilitating adaptive eating behaviours and reducing maladaptive eating behaviours), we expect that the outcomes of this research will benefit the well-being of Māori communities.

### 3.7 Data Analysis

To determine the sample size, non-probability sampling was used. To estimate the required sample size for medium effect size ( $f^2 = .15$ ; Cohen, 1992) in a regression model with 4 predictors (allowing for the inclusion of covariates), an *a priori* power analysis was conducted using G\*Power (version 3.1.9.7; Faul et al., 2009). Assuming an  $\alpha$  of .05 and target power of .95, the target sample size was a minimum of 129 participants.

Before the survey was made live, it was piloted for several weeks among post-graduate colleagues of the researcher. After data was collected, we cleaned the data for quality assurance. In data cleaning we looked for incomplete surveys, nonsense open response answers, and incorrect attention questions. Ultimately, participants were removed if

they did not meet the eligibility criteria and/or did not fill out a significant proportion of the survey.

First, we predicted that self-compassion and intuitive eating would be negatively related to disordered eating attitudes and behaviors, and self-compassion would be positively related to intuitive eating (H1). To test this hypothesis, Pearson-moment correlations were run between variables of interest. Second, we predicted that intuitive eating would mediate the relationship between self-compassion and disordered eating (H2). Specifically, we predicted that unconditional permission to eat would explain the most variance, while body-food choice congruence would explain the least. Given the mixed findings related to the eating for physical rather than emotional reasons and reliance on hunger and satiety cues subscales, we had no a priori hypotheses for these subscales. To test the mediating effect of intuitive eating on the relationship between self-compassion and intuitive eating a series of regression analyses were conducted in SPSS (IBM Corp, 2021; Version 28.0) with the use of Hayes' PROCESS Macro (Hayes, 2022). Five models were run, testing the mediating effect of the total intuitive eating score as well as its four subscales. Hayes (2022) introductory book to mediation and moderation was used to aid output interpretation.

## Chapter Four: Results

### 4.1 Descriptive Statistics

Means, standard deviations and Cronbach's alphas of the self-compassion (SCS-SF total score), intuitive eating (IES-2 total score and four subscales), and disordered eating (EAT-26 total score) measures are presented in Table 2. SCS-SF total scores ( $M = 2.73$ ,  $SD = 0.60$ ) were comparable to similar studies in different countries (e.g. USA,  $M = 2.99$ ,  $SD = 0.61$ ; Neff & McGehee, 2010). IES-2 total scores ( $M = 3.26$ ,  $SD = 0.59$ ) were also comparable to similar studies in different countries (e.g. Turkey,  $M = 3.31$ ,  $SD = 0.64$ ; Akırmak et al., 2021). IES-2 unconditional permission to eat subscale scores ( $M = 3.46$ ,  $SD = 0.80$ ) were comparable to similar studies in different countries (e.g. USA,  $M = 3.38$ ,  $SD = 0.89$ ; Tylka et al., 2020). IES-2 eating for physical rather than emotional reasons subscale scores ( $M = 2.39$ ,  $SD = 0.93$ ) were lower compared to similar studies in different countries (e.g. USA,  $M = 3.70$ ,  $SD = 0.70$ ; Koller et al., 2020). IES-2 reliance on hunger and satiety cues subscale scores ( $M = 3.15$ ,  $SD = 0.82$ ) were comparable to similar studies in different countries (e.g. Germany,  $M = 3.40$ ,  $SD = 0.90$ ; Ruzanska & Warschburger, 2017). IES-2 body-food choice congruence subscale scores ( $M = 3.50$ ,  $SD = 0.92$ ) were comparable to similar studies in different countries (e.g. USA,  $M = 3.43$ ,  $SD = 0.90$ ; Tylka et al., 2020). EAT-26 total scores ( $M = 13.54$ ,  $SD = 12.85$ ) were slightly elevated compared to other studies with community populations (e.g. Greece, Males:  $M = 9.10$ ,  $SD = 8.70$ , Females:  $M = 10.7$ ,  $SD = 9.3$ ; Gonidakis et al., 2018) — in fact, we found that 25% of the sample were over the clinical cut-off (a score of 20) (Garner et al., 1982) on the EAT-26.

### 4.2 The Relationships Between Self-compassion, Intuitive Eating and Disordered Eating

To address H1 Pearson-moment correlations were computed between all variables of interest (see Table 2). As predicted, SCS-SF total score showed a significant moderate positive association with the IES-2 total score ( $r = .59$ ,  $p < .001$ ) and a moderate negative

association with the EAT-26 total score ( $r = -.54, p < .001$ ). All correlations between the intuitive eating subscales and SCS-SF and EAT-26 were statistically significant in the expected directions, such that intuitive eating subscales showed a positive association with self-compassion ( $r = .36$  to  $.59, p < .001$ ) and a negative association with disordered eating ( $r = -.23$  to  $-.69, p < .001 - p < .05$ ).

**Table 2***Means, standard deviations, Cronbach alphas and Pearson-moment correlations of variables of interest*

Variable	<i>M</i>	<i>SD</i>	$\alpha$	1	2	3	4	5	6	7
<b>Self-Compassion (SCS-SF)</b>										
1. Total Score	2.73	0.60	0.81	—						
<b>Intuitive Eating (IES-2)</b>										
2. Total	3.26	0.59	0.88	.59***	—					
3. Unconditional Permission to Eat	3.46	0.80	0.80	.36***	.51***	—				
4. Eating for Physical rather than Emotional Reasons	2.39	0.93	0.91	.42***	.73***	.17	—			
5. Reliance on Hunger and Satiety Cues	3.15	0.82	0.85	.46***	.78***	.36***	.40***	—		
6. Body-Food Choice Congruence	3.50	0.92	0.87	.36***	.67***	-.02	.39***	.37***	—	
<b>Disordered Eating</b>										
7. EAT-26	13.54	12.85	0.91	-.54***	-.58***	-.69***	-.23*	-.45***	-.23**	—

*Note.* N = 170. SCS-SF = Self-Compassion Scale Short Form (Raes et al., 2011); IES-2 = Intuitive Eating Scale-2 (Tylka & Kroon Van Diest, 2013); EAT-26 = Eating Attitudes Test-26 (Garner et al., 1982); M = mean; SD = standard deviation;  $\alpha$  = Cronbach's alpha. \*  $p < .05$  \*\*  $p < .01$  \*\*\* $p < .001$ .

### 4.3 Impact of Self-Compassion on Disordered Eating as Mediated by Intuitive Eating

To address H2, a series of five regression-based mediation analyses were run using Hayes' PROCESS macro in SPSS. It was hypothesised that higher levels of self-compassion would negatively predict disordered eating and that intuitive eating would mediate this relationship. It was also expected that participants higher in self-compassion might experience decreases in disordered eating due to greater engagement with intuitive eating. Finally, it was hypothesised that each dimension of intuitive eating would mediate this relationship, albeit to different extents (some intuitive eating subscales may explain more variance in disordered eating than others).

#### 4.3.1 Total score

When predicting EAT-26 total score from SCS-SF total score and entering IES-2 total score as a mediator (see Figure 1a), self-compassion positively predicted intuitive eating ( $a = .58, SE = 0.17, p < .001$ ) and intuitive eating, in turn, negatively predicted disordered eating ( $b = -8.71, SE = 1.64, p < .001$ ). We found a significant negative indirect effect of SCS-SF on EAT-26 total score,  $ab = -5.04, SE = 1.17, p < .05, 95\% CI [-9.67, -3.30]$ . Furthermore, the direct effect of self-compassion on disordered eating in the presence of IES-2 as the mediator was also significant ( $c' = -6.47, SE = 1.60, p < .001$ ). Hence, intuitive eating partially mediated the relationship between self-compassion and disordered eating. Specifically, two emerging adults who differ by 1 unit in self-compassion are estimated to differ by 11.51 scale points in disordered eating (c path), with the more self-compassionate young adult engaging in less disordered eating. They differ by 5.04 units in disordered eating because of the positive effect of self-compassion on intuitive eating, which in turn decreases disordered eating (ab path). However, independent of this mechanism, the emerging adult with more self-compassion is estimated to be 6.47 units lower in disordered eating (c' path). Overall, the

mediation model accounted for 39.12% ( $R^2 = 0.3912$ ) of the variance in disordered eating among this sample.

These findings provide some evidence that those with higher levels of self-compassion exhibit less disordered eating as they are more likely to engage in intuitive eating. However, results indicate that higher self-compassion contributes to lower disordered eating beyond what is accounted for by intuitive eating.

#### ***4.3.2 Unconditional Permission to Eat IES-2 Subscale***

When predicting EAT-26 total score and entering the IES-2 unconditional permission to eat subscale score as a mediator (see Figure, 1b), self-compassion positively predicted unconditional permission to eat ( $a = .48$ ,  $SE = 0.10$ ,  $p < .001$ ) and unconditional permission to eat, in turn, negatively predicted disordered eating ( $b = -9.16$ ,  $SE = 0.87$ ,  $p < .001$ ). We found a significant negative indirect effect of SCS-SF on EAT-26 total score  $ab = -4.44$ ,  $SE = 1.24$ ,  $p < .05$ , 95%  $CI [-7.21, -2.24]$ . Furthermore, the direct effect of self-compassion on disordered eating in the presence of IES-2 Unconditional Permission to Eat subscale as the mediator was also significant ( $c' = -7.07$ ,  $SE = 1.16$ ,  $p < .001$ ). Hence, unconditional permission to eat partially mediated the relationship between self-compassion and disordered eating. Specifically, two emerging adults who differ by 1 unit in self-compassion are estimated to differ by 11.51 scale points in disordered eating (c path), with the more self-compassionate young adult engaging in less disordered eating. They differ by 4.44 units in disordered eating because of the positive effect of self-compassion on unconditional permission to eat, which in turn decreased disordered eating (ab path). However, independent of this mechanism, the emerging adult with more self-compassion is estimated to be 7.07 units lower in disordered eating (c' path). Overall, the mediation model accounted for 57.41% ( $R^2 = 0.5741$ ) of the variance in disordered eating among this sample.

#### ***4.3.3 Eating for Physical rather than Emotional IES-2 Reasons Subscale***

When predicting EAT-26 total score from SCS-SF total score and entering IES-2 eating for physical rather than emotional reasons subscale score as a mediator (see Figure 1c), results revealed that eating for physical rather than emotional reasons did not significantly mediate the relationship between self-compassion and disordered eating,  $ab = -0.05$ ,  $SE = 0.04$ , 95%  $CI [-1.76, 1.48]$ . Although self-compassion positively predicted eating for physical rather than emotional reasons ( $a = .48$ ,  $SE = 0.10$ ,  $p < .001$ ), eating for physical rather than emotional reasons, did not in turn significantly predict decreases in disordered eating ( $b = -0.08$ ,  $SE = 1.00$ ,  $p = .94$ ).

These results are consistent with previous research indicating that some subscales of intuitive eating have a greater relationship with disordered eating than others. These findings suggest that although self-compassion increases levels of eating for physical rather than emotional reasons, this relationship does not account for significant variance in disordered eating.

#### ***4.3.4 Reliance on Hunger and Satiety Cues IES-2 Subscale***

When predicting EAT-26 total score from SCS-SF total score and entering IES-2 reliance on hunger and satiety cues subscale score as a mediator (see Figure 1d), self-compassion positively predicted reliance on hunger and satiety cues ( $a = 0.62$ ,  $SE = 0.09$ ,  $p < .001$ ) and reliance on hunger and satiety cues, in turn, negatively predicted disordered eating ( $b = -4.02$ ,  $SE = 1.11$ ,  $p < .001$ ). We found a significant negative indirect effect of SCS-SF on EAT-26 total score,  $ab = -2.51$ ,  $SE = 0.86$ ,  $p < .05$ , 95%  $CI [-4.32$  to  $-0.93]$ . Furthermore, the direct effect of self-compassion on disordered eating in the presence of IES-2 reliance on hunger and satiety cues subscale as the mediator was also significant ( $c' = -9.00$ ,  $SE = 1.16$ ,  $p < .001$ ). Hence, reliance on hunger and satiety cues partially mediated the relationship between self-compassion and disordered eating. Specifically, two emerging adults who differ

by 1 unit in self-compassion are estimated to differ by 11.51 scale points in disordered eating (c path), with the more self-compassionate emerging adult engaging in less disordered eating. They differ by 2.51 units in disordered eating because of the positive effect of self-compassion on reliance on hunger and satiety cues, which in turn decreases disordered eating (ab path). However, independent of this mechanism, the emerging adult with more self-compassion is estimated to be 9.00 units lower in disordered eating (c' path). Overall, the mediation model accounted for 34% ( $R^2 = 0.3399$ ) of the variance in disordered eating among this sample.

These findings provide some evidence that those with higher levels of self-compassion exhibit less disordered eating in part due to reliance on hunger satiety cues. However, results indicate that self-compassion contributes to disordered eating, beyond what is accounted for by reliance on hunger and satiety cues.

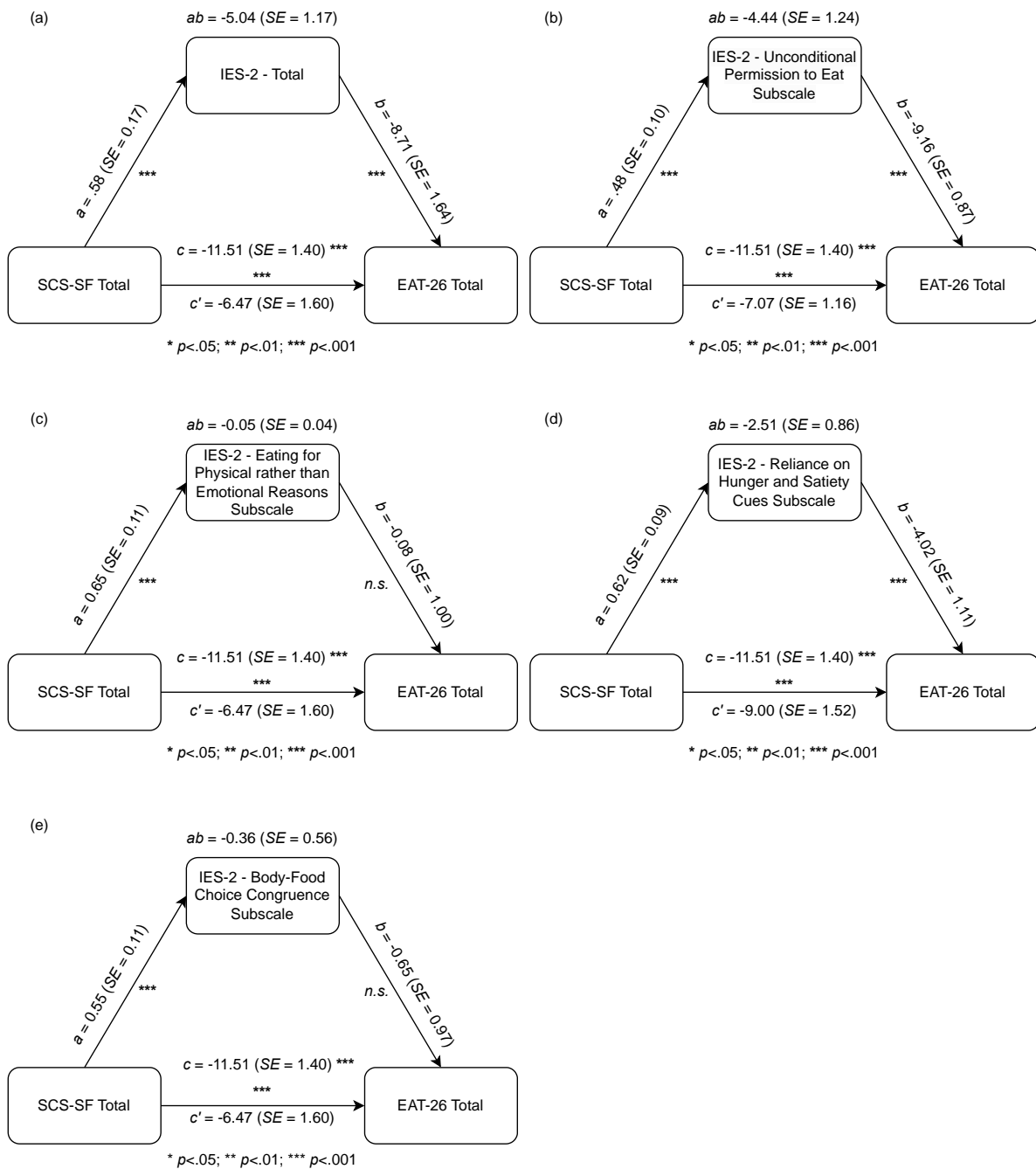
#### ***4.3.5 Body-Food Choice Congruence IES-2 Subscale***

When predicting EAT-26 total score from SCS-SF total score and entering IES-2 body-food choice congruence subscale score as a mediator (see Figure 1e), body-food choice congruence did not significantly mediate the relationship between self-compassion and disordered eating,  $ab = -0.36$ ,  $SE = 0.56$ , 95%  $CI [-1.51 \text{ to } 0.71]$ . Although self-compassion positively predicts body-food choice congruence ( $a = 0.55$ ,  $SE = 0.11$ ,  $p < .001$ ), body-food choice congruence, did not in turn significantly predict decreases in disordered eating ( $b = -0.65$ ,  $SE = 0.97$ ).

These results are consistent with previous research indicating that some subscales of intuitive eating have a stronger relationship with disordered eating than others. These findings suggest that although self-compassion increases levels of body-food choice congruence, this relationship does not account for significant variance in disordered eating.

**Figure 1**

*Mediation Analyses: Impact of Self-Compassion on Disordered Eating as Mediated by Intuitive Eating*



## **Chapter Five: Discussion**

The aim of the current study was to investigate the relationship between self-compassion, intuitive eating, and disordered eating among emerging adults in Aotearoa New Zealand. Two main hypotheses were proposed. First, it was hypothesised that self-compassion and intuitive eating would be negatively related to disordered eating attitudes and behaviors, and self-compassion would be positively related to intuitive eating (H1). Second, it was predicted that intuitive eating would significantly mediate the relationship between self-compassion and disordered eating (H2). Based on existing research that has yielded mixed findings on the relationship between the intuitive eating subscales and disordered eating, we anticipated that some dimensions of intuitive eating would explain greater variance in this relationship than others. Specifically, we predicted that unconditional permission to eat would explain the most variance, while body-food choice congruence would explain the least. Given the mixed findings related to the eating for physical rather than emotional reasons and reliance on hunger and satiety cues subscales, we had no a priori hypotheses for these subscales.

### **5.1 The Relationship Between Self-compassion, Intuitive Eating and Disordered Eating**

Findings of the current study provided support for H1. As expected, self-compassion and intuitive eating was negatively related to disordered eating attitudes and behaviours, and self-compassion was positively related to intuitive eating. The same pattern emerged when analysing the individual subscales of intuitive eating, such that self-compassion showed a significant positive relationship with each dimension of intuitive eating and a significant negative relationship with disordered eating attitudes and behaviours. These results are consistent with previous cross-sectional studies with community samples indicating that self-compassion is related to increases in intuitive eating (Kelly & Stephen, 2016; Schoenefeld & Webb, 2013) and decreases in disordered eating (Braun et al., 2016; Pullmer et al., 2019;

Taylor et al., 2015; Turk & Waller, 2020; Webb & Forman, 2013), and that intuitive eating is related to decreases in disordered eating (Anderson et al., 2016; Bruce & Ricciardelli, 2016; Linardon, 2021; Linardon & Mitchell, 2017; Tylka, 2006; Tylka & Kroon Van Diest, 2013). The fact that a similar pattern was observed between these variables within an Aotearoa New Zealand context is significant, as it suggests that these relationships are robust and can be applied to emerging adults in Aotearoa New Zealand specifically. It is important to note that much of the research that has investigated these constructs has been limited to female college participants. In contrast, the current study allowed for emerging adults of all genders and occupational backgrounds to participate. As a result, our study builds upon previous research by indicating that these constructs are relevant to emerging adults of diverse genders within the Aotearoa New Zealand context.

## **5.2 Impact of Self-Compassion on Disordered Eating as Mediated by Intuitive Eating**

### **Total Score**

H2 was also supported by the findings of the current study. When analysing total scores, intuitive eating partially mediated the relationship between self-compassion and disordered eating; that is to say, the negative relationship observed between self-compassion and disordered eating could be partially explained by increased engagement in intuitive eating. However, as expected, some subscales of intuitive eating appeared to account for more variance in this relationship than others. Specifically, while the unconditional permission to eat and reliance on hunger and satiety cues subscales significantly mediated the relationship between self-compassion and disordered eating, the eating for physical rather than emotional reasons and body-food choice congruence subscales did not. It is important to note that although the eating for physical rather than emotional reason and body-food choice congruence subscales did not significantly mediate the relationship between self-compassion and disordered eating, the effects were trending in the predicted directions.

The outcomes from these mediation analyses are congruent with previous research. The significant mediating effect of intuitive eating on the relationship between self-compassion and disordered eating in this study adds to the existing literature suggesting that having a self-compassionate stance towards oneself reduces disordered eating by enabling greater engagement with adaptive eating behaviors (Schoenefeld & Webb, 2013; Shaw & Cassidy, 2022; Taylor et al., 2015). For example, Kelly and Stephen (2016) in their daily diary study found that on days that individual's experienced higher levels of self-compassion they engaged in greater levels of intuitive eating and less restrained eating behaviors. Thus, it may be that self-compassion mitigates the daily triggers one might experience regarding food and body, resulting in the ability to listen to one's internal needs rather than resorting to self-punishing eating behaviors. Indeed, research has demonstrated that self-compassion reduces the impact of triggering body related situations including the impact of being around individuals that are heavily focused on their appearance (Kelly et al., 2016), weight stigma (Fekete et al., 2021) and media pressure (Tylka et al., 2015). These findings might extend to the multitude of triggers inevitable in a society that shames fatness and moralises food choice and body shape.

It is not surprising that intuitive eating was a partial mediator in the relationship between self-compassion and disordered eating (rather than a full mediator), given the plethora of research implicating several other mechanisms by which self-compassion may influence eating behaviors. For example, self-compassion has shown to reduce disordered eating through decreases in body shame (Breines et al., 2014) and increases in mindful eating (Shaw & Cassidy, 2022; Taylor et al., 2015), body appreciation (Kelly & Stephen, 2016; Linardon, 2021) and body acceptance. In addition, research has suggested that self-compassion may ameliorate disordered eating symptomology by reducing the impacts of a variety of associated risk factors, including media pressure (Braun et al., 2016; Tylka et al.,

2015), thin ideal internalisation (Tylka et al., 2015), weight concern (Geller et al., 2015; Stutts & Blomquist, 2018) and perfectionism (Bergunde & Dritschel, 2020). So, although the current study provides evidence suggesting that self-compassion works to decrease disordered eating through increased engagement in intuitive eating, it is likely that there are other variables related to self-compassion outside of this mediational relationship that work to reduce disordered eating in this sample. Nevertheless, the results of the current study preliminarily suggest that self-compassion and intuitive eating are relevant in influencing eating behavior in a positive way.

### **5.3 Impact of Self-Compassion on Disordered Eating as Mediated by IES-2 Subscales**

As noted, the current study found that some components of intuitive eating explained greater variance in the relationship between self-compassion and disordered eating than others. While unconditional permission to eating and reliance on hunger and satiety cues significantly mediated the relationship between self-compassion and disordered eating, body-food choice congruence and eating for physical rather than emotional reasons did not. These results compliment previous findings that have found that certain intuitive eating subscales may be more relevant to disordered eating behavior than others (Anderson et al., 2016; Koller et al., 2020; Tylka, 2006; Tylka & Kroon Van Diest, 2013).

Studies have consistently demonstrated that the unconditional permission to eat subscale has a strong negative relationship with disordered eating while the body-food choice congruence subscale does not significantly relate to disordered eating symptomology (Anderson et al., 2016; Koller et al., 2020; Tylka, 2006; Tylka & Kroon Van Diest, 2013). The current study reflected a similar pattern; while the unconditional permission to eat subscale was a significant mediator in the self-compassion disordered eating relationship, the body-food choice congruence subscale was not.

Theoretically, these relationships (or lack thereof) cohere. As self-compassion revolves around acceptance and self-kindness, it makes sense that people who have higher levels of self-compassion would be better able to eat the foods they desire unconditionally; that is, to eat foods that align with their wants and needs without guilt or self-punishing rumination (Neff, 2009). Furthermore, the strong link between unconditional permission to eat and disordered eating makes sense in relation to the restraint hypothesis of disordered eating that suggests disordered eating behaviors arise from the impacts of both physical and psychological restriction patterns (Anderson et al., 2016; Linardon, 2018; Schaumberg et al., 2016). As unconditional permission to eat is diametrically opposed to caloric restriction (Tylka & Wilcox, 2006), it is not surprising that research has consistently found a strong link between this subscale and disordered eating symptomology.

In contrast, body-food choice congruence (i.e., making food choices that honor your health) may be easily taken as another restrictive practice at initial stages of one's healing journey (Tribole & Resch, 2017). Making food choices based on health measures (e.g., avoiding foods that are high in fat or sugar) may represent yet another condition one must think about in food choice; another sort of restriction, antithetical to unconditional permission to eat (Tribole, 2010). As a result, choosing food on the condition that it is "healthy," may not be conducive to a kind or self-compassionate orientation to oneself in addressing disordered eating (Neff, 2009). This study's finding in this area is congruent with the attunement representation model of disordered eating (Cook-Cottone, 2006). Body-food choice congruence represents an integration of the internal and external systems that influence eating behavior (Tribole, 2010). As posited by the attunement hypothesis, it is often the case that those with disordered eating tendencies prioritise external influences over their internal needs and thus are "mis-attuned" (or incongruent) (Cook-Cottone, 2006; Cook-Cottone, 2015). As a result, it is important for those that engage in disordered eating to prioritise their internal

needs over external influences before a healthy integration of the two can be made (Tribole, 2010). Although the tenant of body-food choice congruence is not intended to suggest that honoring your health means having a perfect diet (Tribole & Resch, 2017), it has been noted that people with disordered eating tendencies may appropriate this aspect of intuitive eating in a way that is conducive to maladaptive dieting and restriction (Tribole, 2010). As a result, it is not surprising that this subscale did not significantly mediate the relationship between self-compassion and disordered eating, as self-compassion in this context is likely help a person move away from food rules, restriction, and nutritional boundaries (that are often normalised in diet culture) rather than towards dietary conditions of optimal health.

Although body-food choice congruence may not be particularly important in the initial stages of healing one's relationship with food, research has demonstrated that this subscale is related to stability in eating disorder recovery (Koller et al., 2020). As a result, body-food choice congruence may be something that a person can develop at later stages of their healing journey, after their internal needs have been prioritised and honored (Tribole, 2010).

Previous research has yielded mixed findings regarding the extent to which the reliance on hunger and satiety cues and eating for physical rather than emotional reasons subscales relate to disordered eating indices. For example, contrary to the results of our study, Anderson et al. (2016) found that eating for physical rather than emotional reasons explained significant variance in disordered eating in their sample, while reliance on hunger and satiety cues did not. In contrast, while Tylka and Kroon Van Diest (2013) found that eating for physical rather than emotional reason showed a slight to moderate relationship with disordered eating, reliance on hunger and satiety cues appeared to exert more influence on disordered eating indices in their sample. The fact that our findings are more congruent with that of Tylka and Kroon Van Diest's (2013) may be due to similarities in measures used. For

example, while Tylka and Kroon Van Diest (2013) used the same measure as the current study to ascertain levels of disordered eating while Anderson et al. (2016) utilised different measures; specifically, the Eating Disorder Diagnostic Scale (Stice et al., 2000) and the restriction subscale of the Three-Factor Eating Questionnaire (Karlsson et al., 2000). Thus, it may be that the measures used by Anderson et al. (2016) captured different elements of disordered eating that have a greater relationship with this subscale than the disordered eating indices measured in the current study.

Furthermore, it may be that eating for physical rather than emotional reasons may be more relevant for those with clinical levels of disordered eating. For example, Koller et al.'s (2020) found that while unconditional permission to eat and reliance on hunger and satiety cues could distinguish levels of recovery status (current eating disorder vs. partially recovered vs. fully recovered) and controls, eating for physical rather than emotional reasons could only distinguish between those with a clinical eating disorder and those that who were fully recovered (Koller et al., 2020). As a result, researchers concluded that eating for physical rather than emotional reasons may be of greater relevance to those with a clinical eating disorder (Koller et al., 2020). This makes sense in relation to the current study, which used a community sample. It may be that eating for emotional reasons from time to time is relatively normative, and only a dysfunction in more extreme cases (Koller et al., 2020). Considering this, it is not surprising that eating for physical rather than emotional reasons subscale was not a significant mediator in the current study.

#### **5.4 Implications and Future Directions**

The results from the current study have several implications. As previously mentioned, research on how positive psychological and behavioral constructs can influence disordered eating is scant. As a result, the current study adds to the literature by implicating self-compassion and intuitive eating as potential ways in which we can foster adaptive eating

behaviors and decrease disordered eating in at-risk populations. As these constructs have not previously been investigated together among emerging adults in Aotearoa New Zealand specifically, this study adds to the literature by suggesting that self-compassion and intuitive eating are relevant to emerging adults in this unique cultural context. Furthermore, similar studies have not looked at how each dimension of intuitive eating may uniquely contribute to disordered eating. Therefore, this study provides insight on how specific components of intuitive eating may be more important than others to target in the prevention and treatment of disordered eating among specific groups.

The outcomes of the present study also provide support for the benefits of moving away from a weight-normative paradigm towards a weight-neutral approach to health and well-being. As self-compassion appears to be linked with reduced disordered eating through increased engagement in intuitive eating (a weight neutral approach to food), intuitive eating may be beneficial in developing a healthy relationship with food. Furthermore, intuitive eating has shown to be related to other well-being and health indices beyond that of eating disorder symptomology. These include improved cardiovascular risk ([Rochford, 2004](#); [Warbrick et al., 2016, 2019](#)), increased fruit and vegetable intake ([Christoph et al., 2021a](#)), and a variety of good mental health outcomes such as better body image ([Carrard et al., 2021](#)), higher self-esteem ([Van Dyke & Drinkwater, 2014](#)), and lower levels of depression and anxiety ([Carrard et al., 2021](#)). As a result, it is possible that the promotion of intuitive eating may be beneficial in both reducing disordered eating behaviours as well as promoting flourishing within individuals who struggle with their relationship with food ([Cook-Cottone, 2015](#); [Cook-Cottone et al., 2013](#)).

Furthermore, findings from the current study suggest that self-compassion and intuitive eating may be important to integrate into future treatment and preventions efforts for emerging adults struggling with their relationship with food in Aotearoa New Zealand. As the

current study found that intuitive eating was a significant mediator in the relationship between self-compassion and disordered eating, interventions that help to build self-compassion and teach emerging adults how to eat intuitively could be a way in which more serious eating pathology can be prevented (although additional studies using experimental and longitudinal methods are needed in order to properly establish a causal link between these constructs). As outlined previously, intuitive eating- and self-compassion-based programmes have been successful in elevating levels of these practices in both community (Bush et al., 2014) and clinical samples (Kelly and Carter, 2015; Mullen et al., 2020). For example, Bush et al. (2014) found that Eat for Life (a short-term educational intervention designed to teach adults how to eat intuitively) was successful in increasing intuitive eating and reducing disordered eating tendencies among participants. Such programmes could potentially be provided by schools and universities in Aotearoa New Zealand to attempt to prevent disordered eating among emerging adults in community settings. Furthermore, it may be beneficial for health practitioners in other disciplines (general practice, health coaches, personal trainers) to integrate concepts of self-compassion and intuitive eating in their practice in order to promote adaptive eating behaviors and consequently prevent disordered eating at the community level. Finally, clinicians working with emerging adults with disordered eating could integrate self-compassion and intuitive eating components to existing interventions (e.g. CBT-E, FBT-YA) to maximise treatment gains.

Future studies on these constructs should employ experimental methods and longitudinal mediation models to confirm a causal relationship between self-compassion, intuitive eating, and disordered eating. Once causal links have been made, findings could be used to inform evidence-based interventions for disordered eating. In addition, future research should develop and pilot self-compassion and intuitive eating interventions for emerging adults in community settings to ascertain the acceptability of such programmes for

emerging adults in Aotearoa New Zealand. Finally, as the results from this study was based on a community setting, prospective studies should investigate the relationship between self-compassion, intuitive eating, and disordered eating in emerging adults with more severe levels of eating pathology to ascertain whether these constructs would be appropriate for this cohort in the clinical context.

### **5.5 Strengths**

There were several strengths of the current study. First, our sample exceeded our recruitment goal by 31 participants, resulting in a larger sample size than expected, enhancing the reliability of results. Second, as noted, the variables of interest had yet to be explored among emerging adults within the Aotearoa New Zealand context. As a result, outcomes of the current study provide novel information, highlighting the relevance of self-compassion and intuitive eating in influencing eating behaviors among this specific cohort. Third, the sample consisted of 14.7% of people who identified as Māori. This figure is almost representative of the national estimate of Māori in Aotearoa New Zealand (17.1%) (Clark et al., 2023; Crengle et al., 2022). As Aotearoa New Zealand is a bicultural nation, it is critical to have a sample that is at least representative of the Māori population. It will be important for future research to employ Kaupapa Māori research methodology to explore the concepts addressed in the current study to ensure that conclusions made are in support of Māori health advancement (Clark et al., 2023; Warbrick et al., 2019). Fourth, our study was a strength-based project that did not include any measures of weight (or BMI). As previously noted, strengths-based literature on disordered eating is scant. As a result, the current study adds to the literature by demonstrating how positive psychological constructs (self-compassion) and adaptive behaviors (intuitive eating) can potentially enhance treatment outcomes for disordered eating. The decision to omit BMI from this study (a measure that is often used in disordered eating research) was made to decenter the importance of weight in health-related

outcomes and prevent the perpetuation of harmful fat phobic ideologies, diet culture and weight-stigma. In addition, the decision to omit BMI from this research was done so to protect the impacts that its inclusion might have on participants. As disordered eating often centers around concerns about weight, we decided that asking for this measure would be counterintuitive and potentially harmful. Measures of BMI and weight may also be particularly harmful to Māori communities due to the associations between weight-normative paradigms and racism (Warbrick et al., 2019). Thus, our omission of BMI in this study was both an act of social advocacy and protection.

## **5.6 Limitations**

Despite this study's many strengths, certain limitations warrant discussion. First, although our sample size exceeded our original recruitment goal, it was still relatively small which may have an impact on reliability. In addition, our sample consisted of a large proportion of people who identified as New Zealand European and female. Furthermore, our recruitment methods meant that most participants were likely to be emerging adults associated with tertiary institutions. Thus, any conclusions made from this study must be done so conservatively as the relationships found may vary according to gender, ethnicity, and occupational background. In future, a larger participant pool that reflects greater ethnic, gender, and occupational diversity may be useful in improving the generalisability of results.

Secondly, because the current study employed a cross-sectional design, causal inferences cannot be made regarding the directionality of the relationships. Thus, future studies utilising a longitudinal design and/or experimental methods would help to clarify questions of causality.

A third caveat of the current study is we did not use a clinical sample. As a result, the validity of the present study may not extend to those with clinical levels of disordered eating. However, despite the limitations of a community sample, we did find that 25% of our sample

were above the clinical cut off for EAT-26 (Garner et al., 1982). Regarding the measures used, EAT-26 is geared more towards detecting restrictive patterns of disordered eating rather than binge and purge symptoms (Garner et al., 1982). As a result, future research should use different measures to capture how self-compassion and intuitive eating may influence the broad spectrum of eating related difficulties (including restriction, bingeing, purging, etc.).

Finally, it is important to note that the measures used in this study have not been normed among emerging adults in Aotearoa New Zealand. Norming is important as what is considered normative levels of any construct is often influenced by sociocultural factors (Cleland et al., 2023). As Aotearoa New Zealand is unique in its sociocultural context, normative levels of each construct may be different within Aotearoa New Zealand compared to other countries (Cleland et al., 2023). As a result, the application of self-compassion and intuitive eating in the prevention and treatment of disordered eating in Aotearoa New Zealand should be made with considerations of culture and social context.

## Chapter Six: Conclusion

This study adds to the growing body of literature that implicates self-compassion and intuitive eating as important constructs in influencing eating attitudes and behaviours, particularly among emerging adults. Although research on pathology and risk factors of disordered eating is abundant, research on positive psychological protective factors and adaptive eating behaviours is scant (Voica et al., 2021). Furthermore, to our knowledge, this is the first study to investigate these specific constructs among emerging adults in Aotearoa New Zealand. As a result, the current study adds to the literature by investigating how positive psychological and behavioural constructs can influence eating behaviours; highlighting the potential benefits of integrating self-compassion and intuitive eating in the prevention and treatment of disordered eating among emerging adults in the unique cultural landscape of Aotearoa New Zealand.

Central to this project was the decision to investigate a weight-neutral eating style and omit any measures of body-weight in order to move away from weight-normative conceptions of health and reduce the perpetuation of weight-stigma. The consequences of weight-stigma are severe, perpetuating discrimination and racism against cultures with different body ideals to the Western “thin-ideal” (e.g., Māori; [Rochford, 2004](#); [Warbrick et al., 2016, 2019](#)). It is essential that we as a society begin to change the way in which we view bodies and conceptualise health in Aotearoa New Zealand. A paradigm shift is necessary in order to satisfy basic human rights and importantly meet the principles of partnership, participation and protection set out by Te Tiriti o Waitangi. We hope that this initial project can contribute to the nascent efforts to realise this more equitable, fair, and kind future for emerging adults in Aotearoa New Zealand.

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## Appendices

### Appendix A. Survey

#### Section 1: Screening and Demographics

What is your current age?

- under 18
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- over 25

Do you live in New Zealand?

- Yes
- No

Are you fluent in English?

- Yes
- No

Which ethnic group(s) do you identify with?

- New Zealand European
- Māori
- Samoan
- Cook Islands Māori
- Tongan
- Niuean
- Chinese
- Indian
- Other (Please specify)

What is your gender?

Section 2: Survey

**HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES**

Please read each statement carefully before answering. Indicate how often you behave in the stated manner, using the following scale:

	Almost never 1	2	3	4	Almost always 5
When I fail at something important to me I become consumed by feelings of inadequacy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to be understanding and patient towards those aspects of my personality I don't like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When something painful happens I try to take a balanced view of the situation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm feeling down, I tend to feel like most other people are probably happier than I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Almost never 1	2	3	4	Almost always 5
I try to see my failings as part of the human condition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm going through a very hard time, I give myself the caring and tenderness I need.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When something upsets me I try to keep my emotions in balance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I fail at something that's important to me, I tend to feel alone in my failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Almost never 1	2	3	4	Almost always 5
When I'm feeling down I tend to obsess and fixate on everything that's wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm disapproving and judgmental about my own flaws and inadequacies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm intolerant and impatient towards those aspects of my personality I don't like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For each item, please check the answer that best characterizes your attitudes or behaviors.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I try to avoid certain foods high in fat, carbohydrates, or calories.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have forbidden foods that I don't allow myself to eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get mad at myself for eating something unhealthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I am craving a certain food, I allow myself to have it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I allow myself to eat what food I desire at the moment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do NOT follow eating rules or dieting plans that dictate what, when, and/or how much to eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I find myself eating when I'm feeling emotional (e.g., anxious, depressed, sad), even when I'm not physically hungry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find myself eating when I am lonely, even when I'm not physically hungry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use food to help me soothe my negative emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find myself eating when I am stressed out, even when I'm not physically hungry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to cope with my negative emotions (e.g., anxiety, sadness) without turning to food for comfort.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am bored, I do NOT eat just for something to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
When I am lonely, I do NOT turn to food for comfort.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find other ways to cope with stress and anxiety than by eating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust my body to tell me when to eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust my body to tell me what to eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust my body to tell me how much to eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rely on my hunger signals to tell me when to eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I rely on my fullness (satiety) signals to tell me when to stop eating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust my body to tell me when to stop eating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most of the time, I desire to eat nutritious foods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I mostly eat foods that make my body perform efficiently (well).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I mostly eat foods that give my body energy and stamina.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To show that you are paying attention, please select “Strongly Agree”



	Never	Rarely	Sometimes	Often	Usually	Always
Take longer than others to eat my meals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoid foods with sugar in them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eat diet foods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feel that food controls my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Display self-control around food.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feel that others pressure me to eat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Give too much time and thought to food.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Never	Rarely	Sometimes	Often	Usually	Always
Feel uncomfortable after eating sweets.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engage in dieting behavior.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Like my stomach to be empty.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have the impulse to vomit after meals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enjoy trying new rich foods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Support Lines

**Thank you for participating in our study!**

If any parts of the survey have caused you distress, you are encouraged to contact the following free support lines:

General mental health support:

- Text 1737 or call 0800 1737 1737 anytime
- Youthline: [www.youthline.co.nz](http://www.youthline.co.nz) (Free phone 0800 376 633) or visit your local centre for youth

Eating Disorder Services:

- Eating Disorder Association of New Zealand: 0800 2 EDANZ or (09)5222679

### Prize Draw and Results

As a thank you for your participation, would you like to be entered in a prize draw for **one of ten \$40 gift vouchers**?

- Yes  
 No

When this study is complete, would you like us to email you a **brief summary of the results**?

- Yes  
 No

### Contact Information

Please provide your email address below:

We thank you for your time spent taking this survey.

Your response has been recorded.

**Appendix B. Assistance Request Email Template**

MASSEY UNIVERSITY  
COLLEGE OF HUMANITIES  
AND SOCIAL SCIENCES  
TE KURA PŪKENGĀ TANGATA

To the [name of department] Department at [name of tertiary institution],

Date

Kia ora,

RE: Master of Arts (Psychology) Research Project

My name is Carly Owen and I am currently completing a Master of Arts (Psychology) Degree under the supervision of Dr. Ilana Seager van Dyk, Senior Lecturer in Clinical Psychology at Te Kunenga ki Pūrehuroa, Massey University. The title of my research project is: *Does being kind to yourself affect your relationship with food?* I am contacting you as I would appreciate your help in recruiting participants for my research project.

I am looking for young adults (18-25 years) in New Zealand who would be willing to complete an anonymous online survey that will take approximately 20-minutes. The survey includes a few demographic questions as well as questions that will measure self-compassion, intuitive eating and eating distress. A detailed information sheet is attached for your review.

I am wondering whether you would be willing to contact your students via email/stream site to give them an opportunity to take part in this study with the advertising email and/or flyer attached.

If you are interested and willing to help us with participant recruitment, please let us know and we will provide any other information you see fit.

**Research contacts:**

Carly Owen - Researcher

Dr Ilana Seager van Dyk - Supervisor

Email: [Carly.owen.2@uni.massey.ac.nz](mailto:Carly.owen.2@uni.massey.ac.nz)

Email: [I.seagervanDyk@massey.ac.nz](mailto:I.seagervanDyk@massey.ac.nz)

Thank you for your consideration – I look forward to hearing back from you.

Ngā mihi nui,

Carly Owen

*This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 22/27. If you have any concerns about the conduct of this research, please contact A/Prof Fiona Te Momo, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800, x 43347, email [humanethicsnorth@massey.ac.nz](mailto:humanethicsnorth@massey.ac.nz).*

**Appendix C. Advertising Flyer**

**PARTICIPANTS  
NEEDED!**

We are conducting a study on how being kind to yourself might affect your relationship with food.

**ARE YOU:**

- Between the ages of 18-25 years?
- Living in New Zealand?
- Fluent in English?

If you said yes to all of the questions above, you are invited to take part in this study by completing a brief online survey!

**For more information:**

Visit [tinyurl.com/2022YASurvey](https://tinyurl.com/2022YASurvey); or scan the QR code provided



RESEARCHER: CARLY OWEN CARLY.OWEN.2@UNI.MASSEY.AC.NZ  
SUPERVISOR: DR. ILANA SEAGER VAN DYK I.SEAGERVANDYK@MASSEY.AC.NZ  
ETHICAL APPROVAL GIVEN BY MASSEY UNIVERSITY HUMAN ETHICS COMMITTEE

## Appendix D. Information Sheet

### Does being kind to yourself affect your relationship with food?

#### Information Sheet

##### Who is doing this research?

Kia Ora, my name is Carly Owen and I am from Te Whanganui-a-Tara, Wellington. I am conducting a study as part of a Master of Arts in Psychology at Te Kunenga ki Pūrehuroa, Massey University. My research is supervised by Dr. Ilana Seager van Dyk, Senior Lecturer in Clinical Psychology at Te Kunenga ki Pūrehuroa, Massey University.

##### What is this research about?

For a while now I have been interested in the concept of intuitive eating (a non-diet approach that encourages listening to your internal body cues to guide food choices) and its potential in reducing eating distress. In particular, I would be interested in investigating how particular individual factors may facilitate intuitive eating and reduce eating distress. Self-compassion has shown promise in enhancing several facets of wellbeing. Interestingly, research has suggested that self-compassion may be an important tool to foster adaptive eating behaviours. The aim of this research project is to explore how self-compassion or self-kindness may be related to intuitive eating and eating distress among young adults in New Zealand. Your contribution to this study will help us identify whether self-compassion may foster more adaptive eating behaviours, informing future interventions for young adults struggling with their relationship with food. Although your participation in this study would be valued, **it is at all times voluntary.**

**Participant eligibility**

You are eligible to participate in this study if you are:

- Between the ages of 18-25 years;
- Living in New Zealand; and
- Fluent in English.

**What will you be asked to do?**

You will be asked to fill out an anonymous survey, administered online that will take approximately 20 minutes. The survey will include a few demographic questions along with questions that will measure self-compassion, intuitive eating and maladaptive eating attitudes and behaviours. In each section of the survey, you will be provided with detailed instructions on how to answer the questions. All questions will be close-ended, where you will be required to select the answer that describes you best.

Although I do not expect any significant distress to be caused to you by your participation, some questions may be triggering. However, if any parts of the survey do cause you distress, you are encouraged to call the free support line 1737, contact *Youthline* at [www.youthline.co.nz](http://www.youthline.co.nz) (Free phone 0800 376 633), or drop-in to your local centre for youth. You can also contact Eating Disorder Association of New Zealand (Free phone 0800 2 EDANZ). Please note that no diagnoses can be made with this information.

The data collected will be used for research purposes and will be securely stored. Once the survey is completed you will be given the opportunity to enter a prize draw to win one of ten \$40 gift vouchers and indicate if you would like to receive a summary of the research

findings. If you wish to enter the draw and/or receive a summary of the research findings, anonymity will be maintained by using a separate survey to collect your contact details.

There is no link between the two data sets other than time and date.

Completion and the return of the questionnaire implies consent. You have the right to decline to answer any particular question.

Thank you for your time and consideration.

Ngā mihi,

Carly Owen

### **Contact Information**

If you have any questions or queries regarding this project, please do not hesitate to contact the following:

#### **Researcher**

Carly Owen

School of Psychology

Massey University Wellington

Email: Carly.owen.2@uni.massey.ac.nz

#### **Supervisor**

Ilana Seager van Dyk

School of Psychology

Massey University Wellington

Email: I.SeagervanDyk@massey.ac.nz



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### **Respondent Consent**

Thank you for participating in this questionnaire. Your participation implies consent. You have the right to decline to answer any particular question.

I have read and understood the information sheet for this study and consent to collection of my responses.

*(Please click on the 'Yes' choice if you wish to proceed)*

- Yes
- No