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Binge eating behaviours: Experiences associated with tertiary education.

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ABSTRACT.

Transitioning and adjusting to tertiary education is often a very challenging time for students. As a result of various personal, social, and academic pressures, many students develop maladaptive behaviours, such as binge eating behaviours, to cope with the stress and anxiety associated with tertiary education. In this qualitative study, I explored experiences of binge eating behaviours and tertiary education and how they impacted one another. The ways in which one views themselves, others, and tertiary education, as well as their subjective experiences of both binge eating behaviours and tertiary education, were also explored. Fifty-five participants completed a survey about their experiences of binge eating behaviours in the context of tertiary education. I analysed the survey responses using reflexive thematic analysis through a social constructionist theoretical lens. Two key themes and six subthemes were identified and explored within the data set. The two key themes were: The Interaction between Binge Eating and Emotional and Psychological States; and Contextual Factors that Impact Tertiary Education and Binge Eating Behaviours. Each theme highlighted the ways in which participants' experiences of tertiary education and binge eating behaviours were negatively impacted by the personal, academic, and social challenges associated with the transition and adjustment to tertiary-level study. Through each of the six subthemes, I explore how participants experienced a paradoxical cycle in which negative experiences further encouraged more negative experiences. This resulted in a cycle that had a considerable impact on their social, physical, and mental well-being. The findings also indicated that the ways in which an individual views their personal experience are strongly related to their own social and cultural understanding of the world. The implications of these findings include that tertiary institutions could develop strategies for better assisting their students in transitioning and adjusting to tertiary education, such as pre-transition and extended transition programmes, food education and food preparation classes, affordable and appealing healthy food in campus dining halls, and easily accessible and available psychological interventions to ensure student success.

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This thesis is dedicated to those who don't believe that they can make it through their first year of tertiary education. Those who don't believe they matter or belong. To those who don't believe they can try one more time. You can. You will survive.

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CHAPTER ONE: INTRODUCTION.

Growing up my family has always emphasized the value and experiences of tertiary education. I was always encouraged to study at the tertiary level from a young age, believing that it would provide me with more and better career opportunities, independence, and life-long memories. As a high school student, I watched my brother transition and adjust to, and complete tertiary education with what seemed to be with ease. I developed an idea of what tertiary education would be like from what I have seen and heard in film, social media, and from those around me who were still studying or who had already graduated. Therefore, I always assumed that this period would be the best time of my entire life. However, this did not prepare me for my own experience of tertiary education. In some way, my unrealistic expectations prepared me to fail in transitioning and adjusting due to how easy and smooth I thought my transitioning process would be. Rather than developing meaningful connections with others and enjoying my new independence, I ended up engaging in binge eating behaviours alone in my university accommodation feeling isolated, depressed, and guilty. The personal, academic, and social pressures I placed on myself and what I felt from others resulted in me developing a way of thinking in which if I did not immediately connect with someone, or understand a concept in one of my papers, I was a failure and that I was not good enough to attend university. I continuously tried to break this now vicious cycle, however, I was unable to control myself when I was alone in my room, all I could do was compare myself to students immediately around and within the vicinity of myself. Was I the only one experiencing this? How is everyone coping so well with adjusting? Am I the failure?

The transition and adjustment to tertiary education can be defined as a common, yet challenging and vulnerable process in which one is removed from their familiar and comfortable surroundings to one that is full of the unknown and unfamiliar (Urquhart & Pooley, 2007). With this, students may face challenges with varying levels of difficulties, and as a result, students may require different types of support to overcome the obstacles associated with tertiary education (O'Shea, 2008). This suggests that the transition and adjustment to tertiary education is complex, non-linear,

and an individually based experience (Gravett & Winstone, 2019; Jindal-Snape & Rienties, 2016; Taylor & Harris-Evans, 2018; Thompson et al., 2021). It is also evident that these experiences provide students with various potential challenges, which can impact groups of students more than others (Coertjens et al., 2017; Gale & Parker, 2012; Thompson et al., 2021; Bowman, 2010). As a result, these experiences can have a considerable impact on student mental and overall well-being.

Many students may also struggle in adjusting to the social, cultural, and academic environments that are associated with tertiary education (Farris, 2010; Kural & Ozyurt, 2021; Briggs et al., 2012; Thuo & Edda, 2017; Longwell-Grice & Longwell-Grice, 2008; Huon & Sankey, 2002; Urquhart & Pooley, 2007; Mersha et al., 2013; Malau-Aduli et al., 2021). From this, it can be suggested that the transition and adjustment to tertiary education does not only occur within classroom settings and within the first few days of beginning tertiary education. Rather, this period is a long-lasting and unique experience for each individual, which heavily impacts their own social and cultural understandings of the world around them and therefore, students require long-term support from those around them (Goldring et al., 2018; O'Shea, 2008; Rahat & Ilhan, 2016; Kural & Ozyurt, 2021).

As a result of leaving home for the first time, social and academic pressures, and being responsible for their own food choices, many tertiary education students are vulnerable to the onset and exacerbation of mental and behavioural disorders at this time (Harrer et al., 2020; Tavoracci et al., 2021a, 2021b; Auerbach et al., 2018). In addition, the time spent at tertiary institutions is known to coincide with the typical age onset of eating disorders and disordered eating behaviours, such as binge eating (Harrer et al., 2020; Tavoracci et al., 2021a, 2021b; Tavoracci et al., 2015). Characterised by recurrent episodes of consuming large amounts of food until feeling uncomfortably full and immense distress, binge eating behaviours are becoming increasingly prevalent in tertiary education settings (Harrer et al., 2020; Solly et al., 2021).

Experiences of binge eating behaviours and tertiary education are subjective; they depend on one's sociocultural context and understanding of the world around them (Gravett & Winstone,

2019; Jindal-Snape & Rienties, 2016; Taylor & Harris-Evans, 2018; Thompson et al., 2021). More specifically, each individual has distinctive demographic, social, and subjective psychological needs, values, and beliefs, which contribute to differing experiences (Hochberg & Konner, 2020). Therefore, it is essential to gain insight into and understand these experiences as it will provide researchers and psychologists with a more generalised and overall understanding of the impact of tertiary education on individuals' well-being, and help in the establishment and improvement of support services for those struggling with disordered eating behaviours, particularly tertiary students. However, little is known about the experiences of binge eating behaviours and tertiary education within an Aotearoa New Zealand context, as there is little to no previous literature regarding these experiences. It is important to understand these experiences from an Aotearoa New Zealand context. There are likely to be differences in cultural beliefs and practices among (and between) countries, which in turn likely impact binge eating behaviours (Rodgers et al., 2018; Cunningham et al., 2018; Harris et al., 2006; Lacey et al., 2020).

From my own experience and the gap in the current literature, I became inspired to carry out this research. This research is an exploratory qualitative investigation into people's experiences of binge eating behaviours associated with experiences of tertiary education.

The following chapter considers the experience of transitioning and adjusting to tertiary education, providing a review of the literature. Binge eating behaviours are then considered within various contexts, such as an eating disorder, a disordered eating behaviour, and then as a maladaptive coping mechanism associated with the challenges of tertiary education. Chapter 3 moves on to outline the research methods for the current study, such as the participants, procedures, theoretical framework, reflexivity, and ethical considerations considered. Then, the findings from the thematic analysis are illustrated in chapter 4, with the implications and research conclusions discussed subsequently in chapter 5.

CHAPTER TWO: LITERATURE REVIEW.

This chapter sets the stage for the thesis by reviewing the current literature associated with binge eating behaviours and experiences of tertiary education. In this review, I will explore the subjective experience of tertiary education, with a focus on how expectations, support, involvement, learning, and feedback contribute to the transition and adjustment period students face when beginning their tertiary level study. Next, I will explore the impact of COVID-19 and associated measures on tertiary education in the context of student experiences. Following this, a review of the literature on disordered eating at both clinical and sub-clinical levels will illustrate the ways in which disordered eating behaviours, particularly binge eating behaviours, have impacted student experiences of tertiary education and how negative experiences of binge eating behaviours have been exacerbated by the pandemic. I will explore disordered eating and binge eating stigma to unpack the ways in which modern-day Western society stigmatizes individuals and how readers and researchers can assist in destigmatising binge eating behaviours. Lastly, I will outline recent literature in relation to Aotearoa New Zealand (NZ) to illustrate the lack of studies that specifically explore binge eating in the context of tertiary education, creating space for this study.

2.1 The Subjective Experience of Tertiary Education.

2.1.1 The Student Experience: A Period of Transition and Adjustment.

Individuals' lives are typically altered during new experiences and changes, otherwise known as life transitions. Every year across the globe, millions of students transition and adjust to tertiary education, which can be broadly defined as any level of education taken beyond secondary school (New Zealand Qualifications Authority [NZQA], 2022; Thuo & Edda, 2017). The definitions and NZ-based examples of the types of tertiary institutions are summarized in Table 1.

The term 'transition' in tertiary education settings has been referred to as "a period of significant adjustment, development and change which requires significant adaptation on the part of the student" (O'Shea, 2008, p. 15). The first year of the tertiary student experience is the foundation

of a students' success in tertiary education, in which academic and social skills are established and built (Thuo & Edda, 2017). However, according to Briggs et al. (2012) the transition and adjustment to tertiary education may cause students to struggle adapting to campus life as they experience transformational changes and social displacement. As a result, first-year tertiary students experience elevated levels of anxieties, and difficulties in relation to their psychological, social, and academic environment (Thuo & Edda, 2017; Longwell-Grice & Longwell-Grice, 2008; Huon & Sankey, 2002). As well as this, due to unrealistic expectations associated with the transition period of tertiary education, the withdrawal rate of students is increasingly growing (Thuo & Edda, 2017).

The majority of students attending tertiary education are defined as emerging adults; a developmental life-stage that occurs between adolescence and fully-fledged adulthood, or between the ages of 18 and 25 years (Arnett, 2000, 2010). In other words, emerging adulthood is a period of transition involving immense change in which individuals are highly vulnerable to societal, personal, and familial pressures (Jones 2017; Brooks, 2002, 2003, 2004). Within Western society, attending tertiary education is a core milestone and a significant life adjustment for many emerging adults, and a time when they become financially independent while training or studying beyond secondary education (Hochberg & Konner, 2020; Buote, 2006; Sevinç & Gizir, 2014; Lütke et al., 2011; Briggs et al., 2012; Kwok et al., 2016).

However, not all students who attend tertiary education are emerging adults. There is a considerable proportion of students who can be defined as mature students, or students who are accepted into tertiary courses when they are over the age of 21 years (Richardson, 1994). Within Western society, this life-stage is most apparent in tertiary institutions where they have either had a change in careers or they were never able to study previously for various reasons. Despite being considerably older than emerging adults, mature students still experience a period of transition and adjustment to tertiary education due to concerns regarding academic experience, family commitments, financial concerns, and poor social integration with other students (Baik et al., 2015; Malau-Aduli et al., 2021).

It is essential to explore the subjective experiences of both emerging adults and mature students within tertiary education settings as they both consist of distinctive demographic, social, and subjective psychological needs, values, beliefs, and therefore, differing experiences (Hochberg & Konner, 2020). Understanding experiences from both groups will allow for a more generalised and overall understanding of the impact tertiary education has on an individual's well-being, regardless of their age.

Although it appears that attending and graduating from tertiary education has become a common developmental step in Western society, this period of transition has been characterised by significant challenges and stresses for individuals as they attempt to meet the personal demands of their new academic and social environment (Wu et al., 2015; Kural & Ozyurt, 2021; Lipka et al., 2020; Berzonsky & Kuk, 2000; D'Augelli & Jay, 1991; Dyson & Renk, 2006; Erikson, 1968; Jackson, 2008; Lau, 2003; Tuna, 2003; Sevinç & Gizir, 2014). In other words, students are required to learn to cope with various challenges associated with tertiary education life and take actions to integrate into their new academic and social world, establish new friendships, meet academic demands, take responsibility in their personal lives, become more independent, and make long-term career choices (Aladağ, 2009; Duchesne et al., 2007; Pittman & Richmond, 2008; Tuna, 2003; Sevinç & Gizir, 2014; Kwok et al., 2016).

Overall, Urquhart & Pooley (2007) suggested five factors that affects students transition and adjustment to tertiary education: (1) difficulties adjusting to a new academic environment where students may struggle taking responsibility for their own education; (2) challenges in adjusting to the academic workload where students may feel overwhelmed by the amount of work required; (3) financial concerns due to little to no budgeting skills; (4) challenges with time management and allocating time to the demands of everyday life such as friends, family, work and study; and (5) difficulties dealing with the vast set of emotions associated with transitioning and adjusting to tertiary education, such as excitement and nervousness (Mersha et al., 2013; Thuo & Edda, 2017).

While a large portion of tertiary students are able to cope with these transitional challenges and adjust to the student lifestyle relatively seamlessly, many also feel overwhelmed and experience various transitional and adjustment problems (Bernier et al., 2005; Gerdes & Mallinckrodt, 1994; Kuh, 2005; Upcraft & Gardner, 1989) that lead them to withdraw from their tertiary studies (Buote et al., 2007; Estrada et al., 2005; McGrath & Braunstein, 1997; Pascarella & Terenzini, 1980; Robbins et al., 1993; Sevinç & Gizir, 2014; McInnis, 2001). Further, Urquhart & Pooley (2007) suggested that as tertiary students make sense of their new academic, social, and personal environments, they are often forced to experience events that are unfamiliar, leaving them feeling vulnerable.

According to Farris (2010), difficulties when adjusting to tertiary education refer to the hurdles that students may face such as being away from their family and making friends, with one in three students experiencing these difficulties (Kural & Ozyurt, 2021). O'Shea (2008) also suggested that transition involves the reflection of the university experiences regarding events inside and outside of the classroom, the structure of courses, and the social and academic interactions with other students. With this, it is crucial to understand that the transition period for students first attending university is a unique experience for each individual, which is heavily impacted by their own social and cultural understandings of the world around them (Rahat & Ilhan, 2016; Kural & Ozyurt, 2021).

Tinto (2009) identified five conditions that should be explored when assessing students' transition and adjustment to tertiary education: expectations, support, feedback, involvement, and learning. Malau-Aduli et al. (2021) suggested that these domains are inter-related. In other words, a students' experience of academic difficulties can be impacted by their social networks and emotion regulation abilities (Brooker & Lawrence, 2012; Fergus & Zimmerman, 2005; Baker & Siryk, 1984, 1986). Thuo & Edda (2017) additionally concluded that students experienced stressful events that persisted throughout the academic year. This suggests that the transition and adjustment to tertiary education does not occur in only the first few days; instead, this period is long-lasting and therefore, students require long-term support from those around them (Goldring et al., 2018). Below, these

five conditions are briefly summarized before moving onto the subjective experiences of tertiary students in relation to the coronavirus pandemic.

2.1.1.1 Learning and Feedback.

A student's ability to cope with educational demands, such as motivation, performance, and effort regarding studying, completing assignments, and taking examinations, are related to the degree to which they are provided with environments that promote learning and provide feedback (Malau-Aduli et al., 2021). More specifically, learning at the tertiary level is often identified as a spectator sport in which a student very rarely participates during a teachers lecture. As a result, students often experience learning as isolating, where their learning is disconnected from that of others (Tinto, 2009). As well as this, feedback regarding a student's learning is often not used to promote student success in the academic environment. Rather, it is usually only collected for institutional purposes and therefore does not provide support to students (Tinto, 2009).

Transition and adjustment to tertiary education can be negatively impacted by students' lack of motivation for learning and poor self-regulation (Vanthournout et al., 2012). In other words, a student must be able to assess their current academic situation and establish actions to be carried out to either continue or improve their academic performance (Martens & Metzger, 2016; Gomez et al., 2022). Further, O'Shea (2008) argues that difficulties with academic learning during the transition and adjustment to tertiary education could be due to difficulties understanding course work, receiving poor results on assignments, and excessive time commitments.

Students are often overwhelmed and unhappy regarding the workload of tertiary education and their academic performance (Thuo & Edda, 2017; Gomez et al., 2022). Gomez et al. (2022) concluded from their study that students successfully transitioned and adjusted to university regarding academics when students adapted to the learning environment through new study techniques, better time management, and problem-solving skills. This suggests that students may believe that they are unprepared for and fearful of the academic demands associated with tertiary

education, hindering the transition and adjustment process, which can lead to students to withdraw from their courses (Gomez et al., 2022).

2.1.1.2 Expectations.

Students' expectations about the tertiary institution, peer interaction, and complexity of the content plays an essential role in the transition and adjustment of students in tertiary education settings (Borghi et al., 2016; Ferrão & Almeida, 2021; Thuo & Edda, 2017; Gomez et al., 2022). It has been suggested that failure to transition and adjust successfully regarding academic and social expectations are often due to a mismatch between unrealistic expectations and reality of the tertiary education experience (Briggs et al., 2012; Hodgson et al., 2011; Gomez et al., 2022). McGhie (2016) argued that students who have successfully transitioned to tertiary education are knowledgeable about what tertiary study entails and therefore have more realistic expectations when they first begin studying (Gomez et al., 2022). Unrealistic expectations regarding the transition and adjustment to tertiary education may be explained by a lack of, or poor-quality, information provided to students from their different support groups such as their family and friends (Guzmán et al., 2021).

Further, Van der Zanden et al. (2018) argued that students in their first year of tertiary study experience a double transition, one in which they personally transition into adulthood and another in which they experience a professional identity transformation where they develop individual responsibility and independent decision-making. Thus, suggesting that first-year students experience an even more challenging transition process (Gomez et al., 2022). Multiple studies have suggested that various expectations posed as challenges for students, therefore adversely influencing their transition to tertiary education. These included: higher-than-expected academic demands (Briggs et al., 2012); lack of self-motivation and self-regulation (Martens & Metzger, 2016; Vanthournout et al., 2012; Gomez et al., 2022); higher-than-expected personal demands (Gomez et al., 2022); time

management (Gomez et al., 2022); and the student's social and family context (Rucks-Ahidiana & Hare Bork, 2020; Schwartz et al., 2017).

2.1.1.3 Support and Involvement.

During the transition and adjustment to tertiary education, support is an essential condition that students require to successfully integrate into their new environment (Thuo & Edda, 2017; Goldring et al., 2018; Money et al., 2017). O'Shea (2008) argued that tertiary students face challenges with varying levels of difficulties, and as a result, students may require different types of support to overcome the obstacles associated with tertiary education. For example, Maylee and Sarigiani (2006) concluded that positive parental support is associated with their child's successful transition and adjustment to the new academic and social environment. More specifically, providing emotional as well as functional and financial support, allowing autonomy, teaching life-skills, and providing academic and social readiness positively influenced students' transition to tertiary education settings (Maylee & Sarigiani, 2006).

Clark and Hall (2010) suggested that successful transition and adjustment to tertiary education is because of positive academic and social integration and support. More specifically, academic integration involves students' enjoyment, involvement, and progress with academic norms and values associated with their studies. As well as this, social integration involves students having a circle of friends, well established interpersonal relationships, and the successful bonding with other students and academic staff (Clark & Hall, 2010; Malau-Aduli et al., 2021). Further, Goldring et al. (2018) suggested that academic and social integration provided students with a sense of belonging in tertiary education settings, and therefore, positively impacted their level of commitment and connection to the new environment. Similarly, O'Shea (2008) suggested that a lack of student integration regarding academics and interpersonal relationships was linked to negative impacts on students' level of commitment and connection to the tertiary education setting. Therefore, the way

in which a student integrates into their new academic and social environment heavily influences their ability to successfully transition and adjust to tertiary education (Thuó & Edda, 2017).

Seen in this way, a successful transition and adjustment to tertiary education is not solely measured through academic outcomes such as grades or persistence, it is also measured through students' unique sociocultural experiences, values, and beliefs (Gomez et al., 2022). Therefore, the experience of tertiary education is subjective and dependent on each individual. The next subsection will now explore the subjective student experience in tertiary education settings regarding the coronavirus pandemic.

2.1.2 The Impact of COVID-19 on Tertiary Education.

On the 11th of March 2020, the World Health Organisation (WHO) declared the acute respiratory virus, coronavirus 2 (SARS-CoV-2), or COVID-19, as a global pandemic (WHO, 2020; Pather et al., 2020; Cucinotta & Vanelli, 2020). By the 25th March 2020, Aotearoa New Zealand as a whole was moved into a restricted lockdown period, restricting travel movements, social gatherings, and the operations of education institutions, businesses, and non-essential facilities were ceased immediately (Cameron et al., 2022).

Tertiary education institutions and students were considerably affected by COVID-19 and the associated lockdown restrictions (Cameron et al., 2022). Within New Zealand, the attempt to “go hard and go early” in regard to overcoming and limiting the spread and impact of the virus (Cumming, 2022; Rajan, 2022; Officer et al., 2022) resulted in the establishment of and decision to move into Alert levels 3 and 4, which occurred within weeks of the academic year commencing. Tertiary institutions were only given 48 hours' notice to shift from a purely face-to-face method of teaching to one that was solely based online (Cameron et al., 2022) and as a result, assessments such as tests, examinations and laboratory sessions were cancelled and replaced with online equivalent assessments, meaning that both teachers and students had to adapt to an unknown learning and assessment environment (Cameron et al., 2022). The rapid shift to online learning in

addition to the disruption of an individual's social and academic life caused considerable distress for tertiary students. Tertiary education students were faced with an unprecedented time not knowing how the lockdown restrictions would impact their education despite universities assuring students that individual academic grades would not be adversely affected by the pandemic with the use of impaired performance grades (University of Waikato, 2020; Owen, 2020; Wiltshire, 2020; Cameron et al., 2022).

Within New Zealand, several studies have been carried out to investigate the impacts of the pandemic on tertiary students. Akuhata-Huntington (2020) investigated the experiences of Māori tertiary students and concluded that there were various issues students faced, such as access and availability of technology, increased financial stress, difficulties exercising, and increased experiences of disconnection, sadness, and isolation, which affected their mental health and well-being during lockdown periods. However, Akuhata-Huntington (2020) noted that these experiences may not be isolated in the context of the pandemic alone, but systemic inequities faced by Māori students in New Zealand may have played a considerable role in these experiences. Cameron et al. (2022) concluded that the largest impact on New Zealand tertiary students was the cancellation of face-to-face classes, and the commencement of synchronous or asynchronous online classes. More specifically, students described difficulties concentrating, larger workloads, decreased academic performance, and negative affect resulting in emotional distress (Cameron et al., 2022).

The body of international literature surrounding the experiences of tertiary education during the pandemic is rapidly growing. In particular, studies in China, Switzerland, the United States, Malaysia, Ghana, Greece, and Spain highlighted that the experiences of the pandemic and tertiary education contributed to negative impacts on students' mental health, financial and food security, and academic learning and performance (Cao et al., 2020; Elmer et al., 2020; Paredes et al., 2021; Perz et al., 2020; Sundarasan et al., 2020; Owens et al., 2020; Owusu-Fordjour et al., 2020; Kamarianos et al., 2020; Gonzalez et al., 2020). Aristovnik et al. (2020) concluded from a meta-analysis of 30,000 students from 62 countries that tertiary education students appeared satisfied

with the support and education received from teaching staff. However, these students also felt as though their workload had increased and had concerns regarding future studying issues, their mental well-being, and their future career opportunities (Aristovnik et al., 2020). It is important to understand the ways in which the experiences of tertiary education were impacted by the COVID-19 pandemic and the associated restrictions as it will not only help improve the outcomes for future pandemics or disruptions such as natural disasters (Jain et al., 2018; Dohaney et al., 2020), but also highlight how pandemics impact students and their experiences in their social worlds.

2.1.3 The Impact of Tertiary Education on Student Well-Being.

It is clear from previous literature that the transition and adjustment to tertiary education is complex, non-linear, and an individually based experience (Gravett & Winstone, 2019; Jindal-Snape & Rienties, 2016; Taylor & Harris-Evans, 2018; Thompson et al., 2021). It is also evident that these experiences provide students with various potential challenges, which can impact groups of students more than others (Coertjens et al., 2017; Gale & Parker, 2012; Thompson et al., 2021). As a result, these experiences can have a considerable impact on student mental and overall well-being.

Henning (2015) has suggested that tertiary students with better levels of well-being may be able to transition and adjust to tertiary education more easily. This highlights the idea that positive well-being is a crucial factor in the success of tertiary students in both the short and long-term (Bowman, 2010). Due to this, it is essential for researchers and tertiary institutions to understand the individual experiences of students and to prevent severe levels of psychological distress within the tertiary student population while promoting positive student well-being (Dodge et al., 2012; Stallman et al., 2018; Govender et al., 2019; Eloff et al., 2021).

It is important to note that these transition and adjustment challenges occur not only for first-year students, but also between different degree levels, such as undergraduate and postgraduate studies (Marais et al., 2018; Turner & Tobbell, 2018; Eloff et al., 2021). Therefore, it can be suggested that psychological distress in tertiary education students can occur when they first

enter tertiary study and continues to fluctuate throughout their academic career. However, Cooke et al. (2004) pointed out that these psychological distress levels may never return to pre-tertiary study levels.

Tertiary education is a time for “heightened psychological distress” (Bewick et al., 2010, p. 643), regardless of whether a student suffers from any mental illness or not. During this time, students face many complex environmental stressors and experiences that are both emotionally and psychologically challenging (Cushman & West, 2006; Carter & Anderson, 2019; Eloff et al., 2021). As such, heightened stress levels are as a result of work overload, and factors relating to work and personal relationships such as unrealistic expectations of tertiary education, loneliness, lack of social and emotional support, academic burnout, balancing part-time employment and full-time study, and societal and familial pressures (Mokgele & Rothmann, 2014; Richardson et al., 2017; Cushman & West, 2006; Eloff et al., 2021; Diehl et al., 2018; Schlossberg et al., 1995; Wheaton, 1990; Wong et al., 2018; Brooks, 2015; Burns, 2021; Awang et al., 2014; Ferriter & Ray, 2011; Kaplan & Geoffroy, 1993). More specifically, Oades et al. (2011) has argued that the high striving environment of tertiary education promotes students to neglect social interactions, emphasise grades over learning, engage in excessive study hours and develop maladaptive behaviours that decrease overall well-being in both the short and long-term, such as drug use, inadequate sleep and disordered eating (Eloff et al., 2021; Giannopoulou et al., 2020).

This thesis is focused on binge eating behaviours, a type of disordered eating behaviour. As such, the next section of this literature review will explore disordered eating, the differences in and characteristics of clinical and sub-clinical forms of disordered eating behaviours, and prevalence. Finally, I will explore binge eating behaviours and the impacts these behaviours have on tertiary students.

2.2 Disordered Eating.

2.2.1 *The Distinction Between Eating Disorders and Disordered Eating Behaviours.*

While often used interchangeably to describe abnormal eating behaviours, eating disorders (EDs) and disordered eating behaviours (DEBs) differ slightly due to varying levels of severity (Jalali-Farahani et al., 2015; Wu et al., 2019). Despite this, severity does not always indicate a diagnosis as many with severe EDs are not diagnosed due to barriers to care and stigma. EDs are defined as maladaptive behavioural conditions and are characterised by severe and persistent disturbances in eating behaviours, which affect an individual's physical, psychological, and social functions (American Psychiatric Association [APA], 2021; Brelet et al., 2021).

In clinical settings, the most recent publication of the Diagnostic Statistical Manual of Mental Disorders (fifth edition [DSM-5]; APA, 2013), is used to diagnose individuals with EDs and defines five categories of EDs; anorexia nervosa (AN); bulimia nervosa (BN); binge eating disorder (BED); other specified feeding and eating disorder (OSFED); and avoidant restrictive food intake disorder (ARFID). Within these disorders, there are various maladaptive eating behaviours that characterise each diagnosis, which include non-compensatory behaviours such as dietary restriction, and binge eating; and compensatory behaviours such as self-induced vomiting, excessive exercise, and the use of diuretics and laxatives (Pirodda et al., 2019).

DEBs are defined by the same characteristics as EDs, but these maladaptive eating behaviours occur less frequently or at a lower level of severity and therefore do not meet the diagnostic criteria for an ED (APA, 2013; Pirodda et al., 2019). As a result, these behaviours are often overlooked and not viewed to be as severe as EDs despite the prevalence of these behaviours being considerably high in general and clinical populations (Qian et al., 2022; Duncan et al., 2017).

2.2.2 Characteristics and Prevalence of Eating Disorders and Disordered Eating Behaviours.

2.2.2.1 Characteristics: Eating Disorders.

There are various characteristics that define EDs and DEBs. More specifically, the characteristics of each ED stems from the DSM-5 diagnostic criteria for each ED. As this thesis does not focus on clinical diagnoses of EDs, and only focuses on BE as a DEB, the purpose of this subsection is to illustrate the range of behaviours currently accounted for in the diagnostic criteria for feeding and EDs. A detailed summary of the defining characteristics and differences between each ED is presented in Table 2.

EDs are not static psychological disorders, they change with the individual over time depending on the events and changes within an individual's biological and environmental context. For that reason, it can be suggested that EDs and DEBs are neither entirely independent of one another nor entirely overlapping conditions (Tozzi et al., 2005; Bulik et al., 1997; Eddy et al., 2002; Strober et al., 1997; Strober et al., 2000; Lilenfeld et al., 1998). This may be due to the idea that EDs and DEBs are diverse (Carr & Grillo, 2020) in symptoms and behaviours, which are based on two main fears: fear of food and fear of weight gain (Steinglass et al., 2012; Levinson et al., 2020; Brown & Levinson, 2022). Individuals may engage in DEBs that crossover between ED diagnoses and this may vary over time based on an individual's personal experience. Therefore, it is crucial to understand the different diagnoses and DEBs due to diagnostic crossover and the changes of behaviour between individuals over time in addition to the diagnostic criteria themselves.

2.2.2.2 Characteristics: Disordered Eating Behaviours.

Clinical and general literature has established three categories of DEBs: restrictive behaviours, bingeing behaviours, and compensatory behaviours. Although literature on these behaviours as DEBs alone is sparse, particularly in regards to prevalence, it is important to highlight what is understood currently and what information is missing in order to understand how these

DEBs impact individuals and their experiences in their social worlds. For the remainder of this subsection, the defining characteristics of each DEB will be outlined.

Restrictive Behaviours. Restrictive eating behaviours (REBs) are defined by Lowe et al. (2007), and Schaumber et al. (2016) as maladaptive eating behaviours with the purpose of limiting caloric and nutrient consumption that is inadequate for weight management and health in the long term. REBs include fasting, skipping meals, refusing to eat specific foods, and choosing to only eat low-calorie and low-fat foods (Haynos et al., 2016; Foerde et al., 2020) and is the central core feature of AN and a characteristic of many other EDs such as BN, BED, ARFID, and OSFED (APA, 2013).

Recent literature has debated the overall purpose of REBs and how REBs could be viewed. For example, Schebendach et al. (2008; 2019) and Steinglass et al. (2015) concluded that REBs can be viewed as an individual's dietary choice to minimise high-fat food intake, rather than the considerable reduction, or even absence of eating altogether (Foerde et al., 2020). This suggests that REBs can occur in individuals without EDs, as well as those with clinical and sub-clinical EDs involving REBs. As a result, REBs can lead to serious medical complications and psychosocial impairments such as significant weight loss, affected organ systems, negative affect, and even suicidality and mortality (APA, 2013; Fitzsimmons-Craft et al., 2015; Kennedy & Krive, 2017).

Bingeing Behaviours. Binge Eating (BE) Behaviours are defined as the consumption of a large amount of food within a short time period accompanied by feelings of loss of control over eating and followed by immense guilt and disgust (APA, 2013; Ince et al., 2021; Mina et al., 2021). Although these behaviours have been observed in individuals with BED, BN, and the binge eating/purging subtype of AN (Stice et al., 2017; Burton et al., 2016; Mina et al., 2021), they have also been observed in individuals without an ED diagnosis, such as those with experiences of obesity and emotional eating (Ince et al., 2021). As BE behaviours are the focus of this thesis, I will develop a more in-depth discussion of these behaviours in the section *Understanding Binge Eating Behaviours*.

Compensatory Behaviours. Compensatory eating behaviours (CEB) can be categorised into purging behaviours and non-purging behaviours with the purpose to counteract the effects of weight gain or to alleviate guilt associated with BE (Binford & Grange, 2005; Stiles-Shields et al., 2012). More specifically, purging behaviours are defined as maladaptive behaviours which discards the body of food and calories consumed in order to lose weight or to prevent weight gain (Stiles-Shields et al., 2012). Common purging behaviours include self-induced vomiting, and laxative and diuretic abuse (APA, 2013; Stiles-Shields et al., 2012). In comparison, non-purging behaviours are defined as maladaptive behaviours which prevent weight gain through other forms of compensatory behaviours that do not involve purging. Common non-purging behaviours include the use of diet pills, excessive exercise, and dietary restraint (APA, 2013; Stiles-Shields et al., 2012).

CEBs are common features of various EDs, such as AN and OSFED, and they are also one of the core features of BN (APA, 2013; Stiles-Shields et al., 2012). Although many individuals engage in CEBs after a BE episode, individuals with AN and BN often engage in these behaviours after the consumption of any amount of food. As a result, CEB can lead to serious medical complications and psychosocial impairments, which can include weight fluctuations, preoccupation with food, and body shape and weight, and suicidality (Mehler, 2011; Mitchell & Crow, 2006; Stiles-Shields et al., 2012).

2.2.2.3 Prevalence: Eating Disorders and Disordered Eating Behaviours.

Globally, it is estimated that over 3.3 million healthy life years are lost to ED-related disability (Global Burden of Disease, 2017; van Hoeken & Hoek, 2020). EDs are particularly debilitating and carry high impairment and societal costs, with the United States spending over \$64.7 billion on EDs, and 10,000 individuals prematurely dying from an ED between 2018 and 2019 alone (Deloitte Access Economics, 2020; Levinson et al., 2021). More specifically, EDs have the second highest rates of mortality among psychiatric illnesses, with 5-7% for individuals with AN and

2% for individuals with BN within the United States (Arcleus et al., 2011; Brown & Levinson, 2022; Levinson et al., 2022). Therefore, it is essential to understand how many individuals are impacted by EDs and DEBs in their everyday lives in order to establish the development and implementation of treatment and prevention methods within general, clinical, and student populations.

It is important to note that these mortality rates are only an estimate for individuals diagnosed with an ED, rather than those who experience a DEB or an ED without meeting diagnostic standards. Mortality and other prevalence rates are impacted by geographical location as there is a lack of surveillance data in many countries, and they are also impacted by the difficulties associated with assessing prevalence due to barriers to diagnosis, such as shame and stigma of EDs. Shame and stigma has particularly contributed to the underrepresentation of men, gender-diverse, and marginalised individuals in ED prevalence rates. Therefore, the reported mortality rates may not be exact.

It is apparent, from the literature, that EDs and DEBs are more prevalent than ever (Qian et al., 2022; Burton et al., 2022; Levinson et al., 2022; van Hoeken & Hoek, 2020). However, there are wide variations between studies in terms of population samples used, as well as the assessment and analysis methods used, which makes prevalence, and increases in prevalence, difficult to ascertain. Qian et al. (2022) concluded that the pooled lifetime and 12-month prevalence rates of any ED was 1.69% and 0.72%, respectively. Additionally, it was concluded that the lifetime prevalence rates of BED were higher in comparison to AN and BN (Qian et al., 2022). In regard to DEBs, Burton et al. (2022) concluded that BE behaviours were more prevalent in comparison to REBs and CEBs.

Although evidently prevalent within society, the incidence and prevalence rates of EDs and DEBs are likely to be increasingly higher than reported due to individuals being underdiagnosed as they have either not sought professional help or are not aware of their maladaptive eating behaviours. It has been suggested that the reason for this is as a result of Western society's increasing preference for the thin ideal and the immense stigma associated with EDs and DEBs (Brewis, 2014; Brewis et al., 2016; Brelet et al., 2021). As well as this, many individuals engage in

behaviours that would be classified as a maladaptive eating behaviour, but do not engage in these behaviours as frequently or as severely, therefore an individual may not classify themselves as someone who engages in DEBs. For the remainder of this subsection, the prevalence and presentation of DEBs and BE behaviours will be discussed in relation to age, ethnicity, and differing environmental contexts.

Age. Despite variations in symptoms, presentations, and prevalence rates, EDs affect people of all ages across the lifespan (Bulik, 2016; Huckins et al., 2022). However, as previously mentioned, the historical and continuing bias associated with EDs and DEBs have led to a focus on a specific presentation, such as adolescent girls and young adult women, and as a result, the literature surrounding life stages outside of this presentation is limited (Huckins et al., 2022).

Research has suggested that the most prevalent lifespan to develop an ED is during emerging or young adulthood, with ED onset peaking when individuals were in their early 20s and the majority of women experiencing an ED before the age of 25 years (Ward et al., 2019; Burton et al., 2022). In a study conducted in Australia, Burton et al. (2022) concluded that within a 22-month period, just less than half of the individuals aged 14 to 26 years engaged in at least one DEB on a regular basis. However, Ward et al. (2019) also noted that the level of relapse and continued ED prevalence in individuals older than 25 years also suggests that an individual can develop and maintain an ED at any age. This suggests that contributing factors such as self-esteem, body dissatisfaction, perfectionism, and social pressures for thinness remains apparent among individuals above the age of 50 (Heffernan, 1996; Hendricks & Testa, 2012; Henrich-Bek & Szymanski, 2017; Lande et al., 2019).

More specifically, BE behaviours have been reported to be rising in prevalence within emerging adulthood populations (Phillips et al., 2016). BE behaviours in emerging adult populations have a prevalence rate of up to 13% (Mustelin et al., 2017; Serra et al., 2020; Bianchi et al., 2021;

Goldschmidt et al., 2016), which suggests that individuals within this age group are particularly vulnerable to the development of BE behaviours.

Ethnicity. It is important to note that the majority of initial studies conducted to investigate BE behaviours used samples consisting of only White individuals. More recently, however, research has explored whether the experiences of BE behaviours vary across different ethnicities (Jennings et al., 2015; WHO, 2013; Lee et al., 2020; Lee et al., 2012; Nakai et al., 2014; Chen et al., 2019; Huckins et al., 2022; Qian et al., 2013; Galmiche et al., 2019). Unfortunately, the findings associated with ethnic differences in relation to BE behaviours have resulted in mixed conclusions due to the studies' definition of choice regarding BE behaviours, whether BE has been viewed as a behaviour or as a symptom, and the assessment tools used (Ivezaj et al., 2010; APA, 2013). These mixed conclusions in the prevalence rates of EDs and DEBs between various ethnicities may be a reflection of the historical biases of ED diagnoses as well as the cultural differences and environmental exposures between different groups of people.

In general, BE behaviours can be viewed as eating behaviours across a spectrum, in which one end represents BE behaviours as a socially acceptable behaviour, while the other end represents BE behaviours as a DEB (Jennings et al., 2015). Due to this, the ways in which one views themselves and their behaviours can vary depending on their sociocultural values and beliefs, as well as differences in environmental exposures (Cargo & Shisslak, 2003). More specifically, the differences between cultures regarding gender roles, particularly of women (Lancelot & Kaslow, 1994; Smolak & Murnen, 2001), body ideals (Dounchis et al., 2001), and the need for acculturation (Miller & Pumariega, 2001; Smolak & Striegel-Moore, 2001; Wildes et al., 2001), suggests that the prevalence of BE behaviours both in the form of EDs and DEBs vary from country to country (WHO, 2013; Cargo & Shisslak, 2003).

Overall, the prevalence of BE behaviours among various ethnicities is apparent; however, the ways in which they are represented varies considerably. This is due to the impact of historical

biases, sociocultural values and beliefs, and different environmental exposures on an individual and BE behaviours in general. In regards to individuals in Aotearoa New Zealand, the ways in which individuals and BE behaviours are viewed also vary, despite the very limited literature at this point in time. This will be discussed further in *The Subjective Experience of Binge Eating: New Zealand Tertiary Students*.

Differing Environmental Contexts: The Tertiary Education Environment. The majority of the literature previously discussed investigated samples of the general population. However, additional social, personal, and environmental pressures, such as academic requirements for university students may add additional stress to an individual's everyday life. As a result, they may be at a higher risk of developing DEB and eventually an ED if they engage in maladaptive eating behaviours to manage their stress.

In terms of university students, researchers from India has suggested that between 13% and 37.6% of tertiary students have experienced an ED (Iyer & Shriraam, 2021; Pengpid et al., 2015; Srinivasan et al., 1995), with a rare findings that men and women equally likely to develop an ED (Weltzin et al., 2005; Iyer & Shriraam, 2021). In comparison to this, in a study conducted in Malaysia, Chua et al. (2022) concluded that OSFED and ARFID were more prevalent in a population of tertiary students in comparison to AN, BN, and BED.

Regarding DEBs, prevalence rates for DEBs in university student populations have varied from 10.4% (Vijayalakshmi et al., 2018) to 31.0% (Barrack et al., 2019). More specifically, within a sample of Brazilian university students, de Matos et al. (2021) found that the prevalence rates of BE were considerably higher than CEBs and REBs. This sample was mostly made up of men but still indicated that these prevalence rates were higher among women than men, with BE being the most prevalent DEB. These results were also reflected in previous literature, which was based mostly in the United States and Australia (Ferreira & Veiga, 2008; Luce et al., 2008; White et al., 2011; Lipson & Sonnevile, 2017; Vitolo et al., 2006; Hay, 1998). As well as this, research carried out in the United

States and Canada concluded that considerably more than half of tertiary students engaged in BE behaviours (Keel et al., 2007; Barker & Galambos, 2007; Delinsky & Wilson, 2008), which suggests that BE behaviours are the most prevalent maladaptive eating behaviours among university students. This may reflect a combination of risk factors, such as emerging adults being a developmental life-stage which is vulnerable to the onset of depression and EDs, as well as the unique stressors associated with tertiary education (Kane et al., 2015).

2.2.3 Understanding Binge Eating Behaviours.

As previously mentioned, BE behaviours have been defined as the consumption of large amounts of food within a short time period (APA, 2013; Gan et al., 2018; Ince et al., 2021; Mina et al., 2021). Historically, BE as a symptom was first identified by Stunkard (1959), however, as a DEB, BE behaviours were not recognised until the most recent version of the DSM, DSM-5 under the Feeding and Eating Disorders Section (APA, 2013). As BE behaviours have been associated with noteworthy medical complications and psychosocial impairments, such as obesity, diabetes, cardiovascular disorders, anxiety, depression, and substance abuse (Sheehan & Herman, 2015; Kilpela et al., 2022; Kessler et al., 2013; Burton & Abbott, 2017), it is important to understand how these behaviours are established, maintained, and experienced in order to apply treatment and prevention methods to those most vulnerable.

2.2.3.1 What Constitutes a Binge?

BE is characterised by distinct episodes of rapid and excessive consumption of food, which is not necessarily driven by physiological hunger (Brownley et al., 2007; Davis et al., 2007; Mathes et al., 2009; APA, 2013). More specifically, individuals who carry out BE behaviours engage in the following behaviours: eating rapidly, eating until one uncomfortably full, eating while one is not hungry, eating alone due to embarrassment, and feeling disgusted or guilty with oneself once they have finished eating (APA, 2013; Gan et al., 2018). This consumption of food often results in

individuals consuming up to several thousand calories in one sitting, resulting in a feeling of lack of control as well as considerable psychological distress (APA, 2013; Apple & Agras, 2004; Gan et al., 2018; Heatherton & Baumeister, 1991; Brownley et al., 2007).

It is important to note that the experience of engaging in BE behaviours is subjective to each individual. As Apple and Agras described, binges exist “in the eye of the beholder” (2004, p. 45), in which the feeling of a lack of control associated with BE is based upon an individual’s external context, social experiences, and personal food rules in relation to the type, amount, and frequency of food consumption (Apple & Agras, 2004). After engaging in BE behaviours, an individual’s experience of physical and emotional discomfort is also dependent upon one’s perception of their experiences and breaking their food rules as well as the discomfort bought upon by physical fullness (Apple & Agras, 2004). This will be discussed further in *The Subjective Experience of Binge Eating: Aotearoa New Zealand Tertiary Students*.

2.2.3.2 What Causes Binge Eating Disorder and Binge Eating Behaviours?

Although many theories have been proposed to conceptualise BE, there is no single theory which explains this DEB perfectly. However, within these theoretical frameworks, the key factors associated with the development of BE behaviours include dietary restraint, negative affect and emotion regulation, low self-esteem and sociocultural pressures, and maladaptive thoughts and beliefs about food and eating (Bodywhys, 2015; Burton & Abbott, 2019; Kane et al., 2015; Brown et al., 2012; Ehlert, 2021). For a summary of the main theoretical frameworks associated with BE behaviours refer to Table 3. For the remainder of this subsection, the main factors associated with the development of BE behaviours will be discussed.

Dietary Restraint. It has been proposed that a combination of dietary restraint and REBs act as a contributing factor towards BE behaviours (Polivy & Herman, 1993; Burton & Abbott, 2019).

Dieting can include various behaviours, such as limiting the number of calories consumed,

decreasing or eliminating certain foods or food groups, reducing the number of meals or snacks per day, and engaging in a set of rules about what, when, and how much food should be consumed (Apple & Agras, 2004; Brown et al., 2012; Ehlert, 2021; Ward & Mann, 2000). As a result, individuals enter a state of starvation or deprivation in which an individual is affected psychologically and physiologically, increasing the likelihood of engaging in BE behaviours (Apple & Agras, 2004; Bodywhys, 2015; Vanderlinden et al., 2001). This is because an individual will experience intense cravings due to not consuming enough nutrition or calories. As well as this, dieting and preoccupation with food increases the likelihood of an individual experiencing a loss of control, especially when an individual experiences a minor slip in their diet. This can result in the individual to abandon their diet completely and engage in BE behaviours (Goodman et al., 2018; Gearhardt et al., 2011).

Negative Affect and Emotion Regulation. In addition to Dietary Restraint, various theoretical models have suggested that *negative affect* (NA), defined as an internal feeling state in which one experiences negative emotions associated with themselves or their personal experiences (APA, 2022), acts as a contributing and maintaining factor of BE behaviours (Bodywhys, 2015; Wonderlich et al., 2022; Wildes et al., 2020). It has been suggested that BE is preceded by the experience of NA in the form of emotions and that BE behaviours are used as a way to cope with or to avoid these negative emotions and experiences (Burton & Abbott, 2017, 2019). Negative experiences and emotions may stem from familial problems, traumatic experiences, triggering events and experiences, and loss of a family member through death, separation, or illness (Bodywhys, 2015) and depending on the individual, they may be unable to process these thoughts and emotions adaptively due to exacerbating self-doubt and concern. As a result, individuals engage in maladaptive coping mechanisms to process negative emotions and experiences. From this, BE behaviours can be viewed as a coping mechanism or a method to avoid unpleasant or negative emotions that can be used by

an individual who has difficulties regulating or expressing their emotions (Bodywhys, 2015; Burton & Abbott, 2019; Mitchell & Mazzeo, 2004; Wolfe et al., 2009; Kane et al., 2015).

Low Self-Esteem and Body Dissatisfaction. Low self-esteem, otherwise known as negative self-schemas, or negative self-beliefs (Burton & Abbott, 2017, 2019) have been suggested to act as a contributing factor towards BE behaviours. More specifically, it has been argued that low self-esteem has been directly linked with poor body image and body dissatisfaction (Paxton et al., 2006; Ricciardelli & McCabe, 2001; Cella et al., 2021). To further explain, the way in which one views themselves physically, impacts their body satisfaction and therefore self-esteem (Orbach, 1996; Cella et al., 2021), and this is heavily influenced by the various sociocultural norms that depict an individual's value based on their physical appearance rather than their inner qualities (Bodywhys, 2015). Western society's and the media's definition of beauty identifies particular body shapes and sizes in both men and women to be more ideal than others (Bodywhys, 2015; Izydorczyk & Sitnik-Warchulska, 2018; Hatoum & Belle, 2004). For example, for women perceive themselves to be attractive and successful when they are slender and thin (Grabe et al., 2008; Ferguson et al., 2011; Izydorczyk & Sitnik-Warchulska, 2018) while men are more attractive and successful when they are larger, more muscular and of "normal" weight (Harmatz et al., 1985; Heunenmann et al., 1966; Dibiase & Hjelle, 1968; Staffieri, 1967; Hatoum & Belle, 2004).

As a result of Western society glorifying thinness and placing considerable pressure to obtain the 'perfect' body, individuals believe that thinness or muscularity equates success, desirability, popularity and happiness (Bodywhys, 2015; Izydorczyk & Stnik-Warchulska, 2018; Hatoum & Belle, 2004). However, this perception of body image can lead to individuals engaging BE was a way to cope with negative comments about oneself due to stigma, teasing, judgement, peer pressure, and rejection (Bodywhys, 2015).

Thoughts and Beliefs about Food and Eating. It has also been emphasised that one's thoughts and beliefs about food and eating contribute to and maintain BE behaviours. Cooper et al. (2004) suggested three types of eating behaviours: Positive beliefs; Negative beliefs; and Permissive beliefs (Burton & Abbott, 2017). These thoughts and beliefs are thought to be triggered by experiences of NA and that the positive, negative, and permissive beliefs interact and ultimately result in a BE episode (Cooper et al., 2004; Burton & Abbott, 2017, 2019).

When an individual engages in BE to cope with or to avoid NA, positive beliefs related to eating for self-soothing purposes is reinforced as engaging in maladaptive eating behaviours relieves the individual of their negative emotions (Burton & Abbott, 2017, 2019; Cooper et al., 2004). When the BE episode has finished, an individual may begin to restrict their food intake due to believing in the possibility that eating will result in negative consequences, such as gaining weight. However, when an individual is triggered once again by a negative experience or event, they will engage in permissive thoughts which will allow them to engage in BE behaviours to cope with the trigger (Cooper et al., 2004; Burton, 2017, 2019). This indicates a paradoxical cycle in which an individual experiences immense guilt and shame following an episode of BE only to engage in BE behaviours once again to alleviate themselves of any negative emotions.

2.2.4 Factors Impacting the Subjective Experience of Binge Eating Behaviours.

2.2.4.1 COVID-19 Pandemic.

As previously mentioned, the COVID-19 pandemic has had serious implications on various aspects of individuals' lives, resulting in sudden drastic changes to be made to the lives of all individuals. Additionally, tertiary students comprise a particularly vulnerable group of individuals susceptible to various mental health problems (Tavolacci et al., 2021; Ye et al., 2021). As a result of the COVID-19 pandemic, public health measures such as the closure of gym facilities and restrictions regarding social gatherings, tertiary students modified their eating and exercising behaviours (Coakley et al., 2021; Nutley et al., 2021; Tavolacci et al., 2021). This often resulted in individuals,

particularly tertiary students, to develop negative psychological effects such as stress, anxiety, and depression (Brooks et al., 2020; Wang et al., 2021; Tavoracci et al., 2021; Ye et al., 2021). As well as this, reduced socialisation, unhealthy living conditions, academic stress, uncertainty of the pandemic, financial concerns, food insecurity, and health concerns in general contributed to negative mental health outcomes among tertiary students during the pandemic (Elmer et al., 2020; Wang et al., 2020; Christensen et al., 2021; Tavoracci et al., 2021).

More specifically, literature has suggested that the radical change in individuals' everyday lives across the globe has resulted in an impact on their food intake (Canello et al., 2020; Haddad et al., 2020; Martin-Neuning & Ruby, 2020; Ye et al., 2021). Salazar-Fernandez et al. (2021) argued that the emotional distress and related stressors associated with the pandemic contributed to maladaptive coping behaviours, such as eating food for comfort, and BE (Tavoracci et al., 2021). As well as this, anxiety and depression are well known to be associated with EDs, therefore, it could be suggested that the development of anxiety and depression as a result of the COVID-19 pandemic contributed to the development of DEB, both at sub-clinical and clinical levels, particularly within the tertiary student population (Essadek & Rabeyron, 2020; Almomani et al., 2021; Rodgers et al., 2020; Udo & Grilo, 2019; Tavoracci et al., 2021; Penaforta et al., 2019; Hootman et al., 2018; Khalid et al., 2016; Moynihan et al., 2015; Vindegaard & Benros, 2020; Ye et al., 2021). In comparison to this, Fernandez-Aranda et al. (2020) argued that the changes in eating behaviours due to the pandemic were due to concerns about weight and shape, greater sedentary lifestyle, fear of contagion, alterations in circadian rhythms, and restrictions on outdoor activities (Tavoracci et al., 2021). It has also been suggested that the maladaptive eating behaviours associated with the pandemic in tertiary students are as a result of a lack of adequate and balanced meals, separation from families, financial concerns, and a lack of time and understanding of healthy nutrition (Ammar et al., 2020; Phillipou, 2020; Wang et al., 2020; Yilmaz et al., 2020; Ye et al., 2021).

However, as the pandemic began not too long ago, little is still known about the impact COVID-19 has had on tertiary students' experiences of tertiary education and BE behaviours. As well

as this, it is difficult to assume that all tertiary students experienced BE behaviours, the COVID-19 pandemic, and tertiary education in the same way due to the unique ways in which each individual understands their own social world. Therefore, exploring these experiences as subjective and dependent on each individual will help us gain a better understanding of the overall experiences associated with tertiary education and BE behaviours in relation to the pandemic.

2.2.5 Stigmatisation and Awareness of Eating Disorders, Disordered Eating Behaviours, and Binge Eating Behaviours.

The APA (2022) defines *stigma* as “the negative social attitude attached to a characteristic of an individual that may be regarded as a mental, physical, or social deficiency” (para. 1). In other words, stigmatised individuals are often treated differently, excluded, or rejected to due not meeting specific societal or cultural standards (Goffman, 1963/2009; Brelet et al., 2021). Stigmatisation of groups of individuals, such as those with a mental illness, is common across the globe (Mucchiarneri et al., 2013; Goffman, 1963/2009; Brelet et al., 2021).

People who have EDs or DEBs often experience stigma that impacts their physical and mental well-being (Corrigan & Rüsch, 2002; Brelet et al., 2021). The consequences of stigma include the individual developing the ability to self-stigmatise; view themselves to be weak or incompetent; experience low self-esteem; and to not pursue any career, academic, or personal goals (Corrigan & Watson, 2002; Brelet et al., 2021). As well as this, individuals who experience self-stigma are unlikely to seek support from psychological professionals and are therefore unlikely to receive any advice or treatment (Brelet et al., 2021).

Stigma is composed of three different components: cognitive, emotional, and behavioural; or, put simply, stereotypes, prejudice, and discrimination (Kowert et al., 2012; Vartanian, 2010; Bertrand & Mullainathan, 2003; Brelet et al., 2021). Typically, stigma results from at least one of these components being present (Brelet et al., 2021). Individuals with EDs and DEBs might experience stigma in different ways at different times, including some or all of these components.

While there is considerable research suggesting that mental health and ED stigma is apparent within Western society, each type of mental illness, and each type of ED, will have varying levels of stigma in terms of its content, distribution, and consequences (Brelet et al., 2021).

As BN and BED are characterised by BE behaviours, the components of stigma associated with these EDs and subsequent DEBs will be discussed below. I have chosen not to include AN even with the binge-purge subtype due to the lack of differentiation between subtypes within previous literature.

2.2.5.1 Stereotypes in Eating Disorders: Bulimia Nervosa and Binge Eating Disorder.

Stereotypes can be defined as positive or negative beliefs shared by individuals about a particular group of people (Brelet et al., 2021; Kowert et al., 2012). In regard to BN and BED, previous literature has suggested that one of the most prominent stereotypes associated with these EDs is that people with EDs are to blame for their ED (Caslini et al., 2016; Lupo et al., 2020; Geerling & Saunders, 2015; Stewart et al., 2006; McLean et al., 2014; Ellis et al., 2020; Wingfield et al., 2011; Brelet et al., 2021). As well as this, individuals with BN and BED have been described as self-destructive, weak, lazy, and careless (Ebnetter & Latner, 2013; Hollett & Carter, 2021; Murakami et al., 2016; Wingfield et al., 2011; Brelet et al., 2021) with low self-esteem and a lack of self-discipline, self-control, and will-power (Ebnetter & Latner, 2013; Thörel et al., 2021; Mond et al., 2004a; Anderson et al., 2015; Brelet et al., 2021). For a more expansive view of the stereotypes commonly found to be associated with EDs, BN, and BED, refer to Table 4.

2.2.5.2 Prejudice and Discrimination in Eating Disorders: Bulimia Nervosa and Binge Eating Disorder.

Prejudice is described as unfavourable attitudes towards an individual due to their identification with a particular group of people (Brelet et al., 2021; Vartanian, 2010). With regard to EDs, DEBs, and BE behaviours, prejudice occurs when an individual presents a negative attitude or

opinion about another individual who has expressed their experiences with EDs or DEBs. In comparison to this, *discrimination* is defined as negative behaviours directed towards an individual due to their association with a particular group of people (Brelet et al., 2021; Bertrand & Mullainathan, 2003). In other words, discrimination against individuals with personal experiences with EDs and DEBs may occur when an individual socially distances themselves from that particular individual.

In regard to EDs, both general and healthcare populations may hold negative attitudes towards those with EDs, and particularly towards those with BN and BED (Thörel et al., 2021; Geerling & Saunders, 2015; Yu et al., 2015; Stewart et al., 2008; Brelet et al., 2021). These negative attitudes included discomfort, frustration, fear, exasperation, and displeasure (Anderson et al., 2016; Raveneau et al., 2014; Seah et al., 2018; Brelet et al., 2021). As well as this, people in the general population may prefer to maintain social distance between themselves and individuals with any type of ED (McLean et al., 2014; Zwickert & Rieger, 2013; Brelet et al., 2021).

However, prejudice and discriminatory acts towards individuals with BN and BED have varied throughout literature. More specifically, some researchers have suggested that individuals with BN experience more sympathy and friendly attitudes from individuals without EDs (Mond et al., 2004b; Brelet et al., 2021), while others have suggested that individuals with BN receive more distrust than those with BED (Thörel et al., 2021; Ellis et al., 2020; Brelet et al., 2021). With regard to discrimination, previous literature has suggested that general populations prefer to maintain social distance between themselves and individuals with BN more than with individuals with BED or with individuals without an ED (McLean et al., 2014; Zwickert & Rieger, 2013; Hollett & Carter, 2021; Brelet et al., 2021). Those in the general populations were noted to be more likely to want to interact with people with BED in comparison to those with BN (O'Connor et al., 2016; Brelet et al., 2021). From these studies, it can be suggested that the desire for social distancing from those with EDs is prevalent but the severity of this depends on the specific type of ED (Thörel et al., 2021; Brelet et al., 2021).

2.2.5.3 Stigma about Disordered Eating Behaviours: Binge Eating Behaviours.

Stigma surrounding BE behaviours has often been associated with similar stereotypes, prejudices, and discriminations that are linked to BED and BN. The majority of the literature has discussed this stigma in relation to Weight Stigma. *Weight Stigma* (WS) has been defined as discriminatory acts and ideologies carried out against an individual due to their weight and size (Bos et al., 2013; Alleva et al., 2021) and is often associated with individuals who are overweight or obese (Body Mass Index [BMI] >25.0) or have been diagnosed with BED (Alleva et al., 2021; National Eating Disorders Association, 2022). As a result of the increases in average weight and the number of individuals being classified as obese continuing to rise, so has the strength and spread of anti-fat norms and weight-related stigma (Brewis, 2014; Brewis et al., 2016). Brewis (2010) has suggested that this is due to the steadily increasing cultural norms established by Western society in which individual effort, responsibility, and work would only be celebrated if the individual has a slim or “thin” body (Brewis et al., 2016). These cultural norms encourage WS in which larger bodies are heavily associated with being “fat”, lazy, unmotivated, and greedy (Puhl & Brownell, 2001; Brewis et al., 2016).

Within the research literature, a disproportionate amount of attention has been paid towards AN, resulting in the perception of EDs to be overshadowed by a particular presentation, rather than allowing EDs to be observed in individuals of any body shape and size (Huckins et al., 2022). Although EDs are typically associated with extremely low BMIs, it is important to remember that BN can occur in individuals across the BMI spectrum, and that BED occurs in individuals with normal or high BMI levels (APA, 2013; Huckins et al., 2022). For example, Nagata et al. (2018) conducted a study with 14,322 young adults, with just less than half of the sample being classified as overweight or obese and concluded that there was higher prevalence rates of DEBs within obese or overweight men and women in comparison to those classified as underweight or of normal weight. From this, it is evident that DEBs can occur in individuals of any weight, shape, and size.

When an individual experiences WS, they are less likely to lose weight and maintain this weight loss. This is because when an individual begins to feel stigmatized based on their weight they are discouraged from exercising, experience negative affect, and will be most likely encouraged to engage in DEBs (Vartanian & Smyth, 2013; Wott & Carels, 2010; Brewis et al., 2016). To further explain, exposure to weight-stigmatising messages, such as teasing, internalization of WS, and anticipated WS, can lead individuals to increase their caloric consumption, comfort eat, and engage in BE behaviours, especially in individuals who believe that they are already overweight (Vartanian & Novak, 2012; Salvy et al., 2011; Schvey et al., 2011; Brewis et al., 2016; Vartanian & Porter, 2016; Wang et al., 2014; Romano et al., 2018; Hunger et al., 2020). This may encourage further weight gain due to individuals being discouraged to engage in a healthy relationship with food and exercise, therefore, WS can be considered a maintenance and contributing factor towards population-level obesity within society today (Brewis, 2014; Brewis et al., 2016).

Given the impact WS has had on individuals in modern day society, these assumptions and beliefs may impact an individual's health behaviours and weight outcomes (Brewis et al., 2016). WS has been defined as a prominent risk factor in both adults and adolescents, with teasing and negative attitudes regarding weight influencing the development of DEBs such as fasting, skipping meals, purging, and BE (Vartanian & Porter, 2016; Wang et al., 2014; Hunger et al., 2020). For example, within university student populations, many students fear of developing the "Freshman 15", a myth associated with first-year university students gaining 15 pounds (or 6.8kgs) early on in their university career (Brown, 2008; Brewis et al., 2016). This fear, in addition to the previously discussed chaotic and unbalanced diets students sometimes engage in, it is not difficult to believe that university students have a high prevalence of body dissatisfaction, "dieting", maladaptive eating behaviours, and sub-clinical and clinical forms of ED symptoms (Cooley & Toray, 2001; Delinsky & Wilson, 2008; Malinauskas et al., 2006; Brewis et al., 2016).

2.2.6 Raising Awareness of Eating Disorders and Binge Eating Behaviours.

Awareness surrounding EDs and BE behaviours is currently lacking. Although as a society, we have become more aware of mental health, psychological disorders, and their various impacts on an individual, EDs and DEBs are still highly stigmatised and overlooked in various ways. This is in spite of relatively high prevalence of EDs and DEBs.

Previous literature has heavily focused on prevalence rates of women and girls. Although men and boys may be included in research, the number of men included in research has often been too low to carry out an analysis or to establish confident conclusions (Huckins et al., 2022). Research has suggested that the prevalence of EDs and DEBs among men were considerably lower in comparison to the prevalence rates of EDs and DEBs among women (The US National Institute of Mental Health, 2017; Galmiche et al., 2019; Ortega-Luyando et al., 2015; Mitchison et al., 2012). These differences between prevalence rates between men and women reflect the differences in clinical presentations, and with the diagnostic criteria more aligned to presentation of EDs in women, this results in the prevalence rates of men to be underestimated (Huckins et al., 2022).

The higher prevalence for women than men in regards to ED diagnosis may be largely due to EDs and DEBs such as BE behaviours being viewed as “female disorders” (Griffiths et al., 2015; O’Hara & Smith, 2007; Brelet et al., 2021), in which men are perceived to not experience these maladaptive eating behaviours. As a result, men with EDs are often underdiagnosed due to avoiding the possibility of being shamed and rejected for experiencing a predominantly “female” mental illness (National Eating Disorders Association, 2018; Brelet et al., 2021). Therefore, increased awareness of men experiencing EDs and BE behaviours may reduce the overrepresentation of women in statistics.

It is important to highlight that the majority of research investigating prevalence differences has not explored gender diversity, particularly in relation to non-binary, transgender, or gender-fluid individuals. More recently, however, literature has begun to illustrate the prevalence and experiences of EDs and DEBs among gender diverse individuals. For example, Burton et al. (2022)

and Nagata et al. (2020) found that the prevalence rates for DEBs were substantially high for women and gender-diverse individuals in comparison to men.

Individuals who identify as being part of the LGBTQIA+ community report increased prevalence of psychiatric disorders, including any type of ED due partly to the systematic discrimination, harassment, and violence they may experience (Kamody et al., 2020; Watson et al., 2016; Nagata, 2018; Bell et al., 2019). In comparison to ED prevalence, multiple studies have indicated that LGBTQIA+ individuals are more likely to engage in DEBs such as fasting, dieting with the intention of weight loss and compensatory behaviours in comparison to their heterosexual counterparts (Austin et al., 2013; Guss et al., 2017; Huxley et al., 2014; Maura & Weisman de Mamani, 2017; Testa et al., 2017; Watson et al., 2016; Calzo et al., 2018; Parker & Harriger, 2020). As well as this, Watson et al. (2016) reported that more than a third of their 19–25-year-old transgender participants engaged in DEBs, with BE and fasting to lose weight being the most commonly reported behaviour. Thus, increased awareness of gender-diverse individuals experiencing EDs and BE behaviours may reduce the dynamics of stigmatisation and minority stress, barriers to recognition and treatment for LGBTQIA+ people, and to reduce the overrepresentation of women in ED and DEB statistics.

As well as this, it is important to note that much of the literature based on stigma associated with EDs is based on perceptions of AN, and not so much on BN and BED, let alone BE behaviours (Brelet et al., 2021; Ellis et al., 2020). This idea is further suggested in a study carried out by Murakami et al. (2016), who found that participants viewed individuals with BED to be less psychologically and physically impaired in comparison to those with BN and AN (Ellis et al., 2020). Anderson et al. (2016) concluded similar findings in which BED symptoms were perceived to be less severe than those of AN and BN, and were perceived to be more as a result of a “lack of will-power or self-control” (Ellis et al., 2020).

This may be due to opinions and beliefs surrounding WS and the legitimacy of BED being an ED as many individuals associated EDs as a psychological disorder with recognisable physical

symptoms, such as extreme weight loss in AN (National Eating Disorders Association, 2018; Harris, 2021). Despite BED becoming its own category as an ED in the most recent publishing of the DSM, many people still do not view BED and BE behaviours as seriously as other EDs and DEBs. It is important to view BE behaviours and BED as seriously as AN and BN due to the considerable psychological and physical effects it can have on an individual.

2.3 The Subjective Experience of Binge Eating: The Aotearoa New Zealand Context.

Within Aotearoa New Zealand, tens of thousands of people enter tertiary education every year (Tertiary Education Commission, 2018). However, 10% of NZ tertiary students drop out of their tertiary programme annually, suggesting that students may not be prepared for tertiary education and additional demands that are associated with it (Ministry of Education [MoE], 2014). As well as this, DEBs and EDs are prevalent within the country with over 100,000 kiwis struggling with an ED (SCOOP, 2020). However, literature on the experiences of tertiary education and BE behaviours from students in NZ is sparse, indicating a gap in knowledge on the subjective experiences and objective realities of tertiary education and BE behaviours (Sotardi & Friesen, 2017; Parsons, 2022). Regarding disordered eating, the majority of New Zealand literature has focused on AN and BN, with little to no research on the experiences and impacts of BE behaviours on the New Zealand population (Parsons, 2022). Therefore, there is a considerable need for an exploration of how these experiences' impacts individuals in tertiary education settings as they are typically more vulnerable in developing DEBs, particularly BE behaviours.

In the limited literature on NZ tertiary students, it has been suggested that first-year students experience various academic challenges such as demanding academic expectations from lecturers, and difficulties knowing how to learn and make sense of the material given to them (Sotardi & Brogt, 2016; Sotardi & Friesen, 2017). As well as this, Sotardi & Friesen (2017) concluded that two-thirds of their participants were unprepared for tertiary education courses at the beginning of the semester, especially in regard to time management, writing skills, and knowledge of the

content. Sotardi & Friesen (2017) also suggested that student perceptions of tertiary education were influenced by an individual's social and academic support from fellow students, indicating that social connections are an essential aspect of successful transitions and positive experiences of tertiary education.

It is important to note the bicultural structure of Aotearoa New Zealand and its impact on tertiary education and BE behaviours. Many institutions within the country are structured based on the European, or Western perspective of education. As a result, Western approaches to teaching, learning, and assessment may negatively impact culturally diverse students, such as Māori and Pacific students (Chu et al., 2013; Curtis et al., 2012; Sotardi & Brogt, 2016; Sotardi & Friesen, 2017). Perry & Allard (2009), suggested that Aotearoa New Zealand students who struggle during the transition to tertiary education with challenges relating to learning and studying might question their place in tertiary education settings to due their lack of preparedness in relation to their cultural values, personal motives and capabilities, and career goals (Sotardi & Friesen, 2017).

Additionally, the understanding, assessment, and treatment of BE behaviours are also heavily based on the Western perspective because of colonisation (Cunningham et al., 2018; United Nations, 2010; Lacey et al., 2020). As Māori make up 16.5% of Aotearoa New Zealand's population (Statistics New Zealand, 2019), it has been suggested that this higher rate among Māori individuals are as a result of the younger age structure of the Māori population, which is comparable to the high rates of EDs in young individuals (Lacey et al., 2020). Despite this, these findings still indicate that the rates of DEBs and EDs among Māori are at least the same or even more than of those who are non-Māori (Lacey et al., 2020).

2.4 Research Rationale.

It is apparent from the literature that the transition and adjustment to tertiary education is a challenging period for some students, particularly those who are emerging adults as it is also a challenging time developmentally. Various changes occur for tertiary students across academic,

social, and personal domains; recently, the coronavirus pandemic has had an impact on these domains as well. These challenges are subjective to each individual, depending on their unique cultural, social and psychological needs, values, and beliefs. Due to negative experiences, for instance those related to unrealistic expectations, a lack of support, and a lack of academic and social integration, students may have challenges successfully transitioning and adjusting to tertiary education. This can result in students withdrawing from tertiary courses and experiencing elevated levels of emotional distress. Some students may develop maladaptive coping mechanisms when facing difficulties transitioning and adjusting to tertiary education; one particular coping mechanism is engaging in BE behaviours.

BE behaviours have been identified as DEBs associated with the sense of a loss of control while consuming abnormally large amounts of food until uncomfortably full and is followed by immense guilt and shame. Typically used as a way to comfort oneself after experiencing negative emotions and events, such as the pandemic, BE behaviours are increasingly prevalent in tertiary students, as well as general and clinical populations. In addition, BE behaviours are often viewed to not be as important as other DEBs and are therefore under-researched and highly stigmatised. Individuals who struggle with these behaviours often are afraid to discuss their experiences in fear of judgement and rejection due to weight stigma, binge eating stigma, and being associated with minority populations regarding their physical appearance, gender, and sexuality.

As there is a lack of research on these experiences, information about the subjective experiences of tertiary students in Aotearoa New Zealand in relation to tertiary education and BE behaviours is sparse. Resultantly, there is a considerable need for an exploration of how these experiences' impact individuals in tertiary education settings as students are typically more vulnerable in developing DEBs, particularly BE behaviours.

Therefore, I aimed to explore the experiences of tertiary students in relation to BE behaviours and tertiary education in Aotearoa New Zealand. I hope that the findings from this study will increase understanding of how subjective experiences of tertiary education can impact a

student's success—across various life domains—in tertiary education. As well as this, I also hoped to gain insight into how experiences of tertiary education and BE behaviours interact and impact an individual's physical and mental well-being.

In order to achieve these aims, I developed three research questions:

1. In what ways do people describe their experiences of binge eating behaviours while studying at a tertiary level?
2. How do experiences of tertiary education impact an individual's binge eating behaviours?
3. How do experiences of binge eating behaviours impact an individual's experience of tertiary education?

CHAPTER THREE: MATERIALS AND METHODS.

3.1 Participants.

3.1.1 Recruitment.

Participant recruitment occurred in late September 2021. An invitation to participate in the format of a digital poster graphic (see Appendix A) was posted on two different Facebook groups for Massey University students. I chose to recruit using Facebook because it has become one of the most popular Internet-based platforms in the Western World, with around 2.93 billion active users per month globally (Dixon, 2022; Kayrouz et al., 2016). Undergraduate students are increasingly using the Internet and social media for social, personal, and academic purposes (Lu et al., 2017; Butt, 2020). This allows Facebook to be used as an effective recruitment tool due to its widespread use, anonymity, and time- and cost-effectiveness (Kayrouz et al., 2016; Lee et al., 2020; Benedict et al., 2019). Using Facebook for recruitment can also help researchers access populations who might not engage with traditional recruitment methods, such as adolescents, young adults, and ethnic minorities (Amon et al., 2014, 2015; Loxton et al., 2015; Ünlü Ince et al., 2014; Kayrouz et al., 2016), especially concerning highly sensitive or stigmatising topics (Lee et al., 2020).

Initially, I sought to recruit 30 to 40 participants for the study, as suggested by Braun et al. (2021; Grogan & Mechan, 2017; Grogan et al., 2018; Clarke & Smith, 2015) for a small Masters analysis project and in consideration of the time and resources required to conduct the research (O'Reilly & Parker, 2012). However, due to the unexpectedly high volume of interest and engagement from students in the Facebook groups, the number of participants subsequently increased to 55. This level of participation provided an appropriate number of participants for a small to medium Masters project to ensure that the dataset is rich and of appropriate scope to address the research questions and aims (Braun et al., 2021).

Of the 55 participants who completed the survey, 46 participants received a \$20 Prezzy E-Gift Card once they completed the first survey and provided their contact information in the second

survey as a token of appreciation for their time. The remaining 9 participants elected to either not receive an E-Gift Card or did not provide their contact details in the second survey.

3.1.2 Inclusion and Exclusion Criteria.

Participants were individuals who responded to research advertising as students who wanted to share their thoughts and experiences of BE behaviours and tertiary education. Participants did not need to have been diagnosed with an eating disorder to participate, nor were any psychometric measures adopted to indicate the presence of disordered eating symptomatology. The decision to not specify an ED diagnosis or to use any psychometric measures to determine the presence of disordered eating behaviours was because I was most interested in subjective experiences related to BE behaviours, rather than diagnostics. As well as this, there are often many barriers to diagnosis and considerable levels of stigma around BE and the associated EDs, therefore, these barriers and levels of stigma may have impacted my ability to recruit participants and explore their subjective experiences.

Respondents were required to be over 18 years of age. This age restriction was guided by the assumption that the majority of students studying at a tertiary level are in the stage of emerging adulthood, 18 to 24 years of age, as previously discussed (Harrer et al., 2020; Arnett, 2000; Potterton et al., 2020). Additionally, the typical onset of disordered eating behaviours (DEBs) occurs around this age as well (Potterton et al., 2020; Kessler et al., 2013; Micali et al., 2013; Steinhausen & Jensen, 2015). It was also important to not limit the age bracket to individuals aged between 18 and 24 years, as there is a considerable proportion of mature students, defined as students who have been admitted to study at a tertiary institution who is above the age of 21 years (Shanahan, 2006), who are currently studying at tertiary institutions. These students may have different experiences of BE behaviours and tertiary education due to their previous life experience. I hoped to include diverse experiences of BE in relation to tertiary education to get a more fulsome picture of the phenomenon of interest.

The requirement to study at a New Zealand tertiary institution was specified as there is a considerable lack of literature on experiences of BE behaviours and tertiary education within the New Zealand student population. As the majority of previous literature is focused on students in the United States and Europe, it was important to include individuals who would be less likely to be included in previous studies to ensure diversity within experiences.

Participants were also required to have completed a first-year paper within the last five years. This cut off was guided by the assumption that experiences of tertiary education is considerably impacted by how an individual adjusts and transitions into this new student lifestyle (Harrer et al., 2020). However, it was important to gather experiences around this idea without excluding students who have been able to reflect on their own experiences, such as postgraduate students. As well as this, it was assumed that many first-year students may be unwilling to discuss their adjustment experiences due to a fear of becoming alienated from their peers. Therefore, it was essential to include a variety of students with different experiences to explore the diversity of experiences within this group.

3.1.3 Participant Demographics.

Demographic information was collected from participants at the beginning of the qualitative survey. This information was collected to describe the sample, help to interpret responses, and illustrate the strengths and limitations of what the data can claim. All participants were asked open-ended questions regarding their age, gender identity, ethnicity, whether they lived on- or off-campus, and whether they were self-catered or not (see Appendix B; Braun et al., 2021). The age range of participants was 19 and 52 years and the participant group consisted of 49 females, 4 males, 1 non-binary person, and 1 individual who did not provide gender identity information. Participants represented a range of ethnicities; New Zealand European (38), Mixed ethnicity (Brisith/Irish, Irish/Italian, Māori/Pasifika, Māori/Samoan, and 1 unidentified ethnicity), Māori (4), Australian (2), Arabic (1), Asian (1), and Indian (1). At the time of data collection, 52 of the

participants lived off-campus, while 2 lived on-campus and 1 did not provide any information regarding this. Lastly, 53 of the participants were self-catered, and 2 participants had a mix of self- and non-self-catering. A participant demographic summary is provided in Table 5.

3.2 Research Design.

3.2.1 Qualitative Research.

Qualitative research investigates phenomena in natural settings regarding the different contexts, perspectives, and manifestations rather than their range, frequency, and objectivity (Busetto et al., 2020). A qualitative research methodology was selected as I wanted to explore the different experiences students have of BE behaviours and tertiary education as expressed by participants in their own words using reflexive thematic analysis (RTA) to analyse these responses, which is further discussed in the subsection *Data Analysis*. Qualitative survey data also allowed my research questions to be answered in a targeted way while also remaining open to participant perspectives (Frith, 2000; Braun et al., 2021). This type of research can occur in person, through the mail, or even online using Internet-based survey programs, such as SurveyMonkey and Qualtrics (Ponto et al., 2010; Ponto, 2015).

Online qualitative surveys were selected due to their ability to allow researchers to openly and flexibly collect participants' personal experience narratives and perspectives (Braun & Clarke, 2013) to produce rich and complex accounts from participants (Braun et al., 2021). Online qualitative surveys are further advantageous because they can be self-administered, with the survey questions being presented to the participants in a fixed and standard order (Braun et al., 2021). By allowing participants to respond by typing responses in their own words, rather than through pre-determined response options, online qualitative surveys can produce rich and complex data from participants' accounts that are required to make sense of and understand their experiences and perspectives concerning the research topic (Braun et al., 2021). This 'wide-angle lens' is even more beneficial for a research topic that has been un- or under-explored (Toerien & Wilkinson, 2004; Braun et al., 2021).

As well as this, online qualitative surveys are affordable for researchers and easy for participants to access from various geographical areas, which is rare in student research (Braun et al., 2017; Braun et al., 2021).

Despite the various advantages of qualitative research and online qualitative surveys, it is also important to consider the limitations of these approaches. Online qualitative research requires participants to have sufficient literacy and digital skills, and researchers immediately exclude individuals who do not have the skills to participate (Braun & Clarke, 2013; Terry & Braun, 2017; Van Deursen & Van Dijk, 2019; Braun et al., 2021). This limitation was identified early in the design process. As many students are typically required to have essential literacy and digital skills to submit assignments and engage in study materials, therefore, this limitation was not determined to be a considerable barrier in participant recruitment and data collection. Additionally, criticism of qualitative surveys includes that the depth of data is lost compared to interviews as many participants provide thin or perfunctory responses. However, many participants also provide rich and valuable accounts of their experiences and perspectives, which are more focused than interview data (Braun & Clarke, 2013; Braun et al., 2021). Therefore, the use of an online qualitative survey was appropriate for the current research as this data collection method would allow rich and in-depth data of subjective experiences of BE behaviours and tertiary education to be collected from a student population (Braun et al., 2021).

3.2.2 Theoretical Frameworks.

3.2.2.1 Social Constructionism.

This research adopted a social constructionist theoretical lens to explore students' experiences of BE behaviours and tertiary education. Defined as a theory of knowledge in which reality is constructed from social and interpersonal influences (Gergen, 1985; Galbin, 2014), *social constructionism* urges researchers to understand the social and environmental contexts of a phenomenon to understand individuals and to generate understandings of psychological problems

(Gergen, 2001; Meyer, n.d.). Social constructionism rejects the idea that the “truth” is objectively experienced; instead, truth is dependent on social, cultural, and historical contexts (Gergen, 2001). Instead of the truth bearing a universal meaning, social constructionism promotes the idea that truth is subjective to an individual’s beliefs and experiences. The key principle of social constructionism is that knowledge of the world is a product of individual thought, language, and interaction rather than objectivity to an observable and definable external reality (Burr, 2018; Zhao, 2020). As well as this, language and communication play a fundamental role in constructing these realities (Burr, 2015, 2018; Zhao, 2020; Meyer, n.d.).

I selected social constructionism as my epistemological perspective because of how students’ beliefs and opinions of tertiary education and BE behaviours have been constructed due to their experiences. *Experiences*, defined as events that are consciously and actively lived through – as opposed to experiences that are imagined – are viewed through the social constructionist lens as a function that is constructed within a particular social and cultural context and is therefore subjectively experienced (APA, 2022; Galbin, 2014). More specifically, experiences form an individual’s understanding and perception of the world around them and therefore, these experiences are open to interpretation (Galbin, 2014). In the current research, meaning is being constructed in the way that the participants have described their personal, social, academic, and affective experiences. No “true” or universal experience is being established. In other words, experiences are created from socially negotiated processes of meaning-making, which are embedded in the historical and cultural contexts of the participants (Gelo et al., 2015).

3.2.2.2 Emotions as a Social Construct: Emotion-Regulation Theory.

Emotion-Regulation Theory of Binge Eating proved helpful in analysis. As previously discussed, this theory posits that engaging in BE behaviours provides an individual with ways to reduce negative affect (Lacey, 1986). As a result of many biological and social predisposing factors, individuals who lack adaptive coping skills often seek emotional relief through BE behaviours,

resulting in loss of control and overeating (Jiang, 2021). It is important to mention that emotions are not solely constructed as a result of social interactions, as previous theorists have suggested. Rather, they emerge as a result of the interplay between cognitive, motivational, physiological, and social components (Boiger & Mesquita, 2012). Although many theoretical underpinnings view emotions as a biological or cognitive construct, it is also important to view these emotions from a social constructionist lens.

Using this lens, emotions are often shaped, defined, and developed in social contexts due to social interactions and relationships; therefore, emotions are socially constructed (Averill, 1980; Harré, 1986; Hochschild, 1983; Lutz, 1988; Ratner, 1989; Boiger & Mesquita, 2012). Defined as a collection of psychological states including subjective experience, expressive behaviour, and physiological responses, social constructionists view emotions as social artifacts that are formed by sociocultural factors and are confined by an individual's social context and roles in society (Gross & Barrett, 2011). These emotions are ongoing, and the ways in which an individual responds to these emotions can change over time (Boiger & Mesquita, 2012). Therefore, social constructionists view emotion regulation as a function to regulate or shape the feelings and behaviours of individuals within a particular social context (Gross & Barrett, 2011). In other words, emotions and emotional regulation are formed and acted upon based on an individual's social and cultural understanding.

In this way, emotional regulation can be viewed as an individual internalising cultural meanings in order to determine their emotions (Parkinson, 2012). In other words, the ways in which one engages in emotional regulation is heavily dependent on their social and cultural world and how these aspects impact one's emotions. Negative affect can be produced as a result of several social and cultural factors, such as societal norms in regard to the perceptions of beauty and academic success, stigma associated with weight and eating behaviours, and negative, or embarrassing experiences in social contexts (O'Loughlen et al., 2021; Nicoli & Liberatore Junior, 2011; Barker et al., 2015; Caso et al., 2020). If an individual views themselves to be socially and culturally alienated due to the negative perceptions others or oneself has of themselves, elevated levels of negative affect is

likely to ensue. Individuals who experience negative affect and lack adaptive coping mechanisms are likely to engage in BE behaviours to regulate or attempt to completely escape from these negative emotions (Lacey, 1986; Haedt-Matt & Keel, 2011; Heatherton & Baumeister, 1991; Polivy & Herman, 1993; van Strien et al., 2019; Bjorlie et al., 2022). The use of food to alleviate negative affect typically results in the over-consumption of highly palatable foods and therefore exacerbates the likelihood of the loss of control feature typically associated with BE behaviours (Bjorlie et al., 2022; Jiang, 2021). Thus, the ways in which one regulates their negative emotions through the use of food, and therefore engaging in BE behaviours, is heavily dependent on one's social and cultural context (Ertem & Karakaş, 2021). In the analysis of the current research, my interpretation of the themes was determined using my own thoughts, beliefs, and experiences, however, these thoughts and opinions have been shaped by the Emotion-Regulation Theory of Binge Eating.

3.3 Procedures.

3.3.1 Ethics Process.

Ethical approval was granted by the Massey University Human Ethics Committee (MUHEC), Northern prior to commencing participant recruitment and complies with the Massey University Code of Ethical Conduct (see Appendix C). Relevant ethical issues are addressed in the following subsections.

3.3.1.1 Confidentiality and Anonymity.

Participants were informed in the information sheet and before and during the survey of the purpose, aim, and procedures of the research. This ensured that participants were aware of every aspect of the research before participating. Additionally, confidentiality was upheld through informed consent and during data analysis where any identifying information such as location, employment, and personal relationships was removed to ensure a "clean" data set (Kaiser, 2009; Kang & Hwang, 2021).

Participants were informed throughout the recruitment process that their responses to the survey would be anonymous and separate from their names and email addresses if they provided it for the honorarium. Additionally, they were informed about the process for keeping names and email addresses confidential. This was to ensure no personal information was disclosed, preventing the risk of psychological harm (Kang & Hwang, 2021). During the demographics section of the first survey, participants had the opportunity to fill in details about themselves regarding their age, gender, and ethnicity, but were not asked for their name and location to ensure that these responses remained anonymous. For the second survey, participants were asked to provide their first name and an email address so they could receive their Prezzy E-Gift Card. These details provided were in no way linked to the first survey and no attempt was made to assign a particular participant to a particular response. Only the primary researcher received the raw responses from the surveys, and the responses for the first survey were assigned pseudonyms to ensure anonymity for the participants. All data was secured on a password-protected computer, and participants were assured that after five years, all data would be permanently deleted.

3.3.1.2 Informed Consent and Right to Withdraw.

It was essential that participants were made aware that their participation in this study was completely voluntary and that they were allowed to leave the study at any time. As well as this, it was also essential that the participants were made aware of the different aspects of the research in a user-friendly way. This was to ensure that the participants were not deceived in any way (Sanjari et al., 2014). Informed consent was achieved by having the participants agree to participate in the study before and after the demographic questions. This allowed participants not to feel forced to complete the survey and leave the study before the commencement of the topic-based questions if necessary. Participants were also encouraged to contact the researcher(s) if they had any questions or concerns about the research.

3.3.1.3 Risk of Psychological Harm.

In any type of research, it is essential that the potential benefits and risks associated with the study are assessed before recruiting participants and collecting data. This is to ensure the safety and well-being of the participants are being met, and that they are not being caused any harm (Pieper & Thomsom, 2016; Kang & Hwang, 2021). As this research discussed a potentially sensitive topic for some participants, various strategies to reduce participant harm were carried out. Firstly, to reduce any potential emotional distress for participants when answering the survey questions, the survey questions were drafted, rewritten, and approved by myself, my supervisor, and the MUHEC before being published for data collection. This was to ensure that no questions were framed in a way that would invalidate or trigger the participants.

Secondly, a list of support services was provided to the participants in the information sheet and before and after the survey. This was to ensure that participants were able to speak to a professional regarding their mental well-being at any point during participation. As well as this, participants were also encouraged to carefully consider participation if they believed they were at any risk of harm before consenting to participate. Participants were also encouraged to speak to a loved one or a mental health professional regarding their participation if they required. This was to ensure that the risk of discussing a potentially sensitive topic was reduced as much as possible for the participant before consenting and participating in the research.

3.3.1.4 Cultural Considerations.

Although Māori and Pasifika populations are just as vulnerable as non-Māori and non-Pasifika populations to experiences associated with BE behaviours and tertiary education, Māori and Pasifika populations were not the focus of this study. However, a small number of participants who submitted survey responses identified as Māori, Pasifika, or another ethnicity I do not identify with. Therefore, it was important that all ages, cultures, backgrounds and other various differences were honoured and welcomed in this study. All participants were treated equally and the privacy and

cultural beliefs of each participant were respected. All responses, whether completed or not were not questioned in any way in this study.

As well as this, it was decided by myself and my supervisor that the survey and all related material were to be presented in English to prevent any misinterpretation of any non-Western culture. MUHEC also approved this. If any participant had any concerns or questions regarding cultural considerations, cultural consultation was available from one of my supervisor's colleagues within the School of Psychology at Massey University when necessary. However, no cultural consultation was requested.

3.4 Data Collection.

Once the ethics application was approved, a letter was submitted to ITS regarding approval to design and publish the surveys through Qualtrics (see Appendix D). Once approval was received and the surveys were built through Qualtrics, data collection commenced on September 29th 2021, with the final survey response being submitted on October 1st, 2021. Participants who had viewed the recruitment advertisement and were interested in participating were asked to click on the link provided in the advertisement and were also encouraged to contact me if they had any concerns or questions through the contact information provided in the advertisement. Once participants clicked on the link, an information sheet (see Appendix E) was presented to all respondents. After having read the information sheet and consenting to participate, the participants were then provided with a series of questions regarding the inclusion and exclusion criteria of the study. Participants were required to answer these questions before proceeding to ensure that all responses submitted were from participants who met the criteria.

Data was collected via an online survey. A second survey collected contact information for their Prezzy E-Gift Card. These surveys were kept separate and no intention was made to link the two surveys together. There was no delay between the first and second survey and this was to ensure that the participants submitted their contact details and received their E-Gift Card within 72

hours of submitting their responses. The majority of the responses contained detailed accounts of their experiences in relation to BE behaviours and tertiary education. The duration of time taken to complete the surveys ranged from 2 minutes to 7 hours and 42 minutes, with the average time being 28 minutes.

The decision to close the survey was made once the high survey demand and response rate was identified and that the number of survey responses submitted was near the desired number of participants. This was within 5 hours of the survey being advertised. The survey was constructed on Qualtrics to allow participants to complete and submit their responses even after the survey was closed. Participants were also allowed to leave their survey responses and re-enter the survey to finish later. This allowed participants to take a break if required, or to go back and edit their responses if they needed too. Also due to the construction of the survey, data analysis did not occur until several days after data collection. This was because incomplete surveys were recorded 72 hours after the last time the participant edited a response. This ensured time for participants to continue and complete their responses if they desired, but also allowed the collection of data if they did not press submit.

The responses for the first survey was exported into NVivo for data analysis and the responses for the second survey were exported into Microsoft Excel on a computer to organise and keep track of the distribution of the E-Gift Cards. The Prezzy E-Gift Cards were distributed within 72 hours of the last survey response being submitted.

An unexpected challenge occurred when there were mismatched numbers regarding the number of people who completed both the first and second survey, with a total of 65 people responding to the first survey and 47 individuals responding to the second survey. It was possible that some people who had not completed the survey may have skipped to the second survey in order to receive the E-Gift Card without completing the survey.

3.5 Data Analysis.

Data analysis was carried out using Reflexive Thematic Analysis (RTA; Braun & Clarke, 2006; 2012). Defined as an analysis method in which patterns of meaning, or themes, are systematically identified, organized and analysed across a data set, RTA can be considered as an appropriate methodology used to collate participants' experiences, beliefs, and understandings of BE behaviours and tertiary education. This is because RTA assists the researcher in making sense of both the collective and shared meanings and experiences of participants (Braun & Clarke, 2012; Terry et al., 2017).

One of the advantages to RTA is its flexibility (Terry et al., 2017). More specifically, although thematic analysis is not atheoretical, this methodology does not require a particular ontological or epistemological framework and can therefore be used with almost all types of qualitative research methods. Thematic analysis can be used to address various research questions with differing theoretical frameworks (Terry et al., 2017). This flexibility of thematic analysis also allows various data collection methods to be used, such as interviews, focus groups, and surveys (Terry et al., 2017). RTA is a useful data analysis method as it allowed for this research to explore the lived experiences of BE behaviours and tertiary education from students' perspectives. This therefore enabled online qualitative survey responses to be recorded and analysed through a social constructionist lens. The analysis of the current study combined elements of experiential and critical reflexive thematic analysis, as detailed in the 6 phases of thematic analysis below (Braun & Clarke, 2006; 2012).

It is important to note that these phases did not occur independently of one another. Data analysis occurred through the consistent interaction between phases to ensure that the data had been read, reviewed, analysed, and commented on sufficiently and in a way that appropriately answered the research questions (Terry et al., 2017).

3.5.1 Phase One: Familiarising Yourself with the Data.

Familiarisation of the data began with reading and re-reading survey responses. This process allowed me to become “immersed” (Braun & Clarke, 2012; Terry et al., 2017) in the data and initial thoughts, concepts, and impressions were commented on the survey responses in the NVivo software. Any apparent similarities, differences, or contradictions between survey responses were also noted. This phase also involved actively engaging with the data, understanding how the participant described their experiences, why they made sense of their experience this way, and what assumptions about the world did they establish from these experiences, rather than reading it at its surface level (Braun & Clarke, 2012; 2013).

3.5.2 Phase Two: Generating Initial Codes.

An inductive approach was used to develop initial codes, ensuring that these codes were strongly linked to the data content within the entire data set. This “bottom-up”, data-driven approach allowed data to be collected specifically for the research and allowed themes to be identified without trying to associate ideas and perspectives within a particular pre-determined coding frame (Braun & Clarke, 2006). In other words, this approach allowed for the experiences, meanings, and perspectives of the participants to be reflected within the coding, with these codes reflecting participants own use of language.

Survey responses were initially coded separately to ensure that each response was thoroughly read and considered in developing codes and themes later on. Initial codes were collated into separate documents based on their similarities, for example, codes that were perceived to be alike or likely important, such as ‘guilt and shame’, ‘embarrassment’, and ‘emotional support’, were grouped together. A separate document was created for codes that did not naturally fit together and were labelled as miscellaneous or other codes. Once these documents were completed, they were then reviewed to ensure accuracy and additional edits.

3.5.3 Phase Three: Searching for Themes.

After multiple reviews of the coding documents, codes and their associated extracts were organized as potential ideas to be developed into more substantial themes and subthemes. These potential ideas were organised based on their relevance, similarities and their overlapping ideas, which together would form a meaningful story in relation to the research questions (Terry et al., 2017). Concept development was aided with the use of a table to further explore the patterns and trends between and across the data. The table allowed me to establish the boundaries and relationships between each theme and to determine whether the theme was justified in relation to its suitability and meaningfulness to answer the research question (Braun & Clarke, 2012; 2013). Some potential ideas and concepts required reshuffling or collapsing to fit the story of the entire data set. Exceptions and contradictions were noted for later analysis.

During this phase, I struggled to determine what was and what was not meaningful and relevant to the research question as there were several features of the data that were interesting and highlighted important things that could have been considered regarding experiences of tertiary education in particular. However, as these were not relevant or meaningful to the current research, they were collated under miscellaneous in case they later became relevant during the analysis.

As a result of this phase, a number of potential themes were identified and tabled to help understand these themes and how they related to one another (Willig & Stainton Rogers, 2017). Reflexivity was an essential aspect during the analysis process, particularly during this phase. Therefore, any biases or ideas that had the potential to influence how the data was being interpreted were noted.

3.5.4 Phases Four and Five: Reviewing Themes and Defining and Naming Themes.

The main purpose of this phase was to revise and refine the potential themes identified in Phase Three. The potential themes were examined against the initial coding documents to ensure

data integrity, that the themes were different but worked in relation to each other to answer the research questions, and that the data extracts aligned with this (Terry et al., 2017). Considerable reorganization of themes occurred, resulting in an entire theme to be collapsed and reorganized into the two remaining themes. These two remaining themes were also adjusted considerably, with one being entirely renamed and restructured to answer the research questions. As a result, several data extracts were swapped to accommodate these adjustments. As well as this, theme names were also examined and faced considerable adjustments to ensure that they were suitable and meaningful, while also being reflective of the data (Terry et al., 2017).

There is no predetermined or obvious end point when conducting RTA as coding and deeper analysis is never complete (Lowe et al., 2018). This resulted in having to make the decision as to when to move between each phase of analysis myself (Braun & Clarke, 2019). There were many challenges associated with this, and given the time frame for this research, I often struggled with knowing when to move on from searching for themes, to reviewing and defining themes. I also struggled with knowing whether I had sufficiently explored the data enough to have completed an in-depth analysis. However, I was also aware that my interpretations of the data was only one version of the truth, and that others from different perspectives may offer different interpretations of the data (Clifford & Marcus, 1986).

Although inductive coding was used throughout the analysis, my own thoughts and perspectives on the ideas discussed have been shaped by theoretical frameworks, such as the Emotion-Regulation Theory. Therefore, this may have contributed to my interpretation of the data. For example, the first theme identified in the analysis was shaped by both personal experience and the theoretical framework of this study as I was more aware of the emotional aspects contributing to and maintaining BE behaviours. Thus, it allowed me to easily interpret participants' emotional experiences of tertiary education and BE behaviours.

3.5.5 Phase Six: Producing the Report.

The final stage of analysis consisted of combining the data, analysis, and relevant literature to produce a refined analysis that answered the research questions of the current study (Terry et al., 2017). All the findings were presented in an illustrative and analytic manner, using the data extracts to illustrate key elements of the story while also using these extracts to make analytical claims (Terry et al., 2017).

3.6 Research Positionality.

I am a young-adult, middle-class, England-born, New Zealand-based, white heterosexual female Masters student. I situate myself as an insider of this research due to my lived experience of BE behaviours.

My personal experiences of binge eating align with the diagnostic criteria and many of the theoretical models that have been proposed. During an extremely difficult first semester during my first year at university, I experienced considerable emotional distress as I was transitioning into young adulthood and adjusting to life as a university student in on-campus housing. As a result, I found myself uncontrollably eating highly palatable foods until I felt nauseous to relieve myself of the negative emotions I was experiencing. I feared that I had “failed” to make friends as I felt socially isolated and alone. This transitioned to seeking food as a comfort and often feeling ashamed and embarrassed of the amount of food I was consuming, resulting in me beginning to begin hiding food wrappers and not eating in front of others. For me, such behaviours felt like a vicious cycle that I could not escape as after I would binge eat, and I would restrict my food intake and begin an unrealistic eating and exercise regime to only cave into chocolate and potato chips late at night. I gained a considerable amount of weight in a short time, leading to elevated levels of body dissatisfaction, body dysmorphic tendencies, and increased negative affect.

Throughout the research process, I was aware of the possible impact my personal beliefs and experiences could have on the relevance and applicability of the findings. Although, in some

instances, the researcher's personal experiences could enrich data interpretation, it is important to be aware of the potential biases that may occur during the research. Therefore, reflective practices were essential to be carried out throughout the research process. These are discussed in the section below.

When commencing this research, my knowledge of BE behaviours was limited to individual and sociocultural aspects of binge eating beliefs and behaviours. It was not until I engaged further and more in-depth into literature that I became aware of the environmental contexts, such as tertiary education settings, that contributed to and maintained these eating practices. This inspired my research as I was interested to know how experiences of tertiary education impacted and were impacted by BE behaviours and whether anyone had a similar experience to mine. Appropriately, a constructionist theoretical framework was used to interpret and analyse participants' experiences of BE behaviours and tertiary education.

3.7 Reflexivity.

Qualitative research is contextual, meaning that research occurs within a certain time and place for the participants and the researcher (Dodgson, 2019). Therefore, it is essential to address the factors that can influence the researcher, the research process and the knowledge generated to determine the findings' relevance and applicability to the general population (Dodgson, 2019).

Defined as a set of continuous and multifaceted processes to ensure rigour and quality in qualitative research, reflexivity involves identifying and understanding how a researcher's "bias", such as their subjectivity and influence on context, is intertwined within the research process (Dodgson, 2019; Olmos-Vega et al., 2022). This is because despite the many positive impacts the perspective of the researcher can have on the research, a failure to identify and assess this reflexivity can negatively impact the research concerning its validity and trustworthiness (Dodgson, 2019; Olmos-Vega et al., 2022). In line with this, from a constructionist perspective, the purpose of reflexivity is to respect and value subjectivity rather than to achieve an unbiased or inaccurate reflection of the studied

population (Rees et al., 2020; Olmos-Vega et al., 2022). In other words, the purpose of reflexivity is not to apologise for the lack of objectivity in research but rather to embrace researcher subjectivity by capitalising on the researcher's knowledge and identities (Olmos-Vega et al., 2022).

With this research, I view myself as an insider (Hellowell, 2006). Defined as research conducted by a researcher who has similar characteristics, experiences, or beliefs to the researched population (Hellowell, 2006; Kanuha, 2000; Dwyer & Buckle, 2009; Asselin, 2003), having an insider perspective can be a considerable advantage. These advantages include the ability for researchers to approach the topic of interest with considerable knowledge and understanding, which not only encourages rapport with participants but also allows for a deep understanding of the concepts and phrases used by participants (Rees et al., 2020; Olmos-Vega et al., 2022). However, the insider perspective has been criticised due to the increased likelihood of blurring the lines between boundaries and imposing your own values and beliefs onto the participants (Rees et al., 2020; Olmos-Vega et al., 2022). It is important to recognise that we are all biased and the impacts this can have on research. As long as the researcher discloses their perspective and carries out self-reflexive practices to recognise their own bias and is transparent about this with the readers, the use of viewing and conducting research from an insiders perspective is heavily encouraged (Rees et al., 2020; Olmos-Vega et al., 2022).

Due to my familiarity with the topic of this research, it was important for me to be self-reflexive throughout the entire research process, as reflexivity does not begin and end at a certain point in research. Reflexivity processes must occur throughout the research process to pay attention to the personal, interpersonal, methodological, and contextual factors that may impact the study being carried out (Olmos-Vega et al., 2022; Russell & Kelly, 2002). More specifically, at the beginning of this research, I wrote down what my more personal aims were for this study in addition to the theoretical and academic aims previously discussed. These personal aims were associated with self-discovery, how and why I experienced the events that occurred in my life while adjusting to tertiary education. While both the academic and personal aims of research can intertwine, it was important

for me to understand and be aware of how my beliefs and experience influenced the purpose of the research (Haynes, 2012).

Conducting this research in an ethical manner was especially important due to the various ethical issues that result from insider research, such as implicit coercion, informed consent, and privacy and confidentiality (Fleming, 2018). It was important to generate a sample from a population I was not closely involved with to prevent collecting data without informed consent and without the participants being coerced into participating. Therefore, participant recruitment occurred through student Facebook groups as although I was a member of these groups, I was not actively engaging or participating in conversations. This meant that I did not know the majority of the participants on a personal level and prevented power relationships from occurring (Fleming, 2018).

Additionally, I also decided to respond to the survey questions before advertising for participant recruitment (Koopman et al., 2020; Olmos-Vega et al., 2022). This was done to explore and identify my personal experiences of BE behaviour and tertiary education and how theories and previous literature had shaped my view on the topic (Olmos-Vega et al., 2022; Fleming, 2018). I then took notes on my responses, identifying possible concepts that would be similar to, different from, or contradict the sample. This ensured that I was self-aware of my potential bias during data analysis and prevented any premature conclusions from occurring to the best of my ability (Fleming, 2018).

CHAPTER FOUR: FINDINGS.

A total of 55 eligible tertiary students submitted survey responses. The age range of the participants was 19-52 years old; 49 participants were female, 4 were male, 1 was non-binary, and 1 did not provide gender identity information. 38 participants were European or NZ European, 6 were of mixed ethnicity (including British/Irish, Irish/Italian, Māori/Pasifika, Māori/Samoan, and an unidentified ethnicity), 4 participants were Māori, 2 were Australian, 1 was Arabic, 1 was Asian, and 1 was Indian. 52 of the participants lived off-campus, 2 lived on-campus, and 1 did not provide any information regarding this. 53 of the participants were self-catered, and 2 participants had a mix of self- and non-self-catering.

Through thematic analysis of the survey responses, I identified two main themes regarding students' experiences of tertiary education and BE behaviours: *The Interaction between Binge Eating and Emotional and Psychological States*, and *Contextual Factors that Impact Tertiary Education and Binge Eating Behaviours*. These themes were constructed in order to gain insight and further understanding of the everyday experiences students face in regard to tertiary education and BE behaviours, and how these experiences not only impact each other, but also the how they impact the overall well-being of students. Both themes contain sub-themes which are different aspects of the key themes identified.

4.1 The Interaction between Binge Eating and Emotional and Psychological States.

A majority of the participants discussed their emotional and psychological needs and how these have been impacted by tertiary education and BE behaviours. Based on these responses, I developed three subthemes that demonstrate the ways in which emotions stem from BE and how this impacts psychological states, both positively and negatively. These are: *Loneliness and Social Isolation*, *Using Food for Emotional Support*, and *The Cycle of Guilt and Shame*. Experiences of negative emotions such as stress, sadness, anxiety, guilt, shame, and embarrassment were the most

common emotions experienced while studying at a tertiary institution, as well as before and after engaging in BE behaviours.

4.1.1 Loneliness and Social Isolation.

The feelings of *loneliness and social isolation* were common experiences described by participants. Most of these were negative, indicating a pattern in which these experiences build upon one another to produce long-lasting negative emotional states that influence tertiary education and BE behaviours. Participants often described the social, mental, and physical demands of tertiary education impacting their ability to balance studying and making and maintaining relationships. This was often due to the sudden transition from pre-university life to a daunting new university life. Isla shared how:

“It was hard not being present with family, I felt my relationships fall away as I didn’t have time or mental capacity to go out with others (I would be too tired to study if I did and it would snowball).” (Isla)

In this quote, Isla discusses struggling to maintain her social relationships with others, especially family, due to the increasing demands of university life. The increase in expectations and obligations associated with university resulted in Isla having to choose between her loved ones and her academic responsibilities. This is because Isla knew that if she were to try to socialise, her mental health and capacity would not be able to cope, and therefore, “*snowball*”. Choosing between two aspects of her life ultimately led Isla to reduce her time spent with others to complete her tertiary education.

Isla’s experience suggests that her mental well-being was impacted by the social and academic challenges she faced in regard to adjusting to tertiary education. The mental well-being of tertiary students can be impacted by the social, academic, and personal challenges they face,

especially when they are adjusting to this level. During the adjustment to tertiary education, students may experience considerable shifts from their pre-university life, a life often associated with comfort and little changes, to one that is full of personal, social, and academic challenges. This, as participants' accounts attest, can lead to the development of maladaptive coping mechanisms, such as BE behaviours, which participants used as an attempt to temporarily improve their emotional and psychological well-being. Experiences of loneliness can contribute to and enforce negative experiences of tertiary education, which can increase the possibility of impacted academic performance, academic failure, and even withdrawal from tertiary courses (Diehl et al., 2018).

Other participants expressed the difficulties of studying from their homes, otherwise known as distance or external learning. Although many described the positive aspects of external learning, they also described the difficulties of being isolated from other students. Abigail voiced:

“[...] I became quite low, and occasionally I do feel sad when thinking about whether or not I'm missing out on experiences by being a distance student. I do also feel sad when I don't get to talk to people throughout the day, if my partner has to work late and I end up being home alone for the majority of the day I feel quite lonely.” (Abigail)

Abigail's experience of tertiary education has been impacted by her choice to study externally; she expressed concerns regarding this choice to study externally with regard to the experiences many internal students face while at university and feared that she could be missing out on vital social and academic opportunities. This is further impacted by the lack of social interaction she has during the day as she studies alone. Abigail described these experiences as impacting her mood negatively as she often felt sad when she felt lonely while studying.

Abigail's experiences reinforce the impact loneliness has on experiences of tertiary education and BE behaviours. Structural and social lifestyle changes, such as changing from full-time employment to full-time studying, can considerably change an individual's relationships, routines,

and roles (Schlossberg et al., 1995; Wheaton, 1990; Diehl et al., 2018). Because of this, students may feel increased loneliness and social isolation due to feeling a lack of support or disconnection from those around them, which often leads to various effects on one's health, as well as impacted academic performance and mental distress (Wong et al., 2018; Diehl et al., 2018). As well as this, it is possible that these negative experiences may contribute to and increase BE behaviours as loneliness and a lack of social support have been linked to maladaptive eating behaviours (Makri et al., 2022).

4.1.2 Using Food for Emotional Support.

Almost all the participants described *using food for emotional support* in relation to their experiences of tertiary education and BE. These experiences were often described as negative and as resulting from the stressors associated with studying at a tertiary level. Based on participants' responses, university and BE behaviours can lead to elevated levels of stress due to academic expectations and obligations such as excessive homework, unclear assignments, as well as examination and assignment performance. Participants discussed how they would overeat in order to relieve themselves of negative emotions such as stress, anxiety, and sadness. Mia shared how:

“Once I started uni in July, the extra commitment, stress and studying at silly times of the night forced me to start eating ‘easy’ food and a lot of it. [...] I associate stress with eating sugary food and I always have, uni stress hasn’t helped.” (Mia)

In this quote, Mia describes having had a negative experience of tertiary education as a result of the pressures of academic performance, assignments and readings that felt excessive, and an increase in coursework. This resulted in Mia placing a lot of pressure on herself to succeed by studying at “*silly*” times of the night, indicating that she is having difficulty balancing her personal and academic life. Describing the times in which she studies as “*silly*” indicates that Mia may be

aware that this study routine is not ideal; despite this, she noted that she struggled to change this habit as a result of elevated stress levels. Therefore, she sought comfort in sugary food to handle negative emotions associated with tertiary education.

Mia's quote illustrates a trend amongst participants: BE behaviours were often impacted by emotional and psychological needs that arose in relation to tertiary education. The considerable academic and social stressors associated with tertiary education have been found to lead to common experiences of emotional distress and negative affect (Barker & Galambos, 2007; Killen et al., 1996; Striegel-Moore et al., 1989; Kane et al., 2015). In turn, this distress and affect can lead individuals to seek comfort and emotional relief in maladaptive coping mechanisms, such as BE behaviours (Mitchell & Mazzeo, 2004; Wolfe et al., 2009; Kane et al., 2015).

These experiences of tertiary education were not uncommon. Many participants expressed their need for comfort or stress relief through consuming food. Participants often described eating foods that consisted of carbohydrates, sugars, and fats. These highly rewarding foods allowed participants to experience something positive rather than attending to their stress or sadness. Both Isla and Delilah described:

"When I am stressed, overwhelmed, or sad I want to eat comfort, carb filled foods." (Isla)

"I have been eating a lot more in stressful situations, I rely on sweet treats like chocolate and energy drinks!!" (Delilah)

Both Isla and Delilah make a link between the food they are consuming and elevated stress levels. They also both referred to these kinds of foods as "comfort foods" or "treats" and discussed these eating habits in a negative light. Although "comfort food" is not inherently negative, Isla and Delilah may view these foods as negative. This may be due to a set of rigid rules associated with the

types and amounts of food that can be eaten (Brown et al., 2012). It can be suggested that these rules are influenced by what food and amount of food are socially acceptable (Ehlert, 2021). This means that the ways in which society labels particular foods could influence the rigid rules set by individuals who engage in maladaptive eating behaviours. Food rules can be problematic because individuals use them to attempt to maintain self-control due to the increase of thoughts associated with “forbidden” foods. Thus, there is a high likelihood of BE when the temptation to consume “off-limit” food becomes too much for the individual (Ward & Mann, 2000; Brown et al., 2012).

The consumption of highly palatable foods, such as carbohydrates and sugar, helped participants through difficult and highly stressful periods of studying, particularly around the times in which assignments were due or when examinations took place. Although Isla and Delilah described eating different types of foods to help them, they both used food as a way to cope with the negative emotions they were feeling at the time, especially experiences of being stressed, anxious, and overwhelmed. This was a common experience among participants; many participants discussed using food as a way to suppress the feelings of not only stress as a result of tertiary education, but also negative emotions associated with the elevated levels of being overwhelmed, anxious, and stressed, such as sadness, hopelessness, and unworthiness.

Isla and Delilah’s experience reinforce the idea that BE behaviours are often impacted by the emotional and psychological needs that arise due to tertiary education. However, their experiences also go further to explain the ways in which the types of food consumed during a BE episode contribute to and maintain these behaviours. It could be suggested that BE behaviours arise when an individual is triggered by either their negative emotions or by physiological states of hunger (Vanderlinden et al., 2001). When triggered by negative emotions, individuals may seek food which is most sentimental and provides them with the most pleasure; foods made up of sweets, fats, and carbohydrates (Goodman et al., 2018; Spence, 2017). This may lead to an individual developing a habit to consume these types of foods whenever they are emotionally distressed, hungry, or even

when they are experiencing both of these emotional and physiological states at the same time (Goodman et al., 2018; Gearhardt et al., 2011).

4.1.3 *The Cycle of Guilt and Shame.*

Many participants described a cycle of guilt and shame associated with the consumption of food. Participants described *the cycle of guilt and shame* as a paradoxical cycle that is typically triggered by a negative experience. This experience will often lead those who engage in BE behaviours to binge eat and then restrict the type and amount of food they consume due to feelings of guilt and shame and lowered self-esteem. As participants restricted the food they consumed, they described being overwhelmed with cravings for foods they viewed negatively, such as sweets. Another negative experience, such as stress, sadness, or anxiety would trigger the participants into engaging in BE again. Participants described feeling immense guilt and shame once they realised they had engaged in BE, fearing weight gain and judgment. The cycle would then repeat itself time and time again. Participants also described this cycle as periodical, in which they could go days or weeks without engaging in BE but when they would engage in BE they felt out of control and overwhelmed with negative emotions. These experiences indicate a pattern in which feelings of guilt and shame contribute to and exacerbate BE behaviours. Brooklyn shared how:

“[BE is] an intense feeling that you just have to eat and then once you have you are overwhelmed by this intense feeling of shame and guilt and fear of how much weight you have put on but ironically that leads to further bingeing. Bingeing is used like a medicine.”
(Brooklyn)

In this quote, Brooklyn describes feeling as though BE behaviours were a temporary solution to a problem she saw as permanent. Because Brooklyn described feeling unable to control the urge to engage in BE behaviours and would only engage in these behaviours to resolve her emotional

needs as well as physical feelings of hunger. She believed that once she engaged in BE behaviours, she would never partake in these maladaptive behaviours again. However, once she had finished binge eating, Brooklyn experienced pronounced guilt and shame in relation to the amount of food that was eaten and the long-term consequences of her behaviour, such as weight gain. This allowed her to continue BE in order to temporarily resolve the feelings of guilt and shame she experienced. So, for Brooklyn, this became a pattern in which negative affect such as guilt and shame contributed to and exacerbated the need to engage in BE, which leads to further guilt and shame and re-starts the cycle. Brooklyn also describes food as a “*medicine*” to heal oneself of any emotional distress. However, this medicine is only temporarily helpful; after consuming large portions of food, she becomes overwhelmed with a lack of satisfaction and feels a high level of shame and guilt. She then continues binge eating in order to seek emotional satisfaction.

In regards to tertiary education, participants like Brooklyn may experience guilt and shame as a result of the demands both inside and outside of tertiary education (Brooks, 2015). This may be due to participants feeling as though they should be spending more time on their personal obligations rather than studying but at the same time, they also may feel elevated levels of guilt and shame for not studying (Longhurst et al., 2012; Brooks, 2015). As well as this, students may also experience guilt and shame when receiving feedback from peers and teachers in regard to marked assignments (Burns, 2021). This may lead to students engaging in maladaptive coping mechanisms to cope with the stress of balancing tertiary education and personal obligations. Using food as a maladaptive coping mechanism may provide temporary relief, however, these practices further encourage the development of even more negative emotions as they begin to feel more distressed or unsafe physically or emotionally. This may suggest that what started as a way to control one’s emotions, often turns to a loss of control of both the type and amount of food they are consuming when BE, as well as the emotions that occur before, during and after an episode of BE.

Participants often described experiencing emotions such as embarrassment in relation to their eating habits. They were not only ashamed of what they were eating and how much they were

eating, but were also afraid of being caught in the act or aftermath of BE. Participants suggested that this often occurred when they knew what their eating habits should be, but knew that they were not following their idealised behaviours. Mia voiced:

“I hide my snacks from my partner. He’s my biggest supporter for my weight loss journey and I’m so embarrassed about my ‘naughty’ snack times!” (Mia)

Mia describes being uncomfortable with her “*naughty*” snacking habits, especially in relation to her partner and weight loss journey. Mia highlights how embarrassed she is by her eating habits and believes that she should not be engaging in these behaviours especially if she wants to lose weight. This may be because Mia is seeking approval and acceptance from those around her with regard to her weight loss. This is particularly apparent when she disclosed hiding snacks from her partner. Mia may be fearing that if they were to see her lose control, she would be rejected and alienated from those around her.

Mia describes being uncomfortable with her “*naughty*” snacking habits, especially in relation to her partner and weight loss journey. As well as this, Mia highlights how embarrassed she is by her eating habits and believes that she should not be engaging in these behaviours especially if she wants to lose weight. This may be for two reasons. First, it may be because Mia fears that she will be judged by her partner if he were to see her snacking on specific types of food that have been previously associated with Mia’s eating habits. Second, it may be because Mia is embarrassed about her eating habits and how others will perceive her behaviours in association with her weight loss journey. Mia may be seeking approval and acceptance from those around her with regard to her weight loss. She may be fearing that if they were to see her lose control, she would be rejected and alienated from those around her. Either way, Mia has experienced a notable amount of embarrassment and this has led her to hide snacks from those around her.

Mia's experience may suggest a pattern of secretive eating behaviours where she may conceal the act or the evidence of BE behaviours due to the feelings of embarrassment associated with the type and amount of food consumed (Lydecker & Grilo, 2019; APA, 2013). It could be suggested that this pattern of behaviour may also occur as a result of eating or body-related shame (Kass et al., 2017). As a result, many people may engage in dietary restraint to regulate body weight. However, this often sustains the cycle of guilt and shame and BE behaviours due to the excessive deprivation that can occur when restricting the intake of food (Fairburn et al., 2003; Chami et al., 2021).

In addition to Brooklyn and Mia's experiences, many participants who have had previous experiences with poor mental health often dealt with additional guilt and shame in association with BE behaviours. Aubrey expressed:

"I have engaged in binge eating since starting my degree. It's embarrassing and I'd never really want to talk about it with people I know, because I'm already on the bigger side. It also makes me feel really bad most of the time because I had a more restrictive relationship with food as a teenager, so I still deal with those thoughts almost immediately after I finish eating, but it's never enough to stop or just not binge again the next day or so." (Aubrey)

Aubrey describes how BE impacted her experiences of tertiary education in a negative way. From this quote, it appears as though Aubrey's BE behaviour is fuelled by her shame and guilt in association with how she is perceived by herself and by others. Aubrey describes how when she binge eats, she will experience a cyclical pattern in which she feels she should restrict food after binge eating, often leading to guilt in regards to experiencing thoughts related to her previous restrictive relationship with food. As Aubrey no longer identifies with a restrictive relationship with food, she is often struggling to separate herself from healthy and maladaptive thoughts in relation to food and eating. Aubrey is also aware that this restriction in food will not prevent her from binge

eating in the future. She may feel as though she cannot discuss any of this with those around her due to feeling ashamed and judged because of her weight. Thus, Aubrey's fear of how she is perceived by others in regard to her weight and eating habits is likely what continues the BE cycle.

Aubrey's experience reinforces the idea that individuals who engage in BE behaviours do so to relieve themselves of negative emotional states associated with experiences inside and outside of tertiary education. It could be suggested that individuals like Aubrey struggle to cope with the feelings of guilt and shame associated with BE behaviours. This can lead to individuals to engage in restrictive and unrealistic cognitive control over their eating behaviours, which often fails as individuals respond to hunger cues associated with BE (Mason et al., 2016; Polivy & Herman, 1993; Craven & Fekete, 2019). The response to hunger cues associated with BE predicts a loss of control in the amount of type of food they eat, a key aspect of BE (Haedt-Matt & Keel, 2011; Craven & Fekete, 2019). It is possible that these behaviours can contribute to and enforce negative experiences of tertiary education as they often stem from and exacerbate social, emotional, and psychological triggers associated with the adjustment to and continuance of the student lifestyle (Han & Lee, 2017).

4.2 Contextual Factors that Impact Tertiary Education and Binge Eating Behaviours.

I identified the contextual factors that impact tertiary education and BE behaviours as a second key theme; almost all participants discussed the ways in which factors outside of tertiary education contribute to and maintain negative experiences of both BE behaviours and tertiary education. *Expectations versus Reality in Tertiary Education*, *Fear of Self- and Perceived-Stigma*, and *How COVID-19 has Exacerbated Binge Eating Behaviours in Tertiary Education* were identified as sub-themes as they were notable factors that contributed to the establishment and maintenance of poor experiences of tertiary education and BE behaviours. Experiences involving unrealistic expectations involving unhealthy lifestyle choices and lack of adjusting one's expectations, fear of

being judged and ridiculed by others, and adapting to the unknown were the most common contextual factors that impacted students' experience of tertiary education and BE behaviours.

4.2.1 Expectations versus Reality in Tertiary Education.

The experience of unrealistic expectations in tertiary education settings was common among participants. Most of these experiences were discussed negatively, indicating a pattern in which the expectations placed on participants themselves, or by those around them impacted how they interacted with and engaged in both tertiary education and BE behaviours. Participants often described the difficulties associated with the social requirements from others as well as the adjustment to tertiary studying. This was often due to participants establishing a set of expectations regarding their experiences of tertiary education in terms of the personal, social, and academic aspects of their lives that were often unmet once they began tertiary education. William voiced:

“[I] have ended up being too tired to prepare decent meals or have craved fast food or carb heavy meals and due to them being the easier option have gone for them. The flow on effect is that all of these things have affected mental health negatively. Have felt tired, not good about myself, more self conscious etc [...] particularly around the weekends during drinking or when I've been tired and hungover. I know it's not the best for me but it's the easy option and that's what you feel like at the time. Also when everyone around you is doing it, it becomes the culture.” (William)

William describes his overall experience of tertiary education as involving consuming high levels of alcoholic beverages and engaging in BE behaviours especially when he is tired or hungover. William indicated that although he is aware that his behaviour is not the most beneficial thing he can do for himself, it is just the easiest and most convenient lifestyle. William may fear that he will be

judged by others for not participating in heavy drinking sessions and hangover meals with his friends and therefore may only participate in order to fit in with the “*culture*” of tertiary education.

William’s experience shows the ways in which societal and individual expectations can impact one’s own expectations and experiences at tertiary education. As a result of pressures stemming from Western societal norms around becoming an independent and autonomous young adult, many students believe that their experiences of tertiary education will be completely positive (Awang et al. 2014). However, many expectations result in students having poor experiences of tertiary education as these highly anticipated expectations are never met. Students may fear that they will not make friends or will not fit into the mould of a university student and are therefore more likely to engage in opportunities that impact their experience of tertiary education. Societal pressures such as drinking excessively can contribute to, maintain, and co-exist with BE behaviours as both can become highly addictive maladaptive coping mechanisms despite the various negative social, academic, physical, and psychological consequences (Ferriter & Ray, 2011).

Participants also described struggling with BE behaviours with regard to studying and balancing all of their different classes. These experiences were often described as difficult and challenging as participants expected that their coursework at the tertiary level would be similar to the level of study at high school. However, participants described that their actual experiences of coursework were very different from what they expected. Isla shared how:

“When I first started studying it was exciting, but very overwhelming. First year papers, while easier, [...] they are very time consuming as everything you are learning is new and there are tons of small requirements [...] it was overwhelming, exhausting, and often confusing [...] I was in constant stress mode, [...] I was constantly worried, didn’t have time for a break [...] Food became a reward for finishing something and it was really hard to put the food down!” (Isla)

Isla's quote demonstrates her experiences of the adjustment period between pre-university life and a life that has been consumed with studying, assignments, and little time to do things she enjoys. More specifically, Isla described her experiences as "*overwhelming, exhausting, and often confusing*", an experience she was not prepared for. Isla's expectations of university did not appear to be realistic as she struggled to not only complete studying and assignments, but to also allow herself to take breaks, especially during more stressful times. As a result, Isla often sought food as a way to reward herself for studying. This may have been due to her hedonic drive overriding her homeostatic needs, leading to Isla consuming food that satisfies her psychological needs, rather than her physiological needs (Finlayson & Dalton, 2012; Epel et al., 2014; Lowe & Butryn, 2007; Recio-Román et al., 2020). Although using food is a common motivator for studying, the use of unhealthy food in large quantities can have a notable impact on their psychological and physical well-being.

Isla's experience, again, reinforces the strong impact unrealistic expectations can have on tertiary students. However, Isla's experience differed from William's experience slightly as she appears to use food as a reward system for her engagement with her studies. Participants described higher-than-expected workloads as leading to feeling confused, overwhelmed, and incapable of completing a qualification at this level. This made some participants feel unmotivated or unwilling to study. As a result, these students are often faced with disappointment and unwillingness to continue their tertiary education as the student lifestyle did not meet their expectations. These experiences may lead to individuals to copout or experience burnout as both extreme forms of underachievement and overextension of oneself are often adopted as inappropriate coping strategies when an individual tries to deal with the overwhelming pressures of studying (Kaplan & Geoffroy, 1993). This can contribute to BE behaviours as many students often develop undesirable food practices in order to engage or even withdraw themselves in their study.

While many participants reported challenges in the first year of tertiary education, a few found more balance as they went on in their journey of studying. Many students discussed changes they made regarding their expectations. Piper discussed:

“Adjusting to tertiary education has involved adjusting my expectations. I have learned I will get out what I put in. I have to treat it like a job if I want to get A’s (as opposed to treating it as something I need to squeeze in last minute as a deadline approaches). [...] Earlier on during study (1st, 2nd, 3rd years) when I didn’t have a good routine with study, I would find I would binge eat during exams. It felt like survival, and it was not pleasant. [...] Now during PhD and even during stressful deadlines this binge eating has diminished, though it takes a bit of planning (e.g., meal planning to account for times where I will be more vulnerable to a binge).” (Piper)

Piper described her experience of adjusting her expectations of tertiary education as slightly more positive in comparison to when she had unrealistic expectations of herself and her ability to succeed academically. Piper discovered that if she wanted to do well in her assignments and exams, she had to put the work into her studies while also developing a strong routine. Piper expressed that her previous years of tertiary education “*felt like survival*”, indicating the negative impact her expectations had on both her academic performance and on her mental and physical well-being. Her unrealistic expectations in her previous years of study resulted in her binge eating often as a result of her elevated stress levels. However, now she prepares and provides barriers to prevent herself from engaging in BE behaviours during more stressful and vulnerable times.

Piper’s experience reinforces the strong impact unrealistic expectations can have on tertiary education and BE behaviours. Her experience also shows how adjusting expectations can improve one’s experience of tertiary education and BE behaviours. By understanding how healthy physical, emotional, and academic routines promote positive expectations and experiences of tertiary education, students could adapt their expectations to their own individual needs, rather than those of others and the rest of society. This suggests that there is a possibility in the ongoing maintenance

and exacerbation of BE behaviours if students are not provided with support in adjusting their expectations regarding their experiences of tertiary education.

4.2.2 Fear of Self- and Perceived Stigma.

The feelings of *self- and perceived stigma* were common experiences described by participants. Most of these were negative, indicating a pattern in which engagement with BE behaviours profoundly impacts how individuals view themselves as well as how they believe they are perceived by others. Participants often described experiencing stigma in relation to their mental well-being, physical appearance, and their physical behaviours to the point in which many wished to not be noticed by others. Paisley shared how:

“I’ve found myself putting wrappers at the bottom of the bin and covering them so my husband doesn’t see.” (Paisley)

Paisley describes her experiences of BE behaviours as negative as she often hides her rubbish from her husband once she has done engaging in this behaviour. Keeping these things hidden allows Paisley to avoid the possibility of being judged and ridiculed by those closest to her. Paisley may fear what others, especially her husband, may think of her if they found out about her BE behaviours, therefore, she avoids the possibility of rejection by keeping her BE behaviours as a secret. This fear of rejection may stem from Paisley not wanting to be associated with the stereotypes linked to BE and other maladaptive eating behaviours. Using avoidant coping strategies may allow Paisley to distance herself from stigmatising attitudes about BE behaviours.

Paisley’s quote reinforces the psychological and physical impacts BE behaviours can have on as a result of the stigma surrounding BE and other maladaptive eating behaviours. As a result of BE behaviours, many individuals often experience feelings of body dissatisfaction, overconcern with weight and shape, and avoidance behaviours (Lewer et al., 2017). This is further intensified because

of stigma one puts on themselves, especially in relation to their weight. Individuals who engage in BE behaviours and weight-related stigma often accept and endorse these negative attitudes towards oneself and obesity or being overweight in general, leading to notable psychological distress. Because of this, some may feel hopeless and dissatisfied with their weight and seek relief and avoidance of social interactions through maladaptive coping mechanisms (APA, 2013; Puhl & Suh, 2015; Lin et al., 2019; Wong et al., 2019; Ahorsu et al., 2020). This suggests that negative experiences of BE behaviours, such as hiding food wrappers, or keeping their eating habits a secret, not only maintains these types of behaviours, but may also contribute to the development of eating psychopathology.

In comparison to this, many students are often exposed to unpleasant experiences with regard to their BE behaviours. As BE behaviours have been characterised as a loss of control when eating, today's society often labels individuals as lazy, and lacking self-control (Ebnetter et al., 2011; Reas, 2017). This often led to participants believing in these negative stereotypes about themselves and begin to self-stigmatise. Importantly, many participants discussed their fears of eating food in a social situation in fear of how others would perceive them based on their physical appearance.

Harper expressed:

“Being that I was severely overweight with a BMI of 38, I felt that people seeing me eat things that weren't healthy or too much would feed the disgust of other peoples opinion of me. [...] Binge eating was fuelling negative health aspects like poor body image, negative self talk, low motivation and even bulimic tendencies.” (Harper)

In this quote, Harper describes how her experiences have been heavily influenced by her BE behaviours. Harper believes that if she consumed food that was not defined as “healthy” it would “*feed the disgust*” others had of her, simply based on her physical appearance, especially her weight. Harper's experience indicates that individuals, especially students, view themselves based on how

they believe other people perceive them. Harper views herself negatively because she believes others view her this way, which allows the development of poor body image, low self-esteem, and maladaptive eating behaviours. These beliefs can fuel BE behaviours and may not allow individuals to enjoy the things they once did.

Harper's experience indicates that while self-stigma has a considerable impact on one's mental well-being, it is also important to note the impact of perceived stigma on individuals' personal lives and eating behaviours. Perceived stigma results from not only the beliefs and opinions of society, but also from one's own beliefs about themselves. Harper's experiences suggest that individuals who carry out maladaptive eating behaviours, like BE, believe that they are personally to blame for their behaviours as society labels these individuals to have a lack of self-discipline and social support. This often leads to individuals to isolate themselves further from others, further increasing the possibility of impacted academic performance and possible academic failure (Brelet et al., 2021; Guarneri et al., 2019). Therefore, perceived stigma can impact an individual's self-value and contribute to the exacerbation of BE behaviours and difficulties succeeding in a tertiary education setting.

Similarly, many students discuss the impact self- and perceived stigma has had on their tertiary education. Many students struggled to participate in classes or enjoy the complete tertiary student experience as a result of how they are perceived by others in terms of their physical appearance, eating behaviours, and other lifestyle choices. Aubrey discussed:

"It makes me nervous to do face-cam presentations, and show my face on zoom. I feel like I look so big in the face and I would rather my lecturers and classmates not see me like this."

(Aubrey)

Aubrey describes her difficulties to enjoy and participate completely in her classes due to her BE behaviours. As a result of engaging in these behaviours, Aubrey experienced and developed a

low self-esteem and poor body image. These experiences resulted in Aubrey no longer engaging completely in her university classes in fear of how others perceived her. As Aubrey already perceived herself negatively due to believing her face looked “*so big*”, she believed that others would also judge and criticise her based on her physical appearance. Aubrey’s experience was not uncommon among students in this study; many students were focused on how they were viewed by others in various social and academic settings.

Aubrey’s quote shows the ways in which stigma has impacted her self-value and how it contributes to the exacerbation of BE behaviours in tertiary education settings. In regard to experiences of tertiary education, as emerging adults are a high-risk population for the development of BE and other maladaptive eating behaviours, they are more likely to have negative experiences. As a result, they are also more likely to face various opinions in and out of the classroom, which may lead to fear in how they are perceived by themselves and by those around them. This is possibly due to the negative impact BE behaviours and self-stigma has on students’ mental well-being, which may result in an increased negative impact on students’ academic performance and academic failure (Auerbach et al., 2016; Bruffaerts et al., 2018; Kiekens et al., 2016; Mortier et al., 2015; Serra et al., 2020).

4.2.3 How COVID-19 has Exacerbated Binge Eating Behaviours in Tertiary Education.

Although this was not an intentional focus of the study, the impact of the novel coronavirus (COVID-19) pandemic on students’ experiences with both BE behaviours and tertiary education was apparent within the responses. Most of these experiences were negative, indicating a pattern in which the stressors related to the pandemic influenced the likelihood of individuals’ BE. To further explain, the majority of respondents who discussed the pandemic described their experiences as difficult and challenging. Olivia shared how:

“Covid moving things to online has been the biggest challenge for me. [...] It’s taken a negative hit. Lack [of] social interaction is the biggest challenge for me.” (Olivia)

Olivia described her experiences of the shift from a pre-COVID-19 world to one that now encourages social distancing, health concerns, and fears of the unknown has resulted in various physical and psychological impacts. More specifically, Olivia described her experience of adjusting to studying online and the lack of socialisation associated with this as challenging and therefore, impacting her and her studying negatively. With moving their education from face-to-face to online learning, significant reduction in socialisation, and the feelings around the unknown regarding the long-term effects of COVID-19 on individuals and society as a whole proved extremely difficult to adjust to.

Olivia’s experience indicates that the COVID-19 pandemic is an event that has impacted the whole world, especially the tertiary education system. Shifting from an in-person education setting to one that is based solely online and from home is not only daunting and challenging, but can also be hugely disadvantageous for some students. This not only led to stress and fear of the unknown for both the tertiary sector and its students, but also hugely impacted and exacerbated levels of loneliness and social isolation, which can contribute to the development and maintenance of BE behaviours (Hawkley et al., 2009; Schrepft et al., 2019; dos Santos Quaresma et al., 2021).

The challenge of maintaining physical and psychological well-being during the pandemic, while also balancing the demands of tertiary education led to students having negative and often highly stressful experience, and this was evident across participants’ responses. Ella discussed how:

“I guess this year it [relationship with food and exercise] has got worse with full-time study and extended lockdowns. I am not happy with how I treat my health but feel I do not have the time to change my habits whilst studying.” (Ella)

Ella described her experience of adjusting to pandemic life while studying as difficult and negative. Ella indicated that the pandemic and full-time study had impacted her ability to maintain her health while encouraging negative habits that she wished to change.

Ella's experience indicates, again, the ways in which the COVID-19 pandemic has impacted her personal and academic life. However, Ella's experience differed somewhat as she appeared to only lack motivation to change her study and health habits. Being confined to her home did not motivate her to maintain or improve her health and well-being, as well as actively participating in their tertiary classes. The events of the COVID-19 pandemic can contribute to BE behaviours and negative experiences of tertiary education as some students can easily adapt to profound change, while others find it extremely difficult. Thus, the extent to which people engage in BE is dependent upon the personal and academic context they are situated in.

In addition to this, participants indicated that the pandemic has resulted in them increasing the amount of food they consumed. Sophia explained:

"I have been bingeing during lockdown when I'm studying. Usually excessive amounts of cake and baked goods. Since I started studying in comparison to before studying, my eating habits have changed and I eat more frequently and larger portions." (Sophia)

It is evident that Sophia had noticed a shift in her eating habits, and she linked this not just to the COVID-19 related lockdowns, but particularly to studying while at home. More importantly, it is evident that Sophia is not happy about this shift in her eating habits, viewing her "excessive" eating as a problem. Potentially, she may have sought, in "*cakes and other baked goods*", comfort to handle stressors related to the pandemic *and* to study.

Sophia's experience indicates that while COVID-19 impacted the entire world and international tertiary sectors, it is also important to be aware of the profound impact the pandemic had on individuals' personal lives and eating behaviours. Profound change and having to face the

unknown regarding your general health, as well as balancing academic responsibilities is no easy task for students. This often results in individuals needing to find a way to cope with all of the change occurring around them. Therefore, students are likely to engage in maladaptive eating behaviours, especially BE, to cope and adapt to sudden changes and the negative affect associated with these changes.

CHAPTER FIVE: IMPLICATIONS AND CONCLUSIONS.

5.1 Summary of Findings.

This study aimed to explore the experiences of tertiary students in relation to BE behaviours and tertiary education in New Zealand, focusing on how students describe their experiences and how these experiences of tertiary education and BE behaviours impact one another. Using a social constructionist framework, I used thematic analysis to analyse survey responses, focusing on how the experiences of both tertiary education and BE behaviours influenced students' well-being, thoughts and beliefs about university life, and thoughts and beliefs about BE behaviours. Two core themes were established: *The Interaction between Binge Eating and Emotional and Psychological States*, and *Contextual Factors that impact Tertiary Education and Binge Eating Behaviours*.

In sum, participants in this study often described experiences of BE behaviours while studying at a tertiary level negatively. Participants' experiences were negatively impacted by the personal, academic, and social challenges associated with loneliness, using food as a maladaptive coping mechanism, negative affect, such as guilt and shame, unrealistic expectations of tertiary education, self and perceived stigma, and the additional challenges provided by the COVID-19 pandemic. It was apparent that the ways in which these factors impacted participants' experiences of tertiary education and BE behaviours were heavily dependent on their own social and cultural understanding of the world. In regards to my second and third research questions on the impacts that tertiary education and BE behaviours have on each other, participants in the present study experienced a paradoxical cycle in which negative experiences further encouraged more negative experiences. This resulted in a cycle that had a considerable impact on their social, physical, and mental well-being.

5.2 Implications.

The experiences and insights shared by tertiary students in this study can assist tertiary institutions and health professionals to address the difficulties students are experiencing and to

develop more holistic support strategies to help this population succeed. These tertiary students provide examples of how individuals, loved ones, lecturers, and tertiary institutions as a whole impact students' experiences of tertiary education and BE behaviours.

Based on the present study's findings, it is clear that adjusting to tertiary education is a potentially vulnerable time for all students, particularly those who have or will begin to engage in BE behaviours. This is not only because of the adjustment to academic changes but also the personal, social, and financial shifts that occur during this time. The findings of the study suggest that as a result of negative affect, maladaptive coping mechanisms, and contextual factors such as the COVID-19 pandemic, many students have struggled to adjust to university life as new or mature students. Therefore, these students require sufficient support. Previous literature has suggested that tertiary institutions should take a holistic approach to provide consistent and cohesive support to student well-being by developing support strategies with students themselves (Baik et al., 2019; Dooris & Doherty, 2010; Cage et al., 2021). Based on the results of this study, taking this kind of approach seems like a potentially helpful way to equip students with the support they need to navigate a challenging time of life.

More specifically, the findings from this study suggest that students struggled with the adjustment and transition to university, both in social and academic aspects. Tertiary institutions and health professionals, such as counsellors and psychologists could provide services that adequately equip students with the skills and expectations they need to succeed in various ways. For example, by providing students with additional support during an extended transition period into university, students may be better equipped with the skills and expectations they need to cope with the substantial changes associated with tertiary education (Cage et al., 2021). This is not only important for first-year students but mature students as well as they also require support in developing their newfound identity as a student (Chapman, 2013; Cage et al., 2021). As well as this, providing opportunities for students to engage in pre-transition programmes could provide students with the opportunity to gain a realistic insight into university life, as well as an increase in academic

performance while fostering a better sense of belonging and more confidence (Cage et al., 2021; Bir & Myrick, 2015; Suzuki et al., 2012).

In addition to the need for lengthened adjustment periods for students, the present study highlights the need for the development of healthy eating interventions across university campuses. More specifically, participants in the present study often described consuming highly palatable foods, such as those high in sugar, fat, and carbohydrates, when engaging in BE behaviours. Therefore, tertiary institutions could provide students with affordable and appealing healthy food options in order to encourage students to purchase more healthy options (Sogari et al., 2018). Tertiary institutions could also provide students with easy access to microwaves and food preparation areas to encourage the use of meal planning and eating food from home rather than encouraging the use of vending machines, which typically contain food and beverages high in sugar, fat and carbohydrates.

As well as this, students could be provided with food education and food preparation classes in order to educate and provide students with examples of what healthy eating involves, but also ensuring that behaviours associated with food are not maladaptive. This will also likely provide students with the confidence to make better food choices throughout their life (Sogari et al., 2018). However, with this, further research into a beneficial healthy eating program within universities is essential, as many have shown little to no promise in success due to sample sizes and sampling errors (Yager & O’Dea, 2008; Castillo et al., 2019). Accordingly, a healthy eating program could be cautiously integrated into university services as an intervention approach to BE behaviours in university students.

Regarding the mental well-being of university students, the present study has provided insight into the ways in which a student's mental well-being can be impacted by experiences of tertiary education and experiences of BE behaviours. More specifically, students within the current study described experiences involving elevated levels of stress, sadness, anxiety, guilt, shame, and embarrassment as a result of the academic, sociocultural, and personal challenges associated with

tertiary education. Faced with these pressures and challenges, many students engaged in BE behaviours as a way to reduce the negative affect associated with these experiences. Therefore, an effort to increase the support provided by students is essential to ensure their success both during and after their tertiary education.

This research made apparent that the adjustment of expectations regarding the transition and adjustment to tertiary education predicted successful mental well-being and physical outcomes for students, as well as a lack of engagement in BE behaviours. In addition, providing students with support can encourage the development of adaptive coping strategies and therefore reduce the likelihood of developing maladaptive coping behaviours, such as BE behaviours. This type of support can include students learning techniques involving mindfulness and using a moderator as a psychological intervention in order to improve metacognitive awareness, emotional regulation and reactivity, concentration, and mental clarity (Moore & Malinowski, 2009; Ortner et al., 2007; Chambers et al., 2008; Nair & Otaki, 2021). This has been indicated to reduce levels of depression, stress and anxiety (Cohen & Miller, 2009; Nair & Otaki, 2021) while also elevating levels of social connectedness, patience, gratitude, and healthy body awareness in tertiary students (Dekeyser et al., 2008; Rothaupt & Morgan, 2007; Nair & Otaki, 2021). Therefore, further development and implementation of efficient psychological interventions need to be provided and easily accessible for students at all times throughout their university careers.

These strategies to improve the mental well-being of students would be particularly useful in a New Zealand context as the prevalence rates of poor mental well-being and BE behaviours are rapidly increasing, especially within indigenous populations such as individuals who identify as Māori or Pasifika (Lacey et al., 2020). Although there is limited literature regarding the experiences of students in tertiary education settings in Aotearoa New Zealand, this period of transition and adjustment is a particularly vulnerable time for tertiary students. The present study highlights the unique experiences of Aotearoa New Zealand tertiary students and the ways in which these experiences of tertiary education and BE behaviours impact their well-being. Therefore, it is

important to establish strategies to develop and maintain preventative measures for poor mental well-being within student populations.

5.3 Limitations.

This study adds to the limited research on BE behaviours, particularly in a tertiary student population. However, there are limitations to the present study. In regard to the participants in this research, all participants were students who self-identified as engaging in BE behaviours as no measurement or formal assessments of participants' experiences of BE behaviours subjectively perceived and experienced were executed. As a result, it was not possible to determine whether all of the participants met the clinical threshold for what may be characterised as BE behaviours, or BED. Nonetheless, this could be considered a strength of the study as it allowed more inclusive participation from students and avoided difficulties associated with determining BE behaviours from the participants' perspectives. As well as this, not all university students are members of the Facebook groups participants were recruited from, therefore, findings may not be reflective of those who do not have any social media or those who are not members of any tertiary institute Facebook group.

Another limitation of this study is the inequitable number of male, transgender, gender-fluid, and nonbinary participants in comparison to female participants. Although literature surrounding maladaptive eating behaviours is even more limited in regard to these individuals, it is essential that a thorough understanding of the experiences of all genders are explored in terms of experiences of tertiary education and BE behaviours (Striegel et al., 2012; Nagata et al., 2020). It is recommended that an even number of gender-fluid, transgender, non-binary, male, and female tertiary students should be sought if replicating this study.

A final limitation of this study is the use of an online survey as a data collection method. Participants were required to submit responses through an online survey, however, some students may have been unable to access this survey due to a lack of technology or technology issues.

Findings may therefore not be reflective of those who struggle to use technology, or those who have problems with or no access to working technology. Despite this, the use of an online survey may also be a strength of the present study as almost all students today use their computers, laptops, or tablets to study and connect with others. Therefore, the ability to recruit participants and collect data was considerably easy due to the online survey being easily accessible to students in comparison to in-person or online interviews.

5.4 Future Research.

As this study discusses topics with limited research, it is essential that future research is carried out. This would not only help us gain further understanding of the experiences of tertiary education and BE behaviours in a student population, but also help researchers and health professionals further their understanding of the possible causes and the developmental and maintenance factors of disordered eating behaviours, such as BE, and negative experiences of tertiary education.

Firstly, future research could consider both the positive and negative experiences of tertiary education and how this impacts students' engagement in BE behaviours. As the present study predominantly discussed the negative experiences of tertiary education, it did not provide much information regarding positive experiences and the impact these experiences had on BE behaviours. Previous literature has also mostly been associated with negative experiences of both tertiary education and how these experiences allow for the development and exacerbation of BE behaviours in the student population. Therefore, exploring students' positive experiences in relation to tertiary education is essential to understanding the ways in which tertiary education impacts an individual's BE behaviour.

Secondly, future research could explore similarities and differences between non-binary, transgender, gender-fluid, male, and female tertiary students. As the sample of the present study was predominantly female, it did not provide much information on male, transgender, non-binary,

and gender-fluid student experiences of tertiary education and BE behaviours. As previous literature has been predominantly focused on female participants, more research into the experiences of male, transgender, non-binary, and gender-fluid students in relation to tertiary education and BE behaviours are essential. These individuals are just as likely to experience situations that could impact the development and exacerbation of BE behaviours, particularly in a student population. This will also allow for a more generalised and representative understanding of these experiences.

Thirdly, whilst a number of ethnicities were represented in the present study's sample, future research would benefit from the exploration of Māori and Pasifika students to increase our understanding of tertiary education experiences and BE behaviours from the perspective of these students. There is little to no previous research on the impact BE behaviours and tertiary education have on Māori and Pasifika students, therefore, future research into these experiences would be beneficial to further increase our understanding within the context of New Zealand universities and society.

Additionally, future research could explore the differences in the levels of studies tertiary students are engaging in, such as undergraduates, postgraduates, and doctoral studies. As the sample of the present study included participants who were well into their undergraduate or starting their postgraduate studies, it would be interesting to collate the experiences of those who have just adjusted to university life with those who have been studying for an extended period of time. This could also look into the similarities and differences in the experiences of young adults and mature students. As previous literature is heavily focused on first-year undergraduate students (Badrasawi & Zidan, 2019; Serra et al., 2020; Vila-Martí et al., 2021), an exploration into experiences of BE behaviours and tertiary education in postgraduate and mature students is essential to ensure that the entire student population is represented in literature.

Lastly, future research should have an in-depth look into the short- and long-term impacts of COVID-19 on student experiences' of tertiary education and BE behaviours. As we are currently in a time where there is not much information on the short- and long-term impacts of COVID-19 on

students' mental well-being, future research exploring how the pandemic impacts experiences of BE behaviours and tertiary education is essential to not only gain further understanding but also provide students, their support systems such as family and friends, and tertiary institutions with information to help establish appropriate support strategies for those who are struggling with both tertiary education and with their BE behaviours.

5.5 Conclusion.

This thesis has explored the experiences of tertiary students regarding binge eating behaviours and tertiary education in New Zealand. Considering the number of individuals who attend a tertiary institution, research on the topic continues to emerge from largely American or European universities, and the present research has helped gain valuable insight into the experiences of students from a country which has not been thoroughly investigated. This thesis has identified the social, personal, academic, physical, and psychological difficulties students face while attending tertiary education and explored how binge eating behaviours have impacted tertiary education and how this level of study has impacted students' use of binge eating behaviours. Through an online qualitative survey, the use of food to relieve negative affect was highlighted by students sharing their personal university experiences. This indicates the considerable contribution these experiences have on negative experiences of both tertiary education and binge eating behaviours. This thesis also resulted in conclusions made regarding the emotion-regulation theory, highlighting the role experiences of tertiary education plays in this. Lastly, implications, limitations, and future research were discussed, indicating the need for further investigation into this topic and how tertiary institutions could implement the use of pre-transition and extended transition programmes for students at the beginning of the academic year, food education and food preparation classes, affordable and appealing healthy food in campus dining halls, and easily accessible psychological interventions to ensure success for their students.

REFERENCES.

- Aguilera-Hermida, A. P. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*, 1(100011). <https://doi.org/10.1016/j.ijedro.2020.100011>
- Ahorsu, D. K., Lin, C. Y., Imani, V., Griffiths, M. D., Su, J. A., Latner, J. D., Marshall, R. D., & Pakpour, A. H. (2020). A prospective study on the link between weight-related self-stigma and binge eating: Role of food addiction and psychological distress. *International Journal of Eating Disorders*, 53(3), 442-450. <https://doi.org/10.1002/eat.23219>
- Akuhata-Huntington, Z. (2020). *Impacts of the COVID-19 lockdown on Māori students*. <https://www.voced.edu.au/content/ngv%3A87008>
- Aladağ, M. (2009). Evaluation of the peer counselling program carried out on university adjustment. *Turkish Psychological Counselling and Guidance Magazine*, 4(31), 12-22. <https://dergipark.org.tr/tr/download/article-file/200011>
- Alleva, J. M., Meadows, A., Waldem, M. I., Stutterheim, S. E., Lissandrello, F., & Atkinson, M. J. (2021). "What can her body do?" Reducing weight stigma by appreciating another person's body functionality. *PLoS ONE*, 16(5). <https://doi.org/10.1371/journal.pone.0251507>
- Almomani, E. Y., Qablan, A. M., Almomany, A. M., & Atrooz, F. Y. (2021). The coping strategies followed by university students to mitigate the COVID-19 quarantine psychological impact. *Current Psychology*, 40(11), 5772-5781. <https://doi.org/10.1007/s12144-021-01833-1>
- Ammar, A., Brach, M., Trabelsi, K., Chtourou, H., Boukhris, O., Masmoudi, L., Bouaziz, B., Bentlage, E., How, D., Ahmed, M., Müller, P., Müller, N., Aloui, A., Hammouda, O., Paineiras-Domingos, L. L., Braakman-Jansen, A., Wrede, C., Bastoni, S., Pernambuco, C. S.,

Mataruna, L., Taheri, M., Irandoust, K., Khacharem, A., Bragazzi, N. L., Chamari, K., Glenn, J. M., Bott, N. T., Gargouri, F., Chaari, L., Batatia, H., Ali, G. M., Abdelkarim, O., Jarraya, M., Abed, K. E., Souissi, N., Van Gemert-Pijnen, L., Riemann, B. L., Riemann, L., Moalla, W., Gómez-Raja, J., Epstein, M., Sanderman, R., Schulz, S. V., Jerg, A., Al-Horani, R., Mansi, T., Jmail, M., Barbosa, F., Ferreira-Santos, F., Šimunič, B., Pišot, R., Gaggioli, A., Bailey, S. J., Steinacker, J. M., Driss, T., & Hoekelmann, A. (2020). Effects of COVID-19 home confinement on eating behaviour and physical activity: Results of the ECLB-COVID-19 international online survey. *Nutrients*, 12(6). <https://doi.org.10.3390/nu12061583>

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>

American Psychiatric Association. (2022). *Eating disorder*. In APA Dictionary of Psychology. Retrieved September 15, 2022, from https://dictionary.apa.org/eating-disorder?_ga=2.18440249.1821569722.1668978678-2076949202.1659584589

American Psychiatric Association. (2022). *Stigma*. In APA Dictionary of Psychology. Retrieved October 5, 2022, from <https://dictionary.apa.org/stigma>

American Psychiatric Association. (2022). *Experience*. In APA Dictionary of Psychology. Retrieved August 15, 2022, from <https://dictionary.apa.org/experience>

Amon, K. L., Campbell, A. J., Hawke, C., & Steinbeck, K. (2014). Facebook as a recruitment tool for adolescent health research: A systematic review. *Academic Pediatrics*, 14(5), 439-447. <https://doi.org/10.1016/j.acap.2014.05.049>

Amon, K. L., Paxton, K., Klineberg, E., Riley, L., Hawke, C., & Steinbeck, K. (2015). Insights into Facebook pages: An early adolescent health research study page targeted at parents. *International Journal of Adolescent Medicine and Health*, 28(1), 69-77. <https://doi.org/10.1515/ijamh-2014-0074>

Anderson, K., Accurso, E. C., Kinasz, K. R., Le Grange, D. (2016). Residents' and fellows' knowledge and attitudes about eating disorders at an academic medical center. *Acad Psychiatry*, 41(3), 381-384. <https://doi.org/10.1007/s40596-016-0578-z>

Anderson, R., Gratwick-Sarll, K., Bentley, C., Harrison, C. & Mond, J. (2015). Adolescents perception of the severity of binge eating disorder: A population-based study. *Journal of Mental Health*, 25(1), 16-22. <https://doi.org/10.3109/09638237.2015.1057329>

Angermeyer, M. C., Dietrich, S. (2005). Public beliefs about and attitudes towards people with mental illness: A review of population studies. *Acta Psychiatrica Scandinavica*, 113(3), 163-179. <https://doi.org/10.1111/j.1600-0447.2005.00699.x>

Apple, R. F., & Agras, W. S. (2004). *Overcoming eating disorders: A cognitive-behavioural treatment for bulimia nervosa and binge-eating disorder*. Oxford University Press.

Arclous, J., Mitchell, A. J., Wales, J., & Nielsen, S. (2011). Mortality rates in patients with anorexia nervosa and other eating disorders: A meta-analysis of 36 studies. *Archives of General Psychiatry*, 68(7), 724-731. <https://doi.org/10.1001/archgenpsychiatry.2011.74>

Aristovnik, A., Damijana, K., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Preprints*, 12. <https://doi.org/10.3390/su12208438>

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480. <https://doi.org/10.1037/0003-066X.55.5.469>

Arnett, J. J. (2010). Emerging adulthood(s). In L. A. Jensen (Eds.), *Bridging cultural and developmental approaches to psychology: New syntheses in theory, research, and policy*

(pp. 255-275). Oxford University Press.

<https://doi.org/10.1093/acprof:oso/9780195383430.003.0012>

Ascend at the Aspen Institute, & The Jed Foundation. (2021). *Improving mental health of student parents: A framework for higher education* (Report No. 1).

https://ascend.aspeninstitute.org/wp-content/uploads/2021/05/MentalHealthFramework_Final.pdf

Asselin, M. E. (2003). Insider research: Issues to consider when doing qualitative research in your own setting. *Journal for Nurses in Staff Development*, 19(2), 99-103.

<https://doi.org/10.1097/00124645-299393999-00008>

Auerbach, R. P., Alonso, J. L., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., Hwang, I., Kessler, R. C., Liu, H., Mortier, P., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Aguilar-Gaxiola, S., Al-Hamzawi, A., Andrade, L. H., Benjet, C., Caldas-de-Almeida, J. M., Demyttenaere, K., Florescu, S., de Girolamo, G., Gureje, O., Haro, J. M., Karam, E. G., Kiejna, A., Kovess-Masfety, V., Lee, S., McGrath, J. J., O'Neill, S., Pennel, B. E., Scott, K., Have, M. T., Torres, Y., Zaslavsky, A. M., Zarkov, Z., & Bruffaerts, R. (2016). Mental disorders among college students in the World Health Organisation world mental health surveys.

Psychological Medicine, 46 (16), 2955-2970. <https://doi.org/10.1017/S0033291716001665>

Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., Kessler, R. C., & WHO WMH-ICS Collaborators. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, 127(7), 623–638. <https://doi.org/10.1037/abn0000362>

Austin, S. B., Nelson, L. A., Birkett, M. A., Calzo, J. P., & Everett, B. (2013). Eating disorder symptoms and obesity at the intersections of gender, ethnicity, and sexual orientation in US high school students. *American Journal of Public Health, 103*(2), 16-22. <https://doi.org/10.2105/AJPH.2012.301150>

Averill, J. R. (1980). A constructivist view of emotion. In R. Plutchik & H. Kellerman (Eds.), *Theories of Emotion* (pp. 305-339). Academic Press. <https://doi.org/10.1016/B978-0-12-558701-3.50018-1>

Awang, M. M., Kutty, F. M., & Ahmad, A. R. (2014). Perceived social support and well being: First-year student experience in university. *International Education Studies, 7* (13), 261-270. <https://doi.org/10.5539/ies.v7n13p261>

Badrasawi, M. M., & Zidan, S. J. (2019). Binge eating symptoms prevalence and relationship with psychosocial factors among female undergraduate students at Palestine polytechnic university: A cross-sectional study. *Journal of Eating Disorders, 7*(33). <https://doi.org/10.1186/s40337-019-0263-1>

Baik, C., Larcombe, W., Brooker, A. (2019). How universities can enhance student mental wellbeing: The student perspective. *Higher Education Research & Development, 38*(4), 674-687. <https://doi.org/10.1080/07294360.2019.1576596>

Baik, C., Naylor, R., & Arkoudis, S. (2015). *The first year experience in Australian universities: Findings from two decades, 1994-2014*. https://melbourne-cshe.unimelb.edu.au/_data/assets/pdf_file/0016/1513123/FYE-2014-FULL-report-FINAL-web.pdf

Baker, R., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology, 33*(1), 31-38. <https://doi.org/10.1037/0022-0167.31.2.179>

Baker, R. W., & Siryk, B. (1986). Exploratory intervention with a scale measuring adjustment to college. *Journal of Counselling Psychology, 33*(1), 31-38.

<https://doi.org/10.1037/0022-0167.33.1.31>

Barker, M. E., Blain, R. J., & Russell, J. M. (2015). The influence of academic stress on energy and nutrient intake in male university students. *Nutrition Journal, 14*(98).

<https://doi.org/10.1186/s12937-015-0088-y>

Barker, E. T., & Galambos, N. (2007). Body dissatisfaction, living away from parents, and poor social adjustment predict binge eating symptoms in young women make the transition to university. *Journal of Youth and Adolescence, 36*(7), 904-911.

<https://doi.org/10.1007/s10964-006-9134-6>

Barrack, M. T., West, J., Christopher M., & Pham-Vera, A. M. (2019). Disordered eating among a diverse sample of first-year college students. *Journal of the American College of Nutrition, 38*(2), 141-148. <https://doi.org/10.1080/07315724.2018.1487345>

Bell, K., Rieger, E., & Hirsch, J. K. (2019). Corrigendum: Eating disorder symptoms and proneness in gay men, lesbian women, and transgender and gender non-conforming adults: Comparative levels and a proposed mediational model. *Frontiers in Psychology, 9*.

<https://doi.org/10.3389/fpsyg.2018.02692>

Benedict, C., Hahn, A. L., Diefenbach, M. A., & Ford, J. S. (2019). Recruitment via social media: Advantages and potential biases. *Digital Health, 5*, 1-11.

<https://doi.org/10.1177/2055207619867223>

Bernier, A., Larose, S., & Whipple, N. (2005). Leaving home for college: A potentially stressful event for adolescent with preoccupied attachment patterns. *Attachment and Human Development, 7*, 171-185. <https://doi.org/10.1080/14616730500147565>

Bertrand, M., & Mullainathan, S. (2003). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *NBER Working Paper*, 9873, 167-169. https://www.nber.org/system/files/working_papers/w9873/w9873.pdf

Berzonsky, M. D., & Kuk, L. S. (2000). Identity status, identity processing style and the transition to university. *Journal of Adolescent Research*, 15, 81-98. <https://doi.org/10.1177/0743558400151005>

Beutel, M. E., Klein, E. M., Braehler, E., Reiner, I., Junger, C., Michal, M., Wiltink, J., Wild, P. S., Münzel, T., Lackner, K. J., & Tibubos, A. N. (2017). Loneliness in the general population: Prevalence, determinants and relations to mental health. *BMC Psychiatry*, 17(1). <https://doi.org/10.1186/s12888-017-1262-x>

Bewick, B., Koutsopoulou, G., Miles, J., Slaa, E., & Barkham, M. (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies in Higher Education*, 35(6), 633-645. <https://doi.org/10.1080/03075070903216643>

Bianchi, D., Baiocco, R., Pompili, S., Lonigro, A., Di Norcia, A., Cannoni, E., Longobardi, E., Zammuto, M., Di Tata, D., & Laghi, F. (2021). Binge eating and binge drinking in emerging adults during COVID-19 lockdown in Italy: An examination of protective and risk factors. *Emerging Adulthood*, 10(1), 291-303. <https://doi.org/10.1177/21676968211058501>

Binford, R. B., Le Grange, D., & Jellar, C. C. (2005). Eating disorders examination versus eating disorders examination – questionnaire in adolescents with full and partial-syndrome bulimia nervosa and anorexia nervosa. *International Journal of Eating Disorders*, 37(1), 44-49. <https://doi.org/10.1002/eat.20062>

Bir, B., & Myrick, M. (2015). Summer bridge's effects on college student success. *Journal of Developmental Education*, 39(1), 22-30. <https://files.eric.ed.gov/fulltext/EJ1106091.pdf>

Bodywhys (2015). *Binge eating: Breaking the cycle a self-help guide towards recovery* (2nd ed.). The Eating Disorders Association of Ireland. <https://www.bodywhys.ie/wp-content/uploads/2017/02/BEDBookletUpload.pdf>

Boiger, M., & Mesquita, B. (2012). The construction of emotion in interactions, relationships, and cultures. *Emotion Review*, 4(3), 221-229. <https://doi.org/10.1177/1754073912439765>

Borgi, S., Mainardes, E., & Silva, É. (2016). Expectations of higher education students: A comparison between the perception of student and teachers. *Tertiary Education and Management*, 22(2), 171-188. <https://doi.org/10.1080/13583883.2016.118326>

Bos, A. E. R., Pryor, J. B., Reeder, G. D., & Stutterheim, S. E. (2013). Stigma: Advances in theory and research. *Basic and Applied Social Psychology*, 35(1), 1-9. <https://doi.org/10.1080/01973533.2012.746147>

Bowman, N. A. (2010). The development of psychological well-being among first-year college students. *Journal of College Student Development*, 51(2), 180–200. <https://doi.org/10.1353/csd.0.0118>

Bjorlie, K., Forbush, K. T., Chapa, D. A. N., Richson, B. N., Johnson, S. N., & Fazzino, T. L. (2022). Hyper-palatable food consumption during binge-eating episodes: A comparison of intake during binge eating and restricting. *International Journal of Eating Disorders*, 55(5), 688-696. <https://doi.org/10.1002/eat.23692>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>

Braun, V., & Clarke, V. (2012). *Thematic analysis*. In H. Cooper, P. M. Camic, D. L., Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbooks in psychology, Vol. 2*.

Research designs: Quantitative, qualitative, neuropsychological, and biological (pp. 57-71).

American Psychological Association. <https://doi.org/10.1037/13620-004>

Braun, V. & Clarke, V. (2013). *Successful Qualitative Research: A Practical Guide for Beginners*. Sage.

https://www.researchgate.net/publication/256089360_Successful_Qualitative_Research_A_Practical_Guide_for_Beginners

Braun, V. & Clarke, V. (2019). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), 1-16.

<https://doi.org/10.1080/2159676X.2019.1704846>

Braun, V., Clarke, V., & Gray, D. (2017). Innovations in qualitative methods. In B. Gough (Ed.), *The Palgrave handbook of critical social psychology* (pp. 243-266). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-51018-1_13

Braun, V., Clarke, V., Boulton, E., Davey, L., & McEvoy, C. (2021). The online survey as a qualitative research tool. *International Journal of Social Research Methodology*, 24(6), 641-654. <https://doi.org/10.1080/13645579.2020.1805550>

Brelet, L., Flaudias, V., Désert, M., Guillaume, S., Llorca, P. M., & Boirie, Y. (2021). Stigmatisation toward people with anorexia nervosa, bulimia nervosa, and binge eating disorder: A scoping review. *Nutrients*, 13(8). <https://doi.org/10.3390/nu13082834>

Brewis, A. A. (2010). *Obesity: Cultural and biocultural perspectives*. Rutgers University Press.

Brewis, A. A. (2014). Social science & medicine stigma and the perpetuation of obesity. *Social Science & Medicine*, 118, 152-158.

<https://doi.org/10.1016/j.socscimed.2014.08.003>

Brewis, A., Brennhofer, S., van Woerden, I., & Bruening, M. (2016). Weight stigma and eating behaviours on a college campus: Are students immune to stigma's effects? *Preventive Medicine Reports*, 4, 578-584. <https://doi.org/10.1016/j.pmedr.2016.10.005>

Briggs, A. R. J., Clark, J., & Hall, I. (2012). Building bridges: Understanding transition to university. *Quality in Higher Education*, 18(1), 3-21. <https://doi.org/10.1080/13538322.2011.614468>

Brooker, A., Lawrence, J. A. (2012). Educational and cultural challenges of bicultural adult immigrant and refugee students in australia. *Australian Journal of Adult Learning*, 52(1), 66-88. <https://doi.org/10.3316/aeipt.193945>

Brooks, R. (2002). 'Edinburgh, Exeter, East London – or employment?' A review of research on young people's higher education choices. *Educational Research*, 44(2), 217-227. <https://doi.org/10.1080/00131880110107405>

Brooks, R. (2003). Young people's higher education choices: The role of family and friends. *British Journal of Sociology of Education*, 24(3), 283-297. <https://doi.org/10.1080/01425690301896>

Brooks, R. (2004). 'My mum would be pleased as punch if I actually went, but my dad seems a bit more particular about it': Paternal involvement in young people's higher education choices. *British Educational Research Journal* 30(4), 495-514. <https://doi.org/10.1080/0141192042000237202>

Brooks, R. (2015). Social and spatial disparities in emotional responses to education: Feelings of 'guilt' among student-parents. *British Educational Research Journal*, 41(3), 505-519. <https://doi.org/10.1002/berj.3154>

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid

review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)

Brown, C. (2008). The information trail of the ‘freshman 15’ – a systematic review of a health myth within the research and popular literature. *Health Information & Libraries Journal*, 25(1), 1-12. <https://doi.org/10.1111/j.1471-1842.2007.00762.x>

Brown, M. L., & Levinson, C. A. (2022). Core eating disorder fears: Prevalence and differences in eating disorder fears across eating disorder diagnoses. *International Journal of Eating Disorders*, 55(7), 956-965. <https://doi.org/10.1002/eat.23728>

Bruffaerts, R., Mortier, P., Kiekens, G., Auerbach, R. P., Cuijpers, P., Demyttenaere, K., Green, J. G., Nock, M. K., & Kessler, R. C. (2018). Mental health problems in college freshmen: Prevalence and academic functioning. *Journal of Affective Disorders*, 225, 97-103. <https://doi.org/10.1016/j.jad.2017.07.044>

Bruce, B., & Agras, W. S. (1992). Binge eating in females: A population-based investigation. *International Journal of Eating Disorders*, 12(4), 365-373. [https://doi.org/10.1002/1098-108X\(199212\)12:4<365::AID-EAT2260120404>3.0.CO;2-M](https://doi.org/10.1002/1098-108X(199212)12:4<365::AID-EAT2260120404>3.0.CO;2-M)

Brown, A. J., Parman, K. M., Rudat, D. E., & Craighead, L. W. (2012). Disordered eating, perfectionism, and food rules. *Eating Behaviours*, 13(4), 347-353. <https://doi.org/10.j.eatbeh.2012.05.011>

Brownley, K. A., Berkman, N. D., Sedway, J. A., Lohr, K. N., Bulik, C. M. (2007). Binge eating disorder treatment: A systematic review of randomised controlled trials. *International Journal of Eating Disorders*, 40(4), 337-348. <https://doi.org/10.1002/eat.20370>

Bucchianeri, M. M., Eisenberg, M. E., & Neumark-Sztainer, D. (2013). Weightism, racism, classism, and sexism: Shared forms of harassment in adolescents. *Journal of Adolescent Health*, 53(1), 47-53. <https://doi.org/10.1016/j.jadohealth.2013.01.006>

Bulik, C. M. (2016). Towards a science of eating disorders: Replacing myths with realities: The fourth Birgit Olsson lecture. *Nordic Journal of Psychiatry*, 70(3), 224-230.
<https://doi.org/10.3109/08039488.2015.1074284>

Bulik, C. M., Sullivan, P. F., Fear, J. L., & Joyce, P. R. (1997). Eating disorders and antecedent anxiety disorders: A controlled study. *Acta Psychiatrica Scandinavica*, 96(2), 101-107. <https://doi.org/10.1111/j.1600-0447.1997.tb09913.x>

Buote, V. M. (2006). *"If I wasn't friends with these people, I probably wouldn't have adjusted too well:" Friendship development and university adjustment among first-year students* [Master's thesis, Wilfrid Laurier University]. Scholars Commons @ Laurier.
<https://scholars.wlu.ca/etd/790/>

Buote, V. M., Pancer, S. M., Pratt, M. W., Adams, G., Birnie-Lefcovitch, S., Polivy, J., & Wintre, M. G. (2016). The Importance of Friends: Friendship and adjustment among 1st-year university students. *Journal of Adolescent Research*, 22(6), 665-689.
<https://doi.org/10.1177/0743558407306344>

Burns, S. T. (2021). Raising awareness of the impact of guilt and shame on counselor education students. *Journal of Creativity in Mental Health*

Burr, V. (2015). *Social Constructionism* (3rd ed.). Routledge & CRC Press.
<https://doi.org/10.4324/9781315715421>

Burr, V. (2018). Constructivism and the inescapability of moral choices: A response to Raskin and Debany. *Journal of Constructivist Psychology*, 31(4), 369-375.
<https://doi.org/10.1080/10720537.2017.1384339>

Burton, A. L., & Abbott, M. J. (2017). Conceptualising binge eating: A review of the theoretical and empirical literature. *Behaviour Change*, 34(3), 1-31.
<https://doi.org/10.1017/bec.2017.12>

Burton, A. L., & Abbott, M. J. (2019). Processes and pathways to binge eating: Development of an integrated cognitive and behavioural model of binge eating. *Journal of Eating Disorders*, 7(18). <https://doi.org/10.1186/s40337-019-0248-0>

Burton, A. L., Hamilton, B., Iorfino, F., La Monica, H. M., Scott, E. M., & Hickie, I. B. (2022). Examining the prevalence of disordered eating in a cohort of young Australians presenting for mental health care at a headspace centre: Results from a cross-sectional clinical survey study. *BMJ Open*, 12, 1-8. <https://doi.org/10.1136/bmjopen-2022-061734>

Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and Practice*, 2(14). <https://doi.org/10.1186/s42466-020-00059-z>

Butt, A. (2020). University students' preference regarding social media content, internet usage and online friendship patterns. *Asian Association of Open Universities Journal*, 15(2), 239-249. <https://doi.org/10.1108/AAOUJ-01-2020-0002>

Cage, E., Jones, E., Ryan, G., Hughes, G., & Spanner, L. (2021). Student mental health and transitions into, through and out of university: Student and staff perspectives. *Journal of Further and Higher Education*, 45(8), 1076-1089. <https://doi.org/10.1080/0309877X.2021.1875203>

Calzo, J. P., Austin, S. B., & Micali, N. (2018). Sexual orientation disparities in eating disorder symptoms among adolescent boys and girls in the UK. *European Child & Adolescent Psychiatry*, 27(11), 1483-1490. <https://doi.org/10.1007/s00787-018-1145-9>

Cameron, M. P., Fogarty-Perry, B., & Piercy, G. (2022). The impacts of the COVID-19 pandemic on higher education students in New Zealand. *Journal of Open, Flexible and Distance Learning*, 26(1), 42-62. <https://www.jofdl.nz/index.php/JOFDL/article/view/515>

Canello, R., Soranna, D., Zambra, G., Zambon, A., & Invitti, C. (2020). Determinants of the lifestyle changes during COVID-19 pandemic in the residents of northern Italy.

International Journal of Environmental Research and Public Health, 17(17).

<https://doi.org/10.3390/ijerph17176287>

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287(112934), 1-5.

<https://doi.org/10.1016/j.psychres.2020.112934>

Cargo, M., & Shisslak, C. M. (2003). Ethnic differences in dieting, binge eating, and purging behaviours among American females: A review. *Eating Disorders: The Journal of Treatment and Prevention*, 11(4), 289-304.

<https://doi.org/10.1080/1064026039024215>

Carr, M. M., & Grilo, C. M. (2020). Examining heterogeneity of binge-eating disorder using latent class analysis. *Journal of Psychiatric Research*, 130, 194-200.

<https://doi.org/10.1016/j.jpsychires.2020.07.032>

Caslini, M., Crocamo, C., Dakanalis, A., Tremolada, M., Clerici, M., & Carrà, G. (2016). Stigmatising attitudes and beliefs about anorexia and bulimia nervosa among Italian undergraduates. *The Journal of Nervous and Mental Disease*, 204(12), 916-924.

<https://doi.org/10.1097/NMD.0000000000000606>

Caso, D., Miriam, C., Rosa, F., & Mark, C. (2020). Unhealthy eating and academic stress: The moderating effect of eating style and BMI. *Health Psychology Open*, 7(2).

<https://doi.org/10.1177/2055102920975274>

Castillo, I., Solano, S., & Sepúlveda, A. R. (2019). A controlled study of an integrated prevention program for improving disordered eating and body image among Mexican university students: A 3-month follow-up. *European Eating Disorders Review*, 27(5), 541-

556. <https://doi.org/10.1002/erv.2674>

Cella, S., Cipriano, A., Aprea, C., & Cotrufo, P. (2021). Self-esteem and binge eating among adolescent boys and girls: The role of body disinvestment. *International Journal of Environmental Research and Public Health*, 18(14). <https://doi.org/10.3390/ijerph18147496>

Chambers, R., Lo, B. C. Y., & Allen, N. B. (2008). The impact of intensive mindfulness training on attentional control, cognitive style, and affect. *Cognitive Therapy and Research*, 32(3), 303-322. <https://doi.org/10.1007/s10608-007-9119-0>

Chami, R., Reichenberger, J., Cardi, V., Lawrence, N., Treasure, J., & Blechert, J. (2021). Characterising binge eating over the course of a feasibility trial among individuals with binge eating disorder and bulimia nervosa. *Appetite*, 164 (105248). <https://doi.org/10.1016/j.appet.2021.105248>

Chapman, A. (2013). A (re)negotiation of identity: From 'mature student' to 'novice academic'. *Widening Participation and Lifelong Learning*, 13(3), 44-61. <https://doi.org/10.5456/WPLL.14.3.44>

Cheng, Z. H., Perko, V. L., Fuller-Marashi, L., Gau, J. M., & Stice, E. (2019). Ethnic differences in eating disorder prevalence, risk factors, and predictive effects of risk factors among young women. *Eating Behaviours*, 32, 23-30. <https://doi.org/10.1016/j.eatbeh.2018.11.004>

Chen, N., Zhou, M., Dong, X., Qu, J., Gong, F., Han, Y., Qiu, Y., Wang, J., Liu, Y., Wei, Y., Xia, J., Yu, T., Zhang, X., & Zhang, L. (2020). Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: A descriptive study. *Lancet*, 395(10223), 507–513. [https://doi.org/10.1016/S0140-6736\(20\)30211-7](https://doi.org/10.1016/S0140-6736(20)30211-7)

Christensen, K. A., Forbush, K. T., Richson, B. N., Thomeczek, M. L., Perko, V. L., Bjorlie, K., Christian, K., Ayres, J., Wildes, J. E., & Chana, S. M. (2021). Food insecurity associated with elevated eating disorder symptoms, impairment, and eating disorder

diagnoses in an American university student sample before and during the beginning of the COVID-19 pandemic. *International Journal of Eating Disorders*, 54(7), 1213-1223.

<https://doi.org/10.1002/eat.23517>

Chua, S. N., Fitzsimmons-Craft, E. E., Austin, S. B., Wilfley, D. E., & Taylor, C. B. (2022). Estimated prevalence of eating disorders in Malaysia based on a diagnostic screen. *International Journal of Eating Disorders*, 55(6), 763-775. <https://doi.org/10.1002/eat.23711>

Clarke, V., & Smith, M. (2015). "Not hiding, not shouting, just me": Gay men negotiate their visual identities. *Journal of Homosexuality*, 62(1), 4-32.

<https://doi.org/10.1080/00918369.2014.957119>

Clifford, J., & Marcus, G. E. (Eds.). (1986). *Writing culture: The poetics and politics of ethnography*. University of California Press.

Coakley, K. E., Le, H., Silva, S. R., & Wilks, A. (2021). Anxiety is associated with appetitive traits in university students during the COVID-19 pandemic. *Nutritional Journal*, 20(45). <https://doi.org/10.1186/s12937-021-00701-9>

Coertjens, L., Brahm, T., Trautwein, C., & Lindblom-Ylänne, S. (2017). Students' transition into higher education from an international perspective. *Higher Education*, 73, 357-369. <https://doi.org/10.1007/s10734-016-0092-y>

Cohen, J. S., & Miller, L. J. (2009). Interpersonal mindfulness training for well-being: A pilot study with psychology graduate students. *Teachers College Record*, 111(12), 2760–2774. <https://doi.org/10.1177/016146810911101202>

Cooke, R., Barkham, M., Audin, K., Bradley, M., & Davy, J. (2004). Student debt and its relation to student mental health. *Journal of Further and Higher Education*, 28(1), 53-66.

<https://doi.org/10.1080.0309877032000161814>

Cooley, E., & Toray, T. (2001). Disordered eating in college freshman women: A prospective study. *Journal of American College Health, 49* (5), 229-235.

<https://doi.org/10.1080/07448480109596308>

Cooper, M. J., Wells, A., & Todd, G. (2004). A cognitive model of bulimia nervosa. *British Journal of Clinical Psychology, 43*(1), 1-16.

<https://doi.org/10.1348/014466504772812931>

Corrigan, P. W., & Rüsch, N. (2002). Mental illness stereotypes and clinical care: Do people avoid treatment because of stigma? *Psychiatric Rehabilitation Skills, 6*(3), 312-334.

<https://doi.org/10.1080/10973430208408441>

Corrigan, P. W., & Watson, A. C. (2002). The paradox of self-stigma and mental illness. *Clinical Psychology: Science and Practice, 9*(1), 35-53.

<https://doi.org/10.1093/clipsy.9.1.35>

Craven, M. P., & Fekete, E. M. (2019). Weight-related shame and guilt, intuitive eating, and binge eating in female college students. *Eating Behaviours, 33*, 44-48.

<https://doi.org/10.1016/j.eatbeh.2019.03.002>

Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatisation of people with mental illnesses. *The British Journal of Psychiatry, 177*(1), 4-7.

<https://doi.org/10.1192/bjp.177.1.4>

Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 pandemic. *Acta Biomedica Atenei Parmensis, 91*(1), 157-160. <https://doi.org/10.23750/abmv91i1.9397>

Cunningham, R., Kvalsvig, A., Peterson, D., Kuehl, S., Gibb, S., McKenzie, S., Thornley, L., & Every-Palmer, S. (2018). *Stocktake report for the mental health and addiction inquiry*.

<https://mentalhealth.inquiry.govt.nz/assets/Summary-reports/Otago-stocktake.pdf>

Curtis, E., Townsend, S., & Airini (2012). Improving indigenous and ethnic minority student success in foundation health study. *Teaching in Higher Education*, 17(5), 589-602. <https://doi.org/10.1080.13562517.2012.658559>

Cushman, S., & West, R. (2006). Precursors to college student burnout: Developing a typology of understanding. *Qualitative Research Reports in Communication*, 7(1), 23-31. <https://doi.org/10.1080/17459430600964638>

D'Augelli, A. R., & Jay, G. M. (1991). Social support and adjustment to university life: A comparison of African-American and white freshmen. *Journal of Community Psychology*, 19(2), 95-108. [https://doi.org/10.1001/1520-6629\(199104\)19:2<95::AID-JCOP2290190202>3.0.CO;2-2](https://doi.org/10.1001/1520-6629(199104)19:2<95::AID-JCOP2290190202>3.0.CO;2-2)

Davis, C., Levitan, R. D., Kaplan, A. S., Carter, J., Reid, C., Curtis, C., Patte, K., Kennedy, J. L. (2007). Dopamine transporter gene (DAT1) associated with appetite suppression to methylphenidate in a case-control study of binge eating disorder. *Neuropsychopharmacology*, 32(1), 2199-2206. <https://doi.org/10.1038/sj.npp.1301348>

Dekeyser, M., Raes, F., Leijssen, M., Leeyen, S., & Dewulf, D. (2008). Mindfulness skills and interpersonal behaviour. *Personality and Individual Differences*, 44(5), 1235-1245. <https://doi.org/10.1016/j.paid.2007.11.018>

Delinsky, S. S., & Wilson, G. T. (2008). Weight gain, dietary restraint, and disordered eating in the freshman year of college. *Eating Behaviours*, 9(1), 82-90. <https://doi.org/10.1016/j.eatbeh.2007.06.001>

Deloitte Access Economics. (2020). *Social and economic cost of eating disorders in the United States of America*. Academy for Eating Disorders.

de Matos, A. P., Rodrigues, P. R. M., Fonseca, L. B., Ferreira, M. G., & Muraro, A. P. (2021). Prevalence of disordered eating behaviours and associated factors in Brazilian

university students. *Nutrition and Health*, 27(2), 231-241.

<https://doi.org/10.1177/0260106020971136>

Dibiase, W. J., & Hjelle, L. A. (1968). Body-image stereotypes and body-type preferences among male college students. *Perceptual and Motor Skills*, 27(3), 1143-1146.

<https://doi.org/10.2466/pms.1968.27.3f.1143>

Diehl, K., Jansen, C., Ishchanova, K., & Hilger-Kolb, J. (2018). Loneliness at universities: Determinants of emotional and social loneliness among students. *International Journal of Environmental Research and Public Health*, 15(9).

<https://doi.org/10.3390/ijerph15091865>

Dixon, S. (2022). Facebook: Quarterly number of MAU (monthly active users) worldwide 2008-2022. Statista. <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>

Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, 2(3), 222-235.

<https://doi.org/10.5502/ijw.v2i3.4>

Dodgson, J. E. (2019). Reflexivity in Qualitative Research. *Journal of Human Lactation*, 35(2), 220-222. <https://doi.org/10.1177/0890334419830990>

Dohaney, J., De Róiste, M., Salmon, R. A., & Sutherland, K. (2020). Benefits, barriers, and incentives for improved resilience to disruption in university teaching. *International Journal of Disaster Risk Reduction*, 50(101691). <https://doi.org/10.1016/j.ijdrr.2020.101691>

Dooris, M., & Doherty, S. (2010). Healthy universities - time for action: A qualitative research study exploring the potential for a national programme. *Health Promotion International*, 25(1), 94-106. <https://doi.org/10.1093/heapro/daq015>

dos Santos Quaresma, M. V. L., Marques, C. G., Magalhães, A. C. O., & dos Santos, R. V. T. (2021). Emotional eating, binge eating, physical inactivity, and vespertine chronotype are negative predictors of dietary practices during COVID-19 social isolation: A cross-sectional study. *Nutrition, 90*(111223). <https://doi.org/10.1016/j.nut.2021.111223>

Dounchis, J. Z., Hayden, H. A., & Wilfley, D. E. (2001). Obesity, body image, and eating disorders in ethnically diverse children and adolescents. In J. K. Thompson & L. Smolak (Eds.), *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment* (pp. 67–98). American Psychological Association. <https://doi.org/10.1037/10404-003>

Duchesne, S., Ratelle, C. F., Larose, S., & Guay, F. (2007). Adjustment trajectories in college science programs: Perceptions of qualities of parents' and college teachers' relationships. *Journal of Counselling Psychology, 54*(1), 62-71. <https://doi.org/10.1037/0022-0167.54.1.62>

Duncan, A. E., Ziobrowski, H. N., & Nicol, G. (2017). The prevalence of past 12-month and lifetime DSM-IV eating disorders by BMI category in US men and women. *European Eating Disorders Review, 25*(3), 165-171. <https://doi.org/10.1002/erv.2503>

Dwyer, S. C., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International Journal of Qualitative Methods, 8*(1), 54-63. <https://doi.org/10.1177/160940690900800105>

Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology, 62*(1), 1231-1244. <https://doi.org/10.1002/jclp.20295>

Ebnetter, D. S., & Latner, J. D. (2013). Stigmatising attitudes differ across mental health disorders: A comparison of stigma across eating disorders, obesity, and major

depressive disorder. *The Journal of Nervous and Mental Disease*, 201(4), 281-285.

<https://doi.org/10.1097/NMD.0b013e318288e23f>

Ebner, D. S., Latner, J. D., & O'Brien, K. S. (2011). Just world beliefs, causal beliefs and acquaintance: Associations with stigma toward eating disorders and obesity. *Personality and Individual Differences*, 51(5), 618-622. <https://doi.org/10.1016/j.paid.2011.05.029>

Eddy, K. T., Keel, P. K., Dorner, D. J., Dellinsky, S. S., Franko, D. L., & Herzog, D. B. (2002) Longitudinal comparison of anorexia nervosa subtypes. *International Journal of Eating Disorders*, 31(2), 191-201. <https://doi.org/10.1002/eat.10016>

Education and Training Act, No. 38. (2020).

<https://www.legislation.govt.nz/act/public/2020/0038/latest/LMS170676.html>

Ehlert, J. (2021). Food consumption, habitus and the embodiment of social change: Making class and doing gender in urban Vietnam. *The Sociological Review*, 69(3), 681-701. <https://doi.org/10.1177/003802612110099793>

Ellis, J. M., Essayli, J. H., Zickgraf, H. F., Rossi, J., Hlavka, R., Carels, R. A., & Whited, M. C. (2020). Comparing stigmatising attitudes toward anorexia nervosa, binge-eating disorder, avoidant-restrictive food intake disorders, and subthreshold eating behaviours in college students. *Eating Behaviours*, 39. <https://doi.org/10.1016/j.eatbeh.2020.101443>

Elmer, T., Mepham, K., & Stadtfeld, C. (2020). Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *PLoS ONE*, 15(7). <https://doi.org/10.1371/journal.pone.0236337>

Eloff, I., O'Neil, S., & Kanengoni, H. (2021). Students' well-being in tertiary environments: Insights into the (unrecognized) role of lecturers. *Teaching in Higher Education: Critical Perspective*. <https://doi.org/10.1080/13562517.2021.1931836>

Epel, E. S., Tomiyama, A. J., Mason, A. E., Laraia, B. A., Hartman, W., Ready, K., Acree, M., Adam, T. C., St. Jeor, S., & Kessler, D. (2014). The reward-based eating drive scale: A self-report index of reward-based eating. *PLoS One*, 9 (6), e101350.

<https://doi.org/10.1371/journal.pone.0101350>

Erikson, E. H. (1968). *Identity: Youth and crisis*. W. W. Norton & Company.

https://www.academia.edu/37327712/Erik_H_Erikson_Identity_Youth_and_Crisis_1_1968

[W W Norton and Company 1](#)

Ertem, M. Y., & Karakaş, M. (2021). Relationship between emotional eating and coping with stress of nursing students. *Perspectives in Psychiatric Care*, 57(2), 433-442.

<https://doi.org/10.1111/ppc.12599>

Essadek, A., & Rabeyron, T. (2020). Mental health of French students during the Covid-19 pandemic. *Journal of Affective Disorders*, 277, 392-393.

<https://doi.org/10.1016/j.jad.2020.08.042>

Estrada, L., Dupoux, E., & Wolman, C. (2005). The personal-emotional social adjustment of English-language to a community college. *Community College Journal of Research and Practice*, 29(7), 557-568. <https://doi.org/10.1080/10668920590954015>

Fairburn, C. G., Cooper, Z., & Shafran, R. (2003). Cognitive behaviour therapy for eating disorders: A “transdiagnostic” theory and treatment. *Behaviour Research and Therapy*, 41 (5), 509-528. [https://doi.org/10.1016/s0005-7967\(02\)00088-8](https://doi.org/10.1016/s0005-7967(02)00088-8)

Farris, A. K. (2010). *The freshmen adjustment process: Commuter life versus residence life* [Master's thesis, California State University]. Sacramento State Scholars.

<https://csu-csus.esploro.exlibrisgroup.com/esploro/outputs/graduate/The-freshmen-adjustment-process-commuter-life/99257830872901671>

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, 26(1), 399-419. <https://doi.org/10.1146/annurev.publhealth.26.021304.144357>

Fernandez-Aranda, F., Casas, M., Claes, L., Bryan, D. C., Favaro, A., Granero, R., Gudiol, C., Jiménez-Murcia, S., Karawautz, A., Grange, D. L., Menchón, J. M., Tchanturia, K., & Treasure, J. (2020). COVID-19 and implications for eating disorders. *European Eating Disorders Review*, 28(3), 239-245. <https://doi.org/10.1002/erv.2738>

Ferrão, M. E., & Almeida, L. S. (2021). Persistence and academic expectations in higher-education students. *Psicothema*, 33(4), 587-594. <https://doi.org/10.7334/psicothema2020.68>

Ferreira, J. E. D. S., & Veiga, G. V. D. (2008). Test-retest reliability of a simplified questionnaire for screening adolescents with risk behaviours for eating disorders in epidemiologic studies. *Revista Brasileira de Epidemiologia*, 11(3), 393-401. <https://doi.org/10.1590/S1415-790X2008000300006>

Ferriter, C., & Ray, L. A. (2011). Binge eating and binge drinking: An integrative review. *Eating Behaviours* 12(2), 99-107. <https://doi.org/10.1016/j.eatbeh.2011.01.001>

Ferguson, C. J., Munoz, M. E., Contreras, S., & Velasquez, K. (2011). Mirror, mirror on the wall: Peer competition, television influences, and body image dissatisfaction. *Journal of Social and Clinical Psychology*, 30(5), 458-483. <https://doi.org.10.1521/jscp.2011.30.5.458>

Finalyson, G., & Dalton, M. (2012). Hedonics of food consumption: Are food 'liking' and 'wanting' viable targets for appetite control in the obese? *Current Obesity Reports*, 1(1), 42-49. <https://doi.org/10.1007/s13679-011-0007-2>

Fitzsimmons-Craft, E. E., Ciao, A. C., & Accurso, E. C. (2016). A naturalistic examination of social comparisons and disordered eating thoughts, urges, and behaviours in

college women. *International Journal of Eating Disorders*, 49(2), 141-150.

<https://doi.org/10.1002/eat.22486>

Fleming, J. (2018). Recognising and resolving the challenges of being an insider researcher in work-integrated learning. *International Journal of Work-Integrated Learning*, 19(3), 311-320. <https://eric.ed.gov/?id=EJ1196753>

Foerde, K., Schebendach, J. E., Davis, L., Daw, N., Walsh, B. T., Shohamy, D., & Steinglass, J. E. (2020). Restrictive eating across a spectrum from healthy to unhealthy: Behavioural and neural mechanisms. *Psychological Medicine*, 52(9), 1755-1764.

<https://doi.org/10.1017/S0033291720003542>

Frith, H. (2000). Focusing on sex: Using focus groups in sex research. *Sexualities*, 3(3), 275-297. <https://journals.sagepub.com/doi/pdf/10.1177/136346000003003001>

Galbin, A. (2014). An introduction to social constructionism. *Social Research Reports*, 26, 82-92.

https://www.researchgate.net/publication/283547838_AN_INTRODUCTION_TO_SOCIAL_CONSTRUCTIONISM

Gale, T., & Parker, S. (2012). Navigating change: A typology of student transition in higher education. *Studies in Higher Education*, 39(3), 734-753.

<https://doi.org/10.1080/03075079.2012.721351>

Galmiche M., Déchelotte P., Lambert G., Tivolacci M. P. (2019). Prevalence of eating disorders over the 2000–2018 period: A systematic literature review. *The American Journal of Clinical Nutrition*, 109(5), 1402–1413. <https://doi.org/10.1093/ajcn/nqy342>

Gan, W. Y., Mohamad, N., & Law, L. S. (2018). Factors associated with binge eating behaviour among Malaysian adolescents. *Nutrients*, 10(1).

<https://doi.org/10.3390/nu10010066>

Geerling, D. M., & Saunders, S. M. (2015). College students' perceptions of individuals with anorexia nervosa: Irritation and admiration. *Journal of Mental Health, 24*(2), 83-87. <https://doi.org/10.3109/09638237.2014.998807>

Gearhardt, A. N., White, M. A., & Potenza, M. N. (2011). Binge eating disorder and food addiction. *Current Drug Abuse Reviews, 4* (3), 201-207. <https://doi.org.10.2174/1874473711104030201>

Gerdes, H., & Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: A longitudinal study of retention. *Journal of Counselling and Development, 72*(3), 281-288. <https://doi.org/10.1002/j.1556-6676.1994.tb00935.x>

Gelo, O. C. G., Vilei, A., Maddux, J. E., & Gennaro, A. (2015). Psychopathology as social construction: The case of anorexia nervosa. *Journal of Constructivist Psychology, 28*(2), 105-125. <https://doi.org/10.1080/10720537.2013.858087>

Gergen, K. J. (1985). The social constructionist movement in modern psychology. *American Psychologist, 40*(3), 266-275. <https://doi.org/10.1037/0003-066X.40.3.266>

Gergen, K. J. (2001). Psychological science in a postmodern context. *American Psychologist, 56*(10), 803-813. <https://doi.org/10.1037/0003-066X.56.10.803>

Giannopoulou, I., Kotopoulea-Nikolaïdi, M., Daskou, S., Martyn, K., & Patel, A. (2020). Mindfulness in eating is inversely related to binge eating and mood disturbances in university students in health-related disciplines. *Nutrients, 12*(2). <https://doi.org/10.3390/nu12020396>

Giel, K. E., Schurr, M., Zipfel, S., Junne, F., & Schag, K. (2021). Eating behaviour and symptom trajectories in patients with a history of binge eating disorder during COVID-19 pandemic. *European Eating Disorders Review, 29*(4), 657-662. <https://doi.org/10.1002/erv.2837>

Global Burden of Disease (2017). Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990-2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet*, 10(392), 1789-1858. [https://doi.org/10.1016/S0140-6736\(18\)32279-7](https://doi.org/10.1016/S0140-6736(18)32279-7)

Goffman, E. (2009). *Stigma: Notes on the Management of Spoiled Identity*. Penguin Books. (Original work published in 1963) <https://cdn.penguin.co.uk/dam-assets/books/9780241548011/9780241548011-sample.pdf>

Goldring, T., Harper, E., Jassal, R., Joseph, L., Kelly, A., Mulrooney, H., Piper, I., & Walker, H. (2018). Experience and expectations of transition to higher education: A qualitative exploration. *New Directions in the Teaching of Physical Sciences*, 13(1). <https://doi.org/10.29311/ndtps.v0i13.2849>

Goldschmidt, A. B., Wall, M. M., Zhang, J., Loth, K. A., & Neumark-Sztainer, D. (2016). Overeating and binge eating in emerging adulthood: 10-year stability and risk factors. *Developmental Psychology*, 52(3), 475-483. <https://doi.org/10.1037/dev0000086>

Gomez, G. C., Guzmán, P., & Santelices, M. V. (2022). Transitioning to higher education: Students' expectations and realities. *Educational Research*, 64(4), 424-439. <https://doi.org/10.1080/00131881.2022.2087712>

Gonzalez, T., de la Rubia, M. A., Hincz, K. P., Comas-Lopez, M., Subirats, L., Fort, S., & Sacha, G. M. (2020). Influence of COVID-19 confinement on students' performance in higher education. *PLoS ONE*, 15(10). <https://doi.org/10.1371/journal.pone.0239490>

Goodman, E. L., Breithaupt, L., Watson, H. J., Peat, C. M., Baker, J. H., Bulik, C. M., & Brownley, K. A. (2018). Sweet taste preference in binge-eating disorder: A preliminary investigation. *Eating Behaviours*, 28, 8-15. <https://doi.org/10.1016/j.eatbeh.2017.11.005>

Govender, K., Bhana, A., McMurray, K., Kelly, J., Theeron, L., Meyer-Weitz, A., Ward, C. L., & Tomlinson, M. (2018). A systematic review of the South African work on the well-being of young people (2000-2016). *South African Journal of Psychology*, 49(1), 52-69.

<https://doi.org/10.1177/0081246318757932>

Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies.

Psychological Bulletin Journal, 134(3), 460-476. <https://doi.org/10.1037/0033-2909.134.3.460>

Gravett, K., & Winstone, N. E. (2019). Storying students' becomings into and through higher education. *Studies in Higher Education*, 46(5), 1-12.

<https://doi.org/10.1080/03075079.2019.1695112>

Griffiths, S., Mond, J. M., Murray, S. B., & Touyz, S. (2015). The prevalence and adverse associations of stigmatisation in people with eating disorders. *International Journal of Eating Disorders*, 48(6), 767-774. <https://doi.org/10.1002/eat.22353>

Grogan, S., & Mehan, J. (2017). Body image after mastectomy: A thematic analysis of younger women's written accounts. *Journal of Health Psychology*, 22(11), 1480-1490.

Grogan, S., Turley, E., & Cole, J. (2018). 'So many women suffer in silence': A thematic analysis of women's written accounts of coping with endometriosis. *Psychology & Health*, 33(11), 1364-1378.

Gross, J. J., & Barrett, L. F. (2011). Emotion generation and emotion regulation: One or two depends on your point of view. *Emotion Review*, 3(1), 8-16.

<https://doi.org/10.1177/1754073910380974>

Guarneri, J. A., Oberleitner, D. E., & Connolly, S. (2019). Perceived stigma and self-stigma in college students: A literature review and implications for practice and research.

Basic and Applied Social Psychology, 41(1), 48-62.

<https://doi.org/10.1080/01973533.2018.1550723>

Guss, C. E., Williams, D. N., Reisner, S. L., Austin, S. B., & Katz-Wise, S. L. (2017). Disordered weight management behaviours, nonprescription steroid use, and weight perception in transgender youth. *Journal of Adolescent Health*, 60(1), 17-22.

<https://doi.org/10.1016/j.jadohealth.2016.08.027>

Guzmán, P., Gomez, G. C., & Santelices, M. V. (2021). Secondary students' expectations on transition to higher education. *Educational Research*, 63(2), 164-179.

<https://doi.org/10.1080/00131881.2021.1915173>

Haddad, C., Zakhour, M., Kheir, M. B., Haddad, R., Al Hachach, M., Sacre, H., & Salameh, P. (2020). Association between eating behaviour and quarantine/confinement stressors during the coronavirus disease 2019 outbreak. *Journal of Eating Disorders*, 8(40).

<https://doi.org/10.1186/s40337-020-00317-0>

Haedt-Matt, A. A., & Keel, P. K. (2011). Revisiting the affect regulation model of binge eating: A meta-analysis of studies using ecological momentary assessment.

Psychological Bulletin, 137(4), 660-681. <https://doi.org/10.1037/a0023660>

Han, S., & Lee, S. (2017). College student binge eating: Attachment, psychological needs satisfaction, and emotion regulation. *Journal of College Student Development*, 58(7), 1074-1086. <https://doi.org/10.1353/csd.2017.0084>

Harmatz, M. G., Gronendyke, J., & Thomas, T. (1985). The underweight male: The unrecognized problem group of body image research. *Journal of Obesity & Weight Regulation*, 4(4), 258-267.

Harré, R. (1986). *The social construction of emotions*. New York, NY: Blackwell.

Harrer, M., Adam, S. H., Mag, E. M. M., Baumeister, H., Cuijpers, P., Bruffaerts, R., Auerbach, R. P., Kessler, R. C., Jacobi, C., Taylor, C. B., & Ebert, D. D. (2020). Prevention of eating disorders at universities: A systematic review and meta-analysis. *International Journal of Eating Disorders*, 53(6), 813-833. <https://doi.org/10.1002/eat.23224>

Harris, R., Tobias, M., Jeffreys, M., Waldegrave, K., Karlsen, S., & Nazroo, J. (2006). Effects of self-reported racial discrimination and deprivation on Māori health and inequalities in New Zealand: Cross-sectional study. *The Lancet*, 367(9527), 2005-2009. [https://doi.org/10.1016/S0140-6736\(06\)68890-9](https://doi.org/10.1016/S0140-6736(06)68890-9)

Harris, S. R., Carrillo, M., & Fujioka, K. (2021). Binge-eating disorder and type 2 diabetes: A review. *Endocrine Practice*, 27(2), 158-164. <https://doi.org/10.1016/j.eprac.2020.10.005>

Hassel, S., & Ridout, N. (2018). An investigation of first-year students' and lecturers' expectations of university education. *Frontiers in Psychology*, 8(2218). <https://doi.org/10.3389/fpsyg.2017.02218>

Hatoum, I. J., & Belle, D. (2004). Mags and abs: Media consumption and bodily concerns in ment. *Sex Roles: A Journal of Research*, 51(7-8), 397-407. <https://doi.org/10.1023/B:SERS.0000049229.93256.48>

Hawkey, L. C., Thisted, R. A., & Cacioppo, J. T. (2009). Loneliness predicts reduced physical activity: Cross-sectional & longitudinal analyses. *Health Psychology Journal*, 28(3), 354-363. <https://doi.org/10.1037/a0014400>

Hay, P. (1998). The epidemiology of eating disorder behaviours: An Australian community-based survey. *International Journal of Eating Disorders*, 23(4), 371-382. [https://doi.org/10.1002/\(SICI\)1098-108X\(199805\)23:4<371::AID-EAT4>3.0.CO;2-F](https://doi.org/10.1002/(SICI)1098-108X(199805)23:4<371::AID-EAT4>3.0.CO;2-F)

Haynes, K. (2012). Reflexivity in qualitative research. In G. Symon, & C. Cassell (Eds.), *Qualitative Organisational Research: Core Methods and Current Challenges* (pp. 72-89).

SAGE Publications. <https://doi.org/10.4135/9781526435620.n5>

Haynos, A. F., Hill, B., & Fruzzetti, A. E. (2016). Emotion regulation training to reduce problematic dietary restriction: An experimental analysis. *Appetite*, *103*, 265-274.

<https://doi.org/10.1016/j.appet.2016.04.018>

Heatherton, T. F., & Baumeister, R. F. (1991). Binge eating as escape from self-awareness. *Psychological Bulletin*, *110*(1), 86.

Heffernan, K. (1996). Eating disorders and weight concern among lesbians. *International Journal of Eating Disorders*, *19*(2), 127-138.

[https://doi.org/10.1002/\(SICI\)1098-108X\(199603\)19:2<127::AID-EAT3>3.0.CO;2-P](https://doi.org/10.1002/(SICI)1098-108X(199603)19:2<127::AID-EAT3>3.0.CO;2-P)

Hellawell, D. (2006). Inside-out: Analysis of the insider-outsider concept as a heuristic device to develop reflexivity in students doing qualitative research. *Teaching in Higher Education*, *11*(4), 483-494. <https://doi.org/10.1080/13562510600874292>

Hendricks, M. L., & Testra, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the minority stress model. *Professional Psychology: Research and Practice*, *43*, 460-467.

<https://doi.org/10.1037/A0029597>

Henrichs-Beck, C. L., & Szymanski, D. M. (2017). Gender expression, body–gender identity incongruence, thin ideal internalization, and lesbian body dissatisfaction. *Psychology of Sexual Orientation and Gender Diversity*, *4*(1), 23–

33. <https://doi.org/10.1037/sgd0000214>

Hochberg, Z. E., & Konner, M. (2020). Emerging adulthood, a pre-adult life-history stage. *Frontiers in Endocrinology*, *14*. <https://doi.org/10.3389/fendo.2019.00918>

Hochschild, A. R. (1983). *The managed heart: The commercialisation of human feeling*. Berkeley, CA: University of California Press.

Hodgson, P., Lam, P., & Chow, C. (2011, December 2). *Assessment experiences of first-year university students: Dealing with the unfamiliar* [Conference session]. Enhancing Learning Experiences in Higher Education: International Conference, University of Hong Kong, Hong Kong. <https://doi.org/10.13140/2.1.2656.0648>

Hollett, K. B., & Carter, J. C. (2021). Separating binge eating disorder stigma and weight stigma: A vignette study. *International Journal of Eating Disorders*, 54(5), 755-763. <https://doi.org/10.1002/eat.23473>

Hootman, K. C., Guertin, K. A., & Cassano, P. A. (2018). Stress and psychological constructs related to eating behaviour are associated with anthropometry and body composition in young adults. *Appetite*, 1(125), 287-294. <https://doi.org/10.1016/j.appet.2018.01.003>

Huckins, L. M., Signer, R., Johnson, J., Wu, Y. K., Mitchell, K. S., & Bulik, C. M. (2022). What next for eating disorder genetics? Replacing myths with facts to sharpen our understanding. *Molecular Psychiatry*, 1-10. <https://doi.org/10.1038/s41380-022-01601-y>

Huenemann, R. L., Shapiro, L. R., Hampton, M. C., & Mitchell, B. W. (1966). A longitudinal study of gross body composition and body conformation and their association with food and activity in a teenage population: Views of teenage subjects on body conformation, food and activity. *The American Journal of Clinical Nutrition*, 18(5), 325-338. <https://doi.org/10.1093/ajcn/18.5.325>

Hunger, J. M., Dodd, D. R., & Smith, A. R. (2020). Weight discrimination, anticipated weight stigma, and disordered eating. *Eating Behaviours*, 37. <https://doi.org/10.1016/j.eatbeh.2020.101383>

Huon, G., & Sankey, M. (2002, July 8-10). *The transition to university: understanding differences in success* [Paper presentation]. The 6th Pacific Rim First Year in Higher Education Conference: Changing Agendas, University of Canterbury, Christchurch, New Zealand.

Huxley, C. J., Clarke, V., & Halliwell, E. (2014). A qualitative exploration of whether lesbian and bisexual women are 'protected' from sociocultural pressure to be thin. *Journal of Healthy Psychology, 19*(2), 273-284. <https://doi.org/10.1177/135910531246849>

Ince, B., Schlatter, J., Max, S., Plewnia, C., Zipfel, S., Giel, K. E., & Schag, K. (2021). Can we change binge eating behaviour by interventions addressing food-related impulsivity? A systematic review. *Journal of Eating Disorders, 9*(38). <https://doi.org/10.1186/s40337-021-00384-x>

Ivezaj, V., Saules, K. K., Hoodin, F., Alschuler, K., Angelella, N. E., Collings, A. S., Saunders-Scott, D., & Wiedemann, A. A. (2020). The relationship between binge eating and weight status on depression, anxiety, and body image among a diverse college sample: A focus on bi/multiracial women. *Eating Behaviours, 11*(1), 18-24. <https://doi.org/10.1016/j.eatbeh.2009.08.003>

Iyer, S., & Shriraam, V. (2021). Prevalence of eating disorders and its associated risk factors in students of a medical college hospital in South India. *Cureus, 13*(1). <https://doi.org/10.7759/cureus.12926>

Izidorczyk, B., & Sitnik-Warchulska, K. (2018). Sociocultural appearance standards and risk factors for eating disorders in adolescents and women of various ages. *Frontiers in Psychology, 4*(429). <https://doi.org/10.3389/fpsyg.2018.00429>

Jain, V., Duse, A., & Bausch, D. G. (2018). Planning for large epidemics and pandemics: Challenges from a policy perspective. *Current Opinion in Infectious Diseases*, 31(4), 316-324. <https://doi.org/10.1097/QCO.0000000000000462>

Jalali-Farahani, S., Chin, Y. S., Nasir, M. T. M., & Amiri, P. (2015). Disordered eating and its association with overweight and health-related quality of life among adolescents in selected high schools of Tehran. *Child Psychiatry & Human Development*, 46(3), 485-492. <https://doi.org/10.1007/s10578-014-0489-8>

Jennings, K. M., Kelly-Weeder, S., & Wolfe, B. E. (2015). Binge eating among racial minority groups in the United States: An integrative review. *Journal of American Psychiatric Nurses Association*, 21(2), 117-125. <https://doi.org/10.1177/1078390315581923>

Jiang, K. (2021). Review on binge eating disorder: Theories, influencing factors and treatments. *Advances in Social Science, Education, and Humanities Research*, 561, 574-578. <https://doi.org/10.2991/assehr.k.210617.141>

Jindal-Snape, D., & Rienties, B. (2016). *Multi-dimensional transitions of international students to higher education*. Routledge. <https://doi.org/10.4324/9781315680200>

Jones, R. (2017). The student experience of undergraduate students: Towards a conceptual framework. *Journal of Further and Higher Education*, 42(8), 1040-1054. <https://doi.org/10.1080/0309877X.2017.1349882>

Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, 19(11), 1632-1641. <https://doi.org/10.1177/1049732309350879>

Kane, J. L., Hyde, M. K., & Hamilton, K. (2015). Exploring female university students' beliefs about binge eating. *International Journal of Health Promotion and Education*, 53(3), 118-127. <https://doi.org/10.1080/14635240.2014.965842>

- Kang, E., & Hwang, H. J. (2021). Ethical conducts in qualitative research methodology: Participant observation and interview process. *Journal of Research and Publication Ethics*, 2(2), 5-10. <https://doi.org/10.15722/jrpe.2.2.202109.5>
- Kanuha, V. K. (2000). "Being" native versus "going native": conducting social work research as an insider. *Social Work*, 45(5), 439-447. <https://doi.org/10.1093/sw/45.5.439>
- Kamarianos, I., Adamopoulou, A., Lambropoulos, H., & Stamelos, G. (2020). Towards an understanding of university students' response times of pandemic crisis (COVID-19). *European Journal of Education Studies*, 7(7), 20-40. <https://doi.org/10.46827/ejes.v7i73149>
- Kamody, R. C., Yonkers, K., Pluhar, E. I., & Olezeski, C. L. (2020). Disordered eating among trans-masculine youth: Considerations through a developmental lens. *LGBT Health*, 7(4), 170-173. <https://doi.org/10.1089/lgbt.2019.0354>
- Kaplan, L. S., & Geoffroy, K. E. (1993). Copout or burnout? Counseling strategies to reduce stress in gifted students. *The School Counselor*, 40(4), 247-252. <https://www.jstor.org/stable/23901812>
- Kass, A. E., Wilfley, D. E., Eddy, K. T., Boutelle, K. N., Zucker, N., Peterson, C. B., Le Grange, D., Celio-Doyle, A., & Goldschmidt, A. B. (2017). Secretive eating among youth with overweight or obesity. *Appetite*, 114(), 275-281. <https://doi.org/10.1016/j.appet.2017.03.042>
- Kayrouz, R., Dear, B. F., Karin, E., & Titov, N. (2016). Facebook as an effective recruitment strategy for mental health research of hard to reach populations. *Internet Interventions* 4(1). <https://doi.org/10.1016/j.invent.2016.01.001>
- Keel, P. K., Baxter, M. G., Heatherton, T. F., & Joiner Jr, T. E. (2007). A 20-year longitudinal study of body weight, dieting, and eating disorder symptoms. *Journal of Abnormal Psychology*, 116(2), 422-432. <https://doi.org/10.1037/0021-843X.116.2.422>

Kennedy, S. F., & Krive, K. (2017). Developmental consequences of restrictive eating disorders after childhood obesity: Two case reports. *Spartan Medical Research Journal* 1(2). <https://doi.org/10.51894/001c.5782>

Kessler, R. C., Berglund, P. A., Chiu, W. T., Deitz, A. C., Hudson, J. I., Shahly, V., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M. C., Benjet, C., Bruffaerts, R., de Girolamo, G., de Graaf, R., Haro, J. M., Kovess-Masfety, V., O'Neill, S., Posada-Willa, J., Sasu, C., Scott, K., Viana, M. C., & Xavier, M. (2013). The prevalence and correlates of binge eating disorder in the WHO world mental health surveys. *Biological Psychiatry*, 73(9), 904-914. <https://doi.org/10.1016/j.biopsych.2012.11.020>

Khalid, S., Williams, C. M., & Reynolds, S. A. (2016). Is there an association between diet and depression in children and adolescents? A systematic review. *British Journal of Nutrition*, 116(12), 2097-2108. <https://doi.org/10.1017/S0007114516004359>

Kiekens, G., Claes, L., Demyttenaere, K., Auerbach, R. P., Green, J. G., Kessler, R. C., Mortier, P., Nock, M. K., & Bruffaerts, R. (2016). Lifetime and 12-month nonsuicidal self-injury and academic performance in college freshmen. *Suicide and Life-Threatening Behaviour*, 46 (5), 563-576. <https://doi.org/10.1111/sltb.12237>

Killen, J. D., Taylor, C. B., Hayward, C., Haydel, K. F., Wilson, D. M., Hammer, L., Kraemer, H., Blair-Greiner, A., & Strachowski, D. (1996). Weight concerns influence the development of eating disorders: A 4-year prospective study. *Journal of Consulting and Clinical Psychology*, 64(5), 936-940. <https://doi.org/10.1037//0022-006x.64.5.936>

Kilpela, L. S., Marshall, V. B., Keel, P. K., LaCroix, A. Z., Espinoza, S. E., Hooper, S. C., & Musi, N. (2022). The clinical significance of binge eating among older adult women: An investigation into health correlates, psychological wellbeing, and quality of life. *Journal of Eating Disorders*, 10(97). <https://doi.org/10.1186/s40337-022-00621-x>

Koopman, W. J., Watling, C. J., & LaDonna, K. A. (2020). Autoethnography as a strategy for engaging in reflexivity. *Global Qualitative Nursing Research*, 7, 1-9.

<https://doi.org/10.1177/2333393620970508>

Kowert, R., Griffiths, M. D., & Oldmeadow, J. A. (2012). Geek or chic? Emerging stereotypes of online gamers. *Bulletin of Science, Technology & Society*, 32(6), 471-479.

<https://doi.org/10.1177/0270467612469078>

Kuh, G. D. (2005). Student engagement in the first year of college. In M. L. Upcraft, J. N. Gardner, & B. O. Barefoot (Eds.), *Challenging and supporting the first-year student: A hand book for improving the first year of college* (pp. 86-108). New York: Jossey- Bass Publishers.

Kural, A. I., & Ozyurt, B. (2021). Why some students adjust easily while others can not? Stress and adjustment to university: Personality as moderator. *Journal of College Student Retention: Research, Theory & Practice*, 0(0), 1-19.

<https://doi.org/10.1177/15210251211002179>

Kwok, M., Rawstron, A. C., Varghese, A., Evans, P. A. S., O'Connor, S. J. M., Doughty, C., Newton, D. J., Moreton, P. & Hillmen, P. (2016). Minimal residual disease is an independent predictor for 10-year survival in CLL. *Blood*, 128(24), 2770-2773.

<https://doi.org/10.1182/blood-2016-05-714162>

Lacey, C., Cunningham, R., Rijnberg, V., Manuel, J., Te Rangimarie Clark, M., Keelan, K., Pitama, S., Huria, T., Lawson, R., & Jordan, J. (2020). Eating disorders in New Zealand: Implications for Māori and health service delivery. *International Journal of Eating Disorders*, 53 (12), 1974-1982. <https://doi.org/10.1002/eat.23372>

Lacey, J. (1986). Pathogenesis. In L. J. Downey, & J. C. Malkin (Eds.), *Current approaches: Bulimia nervosa* (pp. 17–26). Southhampton, UK: Duphar.

Lancelot, C., & Kaslow, N. J. (1994). Sex role orientation and disordered eating in women: A review. *Clinical Psychology Review*, 14(2), 139-157.

[https://doi.org/10.1016/0272-7358\(94\)90013-2](https://doi.org/10.1016/0272-7358(94)90013-2)

Lande, M. S., Rosenvinge, J. H., Skeie, G., & Rylander, C. (2019). Prevalence and correlates of self-reported disordered eating: A cross-sectional study among 90,592 middle-aged Norwegian women. *PLoS ONE*, 14(1). <https://doi.org/10.1371/journal.pone.0211056>

Lau, L. (2003). Institutional factors affecting student retention. *Education*, 124(1), 66-80.

<https://link.gale.com/apps/doc/A108911214/AONE?u=anon~ab64fccf&sid=googleScholar&xid=a1469cbd>

Lee, S., Ng, K. L., Kwok, K. P. S., Thomas, J. J., & Becker, A. E. (2012). Gastrointestinal dysfunction in Chinese patients with fat-phobic and nonfat-phobic anorexia nervosa. *Transcult Psychiatry*, 49(5), 678-695. <https://doi.org/10.1177/1363461512459487>

Lee, S., Torok, M., Shand, F., Chen, N., McGillivray, L., Burnett, A., Larsen, M. E., Mok, K. (2020). Performance, cost-effectiveness, and representativeness of Facebook recruitment to suicide prevent research: Online survey study. *JMIR Mental Health*, 7(10).

<https://doi.org/10.2196/18762>

Leehr, E. J., Krohmer, K., Schag, K., Dresler, T., Zipfel, S., & Giel, K. E. (2015). Emotion regulation model in binge eating disorder and obesity - a systematic review. *Neuroscience & Biobehavioural Reviews*, 49. 125-134. <https://doi.org/10.1016/j.neubiorev.2014.12.008>

Lee-Winn, A. E., Reinblatt, S. P., Mojtabai, R., & Mendelson, T. (2016). Gender and racial/ethnic differences in binge eating symptoms in a nationally representative sample of adolescents in the United States. *Eating Behaviours*, 22(), 27-33.

<https://doi.org/10.1016/j.eatbeh.2016.03.021>

Levinson, C. A., Cash, E., Welch, K., Epskamp, S., Hunt, R. A., Williams, B. M., Keshishian, A. C., & Spoor, S. P. (2020). Personalised networks of eating disorder symptoms predicting eating disorder outcomes and remission. *International Journal of Eating Disorders*, 53(12), 2086-2094. <https://doi.org/10.1002/eat.23398>

Levinson, C. A., Cusack, C., Brown, M. L., & Smith, A. R. (2022). A network approach can improve eating disorder conceptualisation and treatment. *Nature Reviews Psychology*, 1, 419-430. <https://doi.org/10.1038/s44159-022-00062-y>

Levinson, C. A., Hunt, R. A., Keshishian, A. C., Brown, M. L., Vanzhula, I., Christian, C., Brosf, L. C., & Williams, B. M. (2021). Using individual networks to identify treatment targets for eating disorder treatment: A proof-of-concept study and initial data. *Journal of Eating Disorders*, 9(147). <https://doi.org/10.1186/s40337-021-00504-7>

Lewer, M., Bauer, A., Hartmann, A. S., & Vocks, S. (2017). Different facets of body image disturbance in binge eating disorder: A review. *Nutrients*, 9(12). <https://doi.org/10.3390/nu9121294>

Lilenfeld, L. R., Kaye, W. H., Greeno, C. G., Merikangas, K. R., Plotnicov, K., Pollice, C., Rao, R., Strober, M., Bulik, C. M., & Nagy, L. (1998). A controlled family study of anorexia nervosa and bulimia nervosa: Psychiatric disorders in first-degree relatives and effects of proband comorbidity. *Archives of General Psychiatry*, 55(7), 603-610. <https://doi.org/10.1001/archpsych.55.7.603>

Lin, C. Y., Tsai, M. C., Liu, C. H., Lin, Y. C., Hsieh, Y. P., & Strong, C. (2019). Psychological pathway from obesity-related stigma to depression via internalised stigma and self-esteem among adolescents in Taiwan. *International Journal of Environmental Research and Public Health*, 16(22). <https://doi.org/10.3390/ijerph16224410>

Lipka, O., Sarid, M., Zorach, I. A., Bufman, A., Hagag, A. A., & Peretz, H. (2020). Adjustment to higher education: A comparison of students with and without disabilities. *Frontiers in Psychology, 11*(923). <https://doi.org/10.3389/fpsyg.2020.00923>

Lipson, S., & Sonnevile, K. (2017). Eating disorder symptoms among undergraduate and graduate students at 12 U.S. colleges and universities. *Eating Behaviours, 24*, 81–88. <https://doi.org/10.1016/j.eatbeh.2016.12.003>

Longhurst, R., Hodgetts, D., & Stolte, O. (2012). Placing guilt and shame: Lone mothers' experiences of higher education in Aotearoa New Zealand. *Social & Cultural Geography, 13*(3), 295-312. <https://doi.org/10.1080/14649365.2012.678378>

Longwell-Grice, R., & Longwell-Grice, H. (2008). Testing Tinto: How do retention theories work for first-generation, working-class students? *Journal of College Student Retention, 9*(4), 407-420. <https://doi.org/10.2190/CS.9.4.a>

Lowe, M. R., & Butryn, M. L. (2007). Hedonic hunger: A new dimension of appetite? *Physiology & Behaviours, 91*(4), 432-439. <https://doi.org/10.1016/j.physbeh.2007.04.006>

Lowe, M. R., Thomas, J. G., Safer, D. L., & Butryn, M. L. (2007). The relationship of weight suppression and dietary restraint to binge eating in bulimia nervosa. *International Journal of Eating Disorders, 40*(7), 640-644. <https://doi.org/10.1002/eat.20405>

Lowe, A., Norris, A. C., Farris, J., & Babbage, D. R. (2018). Quantifying thematic saturation in qualitative data analysis. *Field Methods, 30*(3), 191-207. <https://doi.org/10.1177/1525822X17749386>

Loxton, D., Powers, J., Anderson, A. E., Townsend, N., Harris, M. L., Tuckerman, R., Pease, S., Mishra, G., & Byles, J. (2015). Online and offline recruitment of young women for a longitudinal health survey: Findings from the Australian longitudinal study on women's

health 1989-1995 cohort. *Journal of Medical Internet Research*, 17(5).

<https://doi.org/10.2196/jmir.4261>

Lu, D., Sang, J., & Chen, Z. (2017). Who are your 'real' friends: analysing and distinguishing between offline and online friendships from social multimedia data. *IEEE Transactions on Multimedia*, 19(6), 1299-1313.

<https://doi.org/10.1109/TMM.2016.2646181>

Luce, K. H., Crowther, J. H., & Pole, M. (2008). Eating disorder examination questionnaire (EDE-Q): Norms for undergraduate women. *International Journal of Eating Disorders*, 41(3), 273-276. <https://doi.org/10.1002/eat.20504>

Lüdtke, O., Roberts, B. W., Trautwein, U., & Nagy, G. (2011). A random walk down university avenue: Life paths, life events, and personality trait change at the transition to university life. *Journal of Personality and Social Psychology*, 101(3), 620-637.

<https://doi.org/10.1037/a0023743>

Lupo, R., Zaminga, M., Carriero, M. C., Santoro, P., Artioli, G., Calabrò, A., Ilari, FF., Benedetto, A., Caslini, M., Clerici, M., Conte, L., & Carvello, M. (2020). "Eating disorders and related stigma": Analysis among a population of Italian nursing students. *Acta Biomedica*, 91(12). <https://doi.org/10.23750/abm.v91i12-S.10797>

Lutz, C. A. (1988). *Unnatural emotions: Everyday sentiments on a micronesian atoll & their challenge to Western theory*. Chicago, IL: University of Chicago Press.

Lydecker, J. A., & Grilo, C. M. (2019). I didn't want them to see: Secretive eating among adults with binge-eating disorder. *International Journal of Eating Disorders*, 52(2), 153-158. <https://doi.org/10.1002/eat.23002>

Makri, E., Michopoulos, I., & Gonidakia, F. (2022). Investigation of loneliness and social support in patients with eating disorder: A case-control study. *Psychiatry International*, 3(2), 142-157. <https://doi.org/10.3390/psychiatryint3020012>

Malau-Aduli, B. S., Adu, M. D., Alele, F., Jones, K., Drovandi, A., Mylrea, M., Sfera, K., Ross, S., & Jennings, E. (2021). Adjusting to university: Perceptions of first-year health professions students. *PLoS One*, 16(5). <https://doi.org/10.1371/journal.ponee.0251634>

Malinauskas, B. M., Raedeke, T. D., Aebly, V. G., Smith, J. L., & Dallas, M. B. (2006). Dieting practices, weight perceptions, and body composition: A comparison of normal weight, overweight, and obese college females. *Nutrition Journal*, 5(11). <https://doi.org/10.1186/1475-2891-5-11>

Marais, G., Shankland, R., Haag, P., Fiault, R. (2018). A survey and a positive psychology intervention on French PhD student well-being. *International Journal of Doctoral Studies*, 13, 109-138. <https://ddoi.org/10.28945/3948>

Martens, T., & Metzger, C. (2016). Different transitions towards learning at university: Exploring the heterogeneity of motivational processes. In E. Kyndt, V. Donche, K. Trigwell, S. Lindblom-Ylänne (Eds.), *Higher Education Transitions: Theory and Research* (pp. 31-46). Routledge.

https://www.researchgate.net/publication/316924256_Different_Transitions_of_Learning_at_University_Exploring_the_Heterogeneity_of_Motivational_Processes

Martin-Neuninger, R., & Ruby, M. B. (2020). What does food retail research tell us about the implications of coronavirus (COVID-19) for grocery purchasing habits? *Frontiers in Psychology*, 11(1448). <https://doi.org/10.3389/fpsyg.2020.01448>

Mason, T. B., Heron, K. E., Braitman, A. L., & Lewis, R. J. (2016). A daily diary study of perceived social isolation, dietary restraint, and negative affect in binge eating. *Appetite*, 97, 94-100. <https://doi.org/10.1016/j.appet.2015.11.027>

Mathes, W. F., Brownley, K. A., Mo, X., & Bulik, C. M. (2009). *Appetite*, 52(3), 545-553. <https://doi.org/10.1016/j.appet.2009.03.005>

Maura, J., & Weisman de Mamani, A. (2017). Mental health disparities, treatment engagement, and attrition among racial/ethnic minorities with severe mental illness: A review. *Journal of Clinical Psychology in Medical Settings*, 24(3-4), 187–210. <https://doi.org/10.1007/s10880-017-9510-2>

Maylee, C. E., & Sarigiani, P. A. (2006, July 24-27). *Students' perspectives of parental support in the college transition* [Poster presentation]. The 19th International Conference on The First-Year Experience, Ontario, Canada.

<https://sc.edu/nrc/presentation/international/2006/download/P-72.pdf>

McCombie, C., Austin, A., Dalton, B., Lawrence, V., & Schmidt, U. (2020). “Now it’s just old habits and misery” - understanding the impact of the COVID-19 pandemic on people with current or life-time eating disorders: A qualitative study. *Frontiers in Psychiatry*, 11(589225). <https://doi.org/10.3389/fpsy.2020.589225>

McGhie, V. (2017). Entering university studies: Identifying enabling factors for a successful transition from school to university. *Higher Education*, 73, 407-422.

<https://doi.org/10.1007/s10734-016-0100-2>

McGrath, M., & Braunstein, A. (1997). The prediction of freshmen attrition: An examination of the importance of certain demographic, academic, financial and social factors. *College Student Journal*, 31(3), 396–408.

McInnis, C. (2001). Researching the first year experience: Where to from here? *Higher Education Research & Development*, 20(2), 105-114.

<https://doi.org/10.1080/07294360125188>

McIntyre, J. C., Worsley, J., Corcoran, R., Woods, P. H., & Bentall, R. (2018). Academic and non-academic predictors of student psychological distress: The role of social identity and loneliness. *Journal of Mental Health*, 27(3), 230-239.

<https://doi.org/10.1080/09638237.2018.1437608>

McLean, S. A., Paxton, S. J., Massey, R., Hay, P. J., Mond, J. M., Rodgers, B. (2014). Stigmatising attitudes and beliefs about bulimia nervosa: Gender, age, education and income variability in a community sample. *International Journal of Eating Disorders*, 47, 353-361. <https://doi.org/10.1002/eat.22227>

McNicholas, F., O'Connor, C., O'Hara, L., & McNamara, N. (2015). Stigma and treatment of eating disorders in Ireland: Healthcare professionals' knowledge and attitudes. *Irish Journal of Psychological Medicine*, 33(1), 21-31. <https://doi.org/10.1017/ipm.2015.24>

Mehler, P. S. (2011). Medical complications of bulimia nervosa and their treatments. *International Journal of Eating Disorders*, 44(2), 95-104. <https://doi.org/10.1002/eat.20825>

Mersha, Y., Bishaw, A., & Tegegne, F. (2013). Factors Affecting Female Students' Academic Achievement at Bahir Dar University. *CICE Hiroshima University, Journal of International Cooperation in Education*, 15(3), 135-148.

<https://core.ac.uk/download/pdf/222951681.pdf>

Meyer, L. B. (n.d.). Understanding problems and solutions in binge-eating disorder (BED): A multimethod study of a two-phased treatment program for patients with BED and overweight [Doctoral dissertation, University of Southern

Denmark]. <https://static1.squarespace.com/static/607eab89b8500d6193d985af/t/60c9c83761cdf42a98168d55/1623836739237/Afhandling.pdf>

Micali, N., Hagberg, K. W., Petersen, I., & Treasure, J. L. (2013). The incidence of eating disorders in the UK in 2000-2009: Findings from the general practice research database. *BMJ Open*, 3(5). <https://doi.org/10.1136/bmjopen-20130002646>

Miller, M. N., & Pumariega, A. J. (2001). Culture and eating disorders: A historical and cross-cultural review. *Psychiatry: Interpersonal and Biological Processes*, 64(2), 93–110. <https://doi.org/10.1521/psyc.64.2.93.18621>

Mina, A., Hallit, S., Rogoza, R., Obeid, S., & Soufia, M. (2021). Binge eating behaviour in a sample of Lebanese adolescents: Correlates and binge eating scale validation. *Journal of Eating Disorders*, 9(134). <https://doi.org/10.1186/s40337-021-00493-7>

Ministry of Education (2022). *Different types of tertiary provider*. <https://parents.education.govt.nz/further-education/different-types-of-tertiary-provider/>

Mitchell, J. E., & Crow, S. (2006). Medical complications of anorexia nervosa and bulimia nervosa. *Current Opinion in Psychiatry*, 19(4), 438-443. <https://doi.org/10.1097/01.yco.0000228768.79097.3e>

Mitchell, K. S., & Mazzeo, S. E. (2004). Binge eating and psychological distress in ethnically diverse undergraduate men and women. *Eating Behaviours*, 5(2), 157-169. <https://doi.org/10.1016/j.eatbeh.2003.07.004>

Mitchison, D., Hay, P., Slewa-Younan, S., & Mond, J. (2012). Time trends in population prevalence of eating disorder behaviours and their relationship to quality of life. *PLoS One*, 7(11). <https://doi.org/10.1371/journal.pone.0048450>

Mokgele, K. R. F., & Rothmann, S. (2014). A structural model of student well-being. *South African Journal of Psychology*, 44(4), 514–527. <https://doi.org/10.1177/0081246314541589>

Mond, J. M., Hay, P. J., Rodgers, B., Owen, C., & Beumont, P. J. V. (2004a). Beliefs of women concerning causes and risk factors for bulimia nervosa. *Australian and New Zealand Journal of Psychiatry*, 38(6), 463-469. <https://doi.org/10.1080/j.1440-1614.2004.01384.x>

Mond, J. M., Hay, P. J., Rodgers, B., Owen, C., & Beumont, P. J. V. (2004b). Beliefs of women concerning the severity and prevalence of bulimia nervosa. *Social Psychiatry and Psychiatric Epidemiology*, 39(4), 299-304. <https://doi.org/10.1080/j.1440-1614.2004.01384.x>

Money, J., Nixon, S., Tracy, F., Hennessy, C., Ball, E., & Dinning, T. (2017). Undergraduate student expectations of university in the United Kingdom: What really matters to them? *Cogent Education*, 4(1). <https://doi.org/10.1080/2331186X.2017.1301855>

Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition*, 18(1), 176-186. <https://doi.org/10.1016/j.concog.2008.12.008>

Mortier, P., Demyttenaere, K., Auerbach, R. P., Green, J. G., Kessler, R. C., Kiekens, G., Nock, M. K., & Bruffaerts, R. (2015). The impact of lifetime suicidality on academic performance in college freshmen. *Journal of Affective Disorders*, 186, 254-260. <https://doi.org/10.1016/j.jad.2015.07.030>

Moreau, M. P. (2019). *Creating inclusive spaces for academic staff with caregiving responsibilities*. Anglia Ruskin University. <https://doi.org/10.25411/aru.11131382.v1>

Moynihan, A. B., van Tilburg, W. A. P., Igou, E. R., Wisman, A., Donnelly, A. E., & Mulcaire, J. B. (2015). Eaten up by boredom: Consuming food to escape awareness of the bored self. *Frontiers in Psychology*, 1(6). <https://doi.org/10.3389/fpsyg.2015.00369>

Murakami, J. M., Essayli, J. H., & Latner, J. D. (2016). The relative stigmatisation of eating disorders and obesity in males and females. *Appetite*, 102, 77-82.

<https://doi.org/10.1016/j.appet.2016.02.027>

Mustelin L., Bulik C. M., Kaprio J., Keski-Rahkonen A. (2017). Prevalence and correlates of binge eating disorder related features in the community. *Appetite*, 109, 165–

171. <https://doi.org/10.1016/j.appet.2016.11.032>

Nagata, J. M., Ganson, K. T., & Austin, S. B. (2020). Emerging trends in eating disorders among sexual and gender minorities. *Current Opinion in Psychiatry*, 33(6), 562-

567. <https://doi.org/10.1097/YCO.0000000000000645>

Nagata, J. M., Garber, A. K., Tabler, J. L., Murray, S. B., & Bibbins-Domingo, K. (2018). Prevalence and correlates of disordered eating behaviours among young adults with overweight or obesity. *Journal of General Internal Medicine*, 33(8), 1337-1343.

<https://doi.org/10.1007/s11606-018-4465-z>

Nakai, Y., Nin, K., Teramukai, S., Taniguchi, A., & Fukushima, M. (2014). Typical and atypical anorexia nervosa in a Japanese sample. *International Journal of Eating Disorders*,

47(2), 130-137. <https://doi.org/10.1002/eat.22208>

National Eating Disorders Association (2022). *Weight Stigma*.

<https://www.nationaleatingdisorders.org/weight-stigma>

National Institute of Mental Health. (2017). Eating Disorders Statistics Reports for the U.S.. <https://nimh.nih.gov/health/statistics/eating-disorders>

New Zealand Qualifications Authority. (2022). *Tertiary Education*. New Zealand Qualifications Authority. <https://www.nzqa.govt.nz/qualifications-standards/understanding-nzqf/tertiary-education/>

Nicoli, M. G., & Liberatore Junior, R. D. R. (2011). Binge eating disorder and body image perception among university students. *Eating Behaviours*, 12(4), 284-288.

<https://doi.org/10.1016/j.eatbeh.2011.07.004>

Nutley, S. K., Falise, A. M., Henderson, R., Apostolou, V., Matthews, C. A., & Striley, C. W. (2021). Impact of the COVID-19 pandemic on disordered eating behaviours: Qualitative analysis of social media posts. *JMIR Mental Health*, 8(1). <https://doi.org/10.2196/26011>

Oades, L. G., Robinson, P., Green, S., & Spence, G. B. (2011). Towards a positive university. *The Journal of Positive Psychology*, 6(6), 432-439.

<https://doi.org/10.1080/17439760.2011.634828>

O'Connor, C., McNamara, N., O'Hara, L., & McNicholas, F. (2016). Eating disorder literacy and stigmatising attitudes towards anorexia, bulimia and binge eating disorder among adolescents. *Advances in Eating Disorders: Theory, Research and Practice*, 4(2), 125-140. <https://doi.org/10.1080/21662630.2015.1129635>

Ogutlu, H., & McNicholas, F. (2021). Stigma and treatment of eating disorders in school counsellors in Turkey (STED-SCIT). *Psychiatry and Behavioural Sciences*, 11(1), 8-17.

<https://doi.org/10.5455/PBS.20201207103947>

O'Hara, S. K., & Smith, K. C. (2007). Presentation of eating disorders in the news media: What are the implications for patient diagnosis and treatment? *Patient Education and Counseling*, 68(1), 43-51. <https://doi.org/10.1016/j.pec.2007.04.006>

Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2022). A practical guide to reflexivity in qualitative research: AMEE guide no. 149. *Medical Teacher*.

<https://doi.org/10.1080/0142159X.2022.2057287>

O’Loughlen, E., Grant, S., & Galligan, R. (2021). Shame and binge eating pathology: A systematic review. *Clinical Psychology & Psychotherapy*, 29(1), 147-163.

<https://doi.org/10.1002/cpp.2615>

Orbach, I. (1996). The role of the body experience in self-destruction. *Clinical Child Psychology and Psychiatry*, 1(4), 607-619. <https://doi.org/10.1177/1359104596014012>

O’Reilly, M., & Parker, N. (2012). “Unsatisfactory saturation”: A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13(2), 190-197. <https://doi.org/10.1177/1468794112446106>

Ortega-Luyando, M., Alvarez-Rayón, G., Garneer, D. M., Amaya-Hernández, A., Bautista-Díaz, M. L., & Mancilla-Díaz, J. M. (2015). Systematic review of disordered eating behaviours: Methodological considerations for epidemiological research. *Revista Mexicana de Trastornos Alimentarios*, 6(1), 51-63. <https://doi.org/10.1015/j.rmta.2015.06.001>

Ortner, C. N. M., Kilner, S. J., & Zelazo, P. D. (2007). Mindfulness meditation and reduced emotional interference on a cognitive task. *Motivation and Emotion*, 31, 271-283. <https://doi.org/10.1007/s11031-007-9076-7>

O’Shea, S. E. (2008). *Choices, challenges, and changes: Exploring transition, persistence and engagement for first generation, female university students* [Doctoral dissertation, University of Sydney]. National Centre for Student Equity in Higher Education. <http://www.ncsehe.edu.au/wp-content/uploads/2014/07/Choices-challenges-and-changes-Sarah-OShea-PhD-Thesis.pdf>

Owen, C. (2020, May 8). Coronavirus: Auckland university students will have grades scaled up. *Stuff*. <https://www.stuff.co.nz/national/education/121455289/coronavirus-auckland-university-students-will-have-grades-scaled-up>

Owens, M. R., Brito-Silva, F., Kirkland, T., Moore, C. E., Davis, K. E., Patterson, M. A., Miketinas, D. C., & Tucker, W. J. (2020). Prevalence and social determinants of food insecurity among college students during the COVID-19 pandemic. *Nutrients*, *12*(9).

<https://doi.org/10.3390/nu12092515>

Owusu-Fordjour, C., Koomson, C. K., & Hanson, D. (2020). The impact of COVID-19 on learning: The perspective of the Ghanaian student. *European Journal of Education Studies*, *7*(3), 1-14. <https://www.oapub.org/edu/index.php/ejes/article/viewFile/3000/5638>

Ozier, A. D., Kendrick, O. W., Lepper, J. D., Knol, L. L., Perko, M., & Burnham, J. (2008). Overweight and obesity are associated with emotion- and stress-related eating as measured by the eating and appraisal due to emotions and stress questionnaire. *Journal of the American Dietetic Association*, *108*(1), 49-56.

<https://doi.org/10.1016/j.jada.2007.10.011>

Paredes, M. R., Apaolaza, V., Fernandez-Robin, C., Hartmann, P., & Yanez-Martinez, D. (2021). The impact of COVID-19 pandemic on subjective mental well-being: The interplay of perceived threat, future anxiety and resilience. *Personality and Individual Differences*, *170*(110455), 1-22. <https://doi.org/10.1016/j.paid.2020.110455>

Parker, L. L., & Harriger, J. A. (2020). Eating disorders and disordered eating behaviours in the LGBT population: A review of the literature. *Journal of Eating Disorders*, *8*(51). <https://doi.org/10.1186/s40337-020-00327-y>

Parkinson, B. (2012). Piecing together emotion: Sites and time-scales for social construction. *Emotion Review*, *4*(3), 291-298. <https://doi.org/10.1177/1754073912439764>

Parsons, J. C. A. (2022). *Lived experiences of binge eating and access to care in the New Zealand health system* [Master's thesis, Massey University]. Massey Research Online. <https://mro.massey.ac.nz/handle/10179/17332>

Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *The Journal of Higher Education*, 51(1), 60-75. <https://doi.org/10.2307/1981125>

Pather, N., Blyth, P., Chapman, J. A., Dayal, M. R., Flack, N. A. M. S., Fogg, Q. A., Green, R. A., Hulme, A. K., Johnson, I. P., Meyer, A. J., Morley, J. W., Shortland, P. J., Štrkalj, G., Štrkalj, M., Valter, K., Webb, A. L., Woodley, S. J., Lazarus, M. D. (2020). Forced disruption of anatomy education in Australia and New Zealand: An acute response to the covid-19 pandemic. *Anatomical Sciences Education*, 13(3), 284-300. <https://doi.org/10.1002/ase.1968>

Paxton, S. J., Neumark-Sztainer, D., Hannan, P. J., & Eisenberg, M. E. (2006). Body dissatisfaction prospectively predicts depressive mood and low self-esteem in adolescent girls and boys. *Journal of Clinical Child & Adolescent Psychology*, 35(4), 539-549. https://doi.org/10.1207/s15374424jccp3504_5

Penaforta, F. R. O., Minelli, M. C. S., Anastácio, L. R., & Japur, C. C. (2019). Anxiety symptoms and emotional eating are independently associated with sweet craving in young adults. *Psychiatry Research*, 271, 715-720. <https://doi.org/10.1016/j.psychres.2018.11.070>

Pengpid, S., Peltzer, K., Kassean, H. K., Tsala Tsala, J. P., Sychareun, V., & Müller-Riemenschneider, F. (2015). Physical inactivity and associated factors among university students in 23 low-, middle- and high- income countries. *International Journal of Public Health*, 60(5), 539-549. <https://doi.org/10.1007/s00038-015-0680-0>

Perry, C. & Allard, A. (2003). Making the connections: transition experiences for first-year education students. *The Journal of Educational Enquiry*, 4(2), 74-89. <https://ojs.unisa.edu.au/index.php/EDEQ/article/view/525>

Perz, C. A., Lang, B. A., & Harrington, R. (2020). Validation of the fear of COVID-19 scale in a US college sample. *International Journal of Mental Health and Addiction*, 20, 273-283. <https://doi.org/10.1007/s11469-020-00356-3>

Phillipou, A., Meyer, D., Neill, E., Tan, E. J., Toh, W. L., Van Rheenen, T. E., & Rossell, S. L. (2020). Eating and exercise behaviours in eating disorders and the general population during the COVID-19 pandemic in Australia: Initial results from the COLLATE project. *International Journal of Eating Disorders*, 53(7), 1158-1165. <https://doi.org/10.1002/eat.23317>

Phillips, K. E., Kelly-Weeder, S., & Farrell, K. (2016). Binge eating behaviour in college students: What is a binge? *Applied Nursing Research*, 30, 7-11. <https://doi.org/10.1016/j.apnr.2015.10.011>

Pieper, I., & Thomson, C. J. H. (2016). Beneficence as a principle of human research. *Monash Bioethics Review*, 34(2), 117-135. <https://doi.org/10.1007/s40592-016-0061-3>

Pirotta, S., Barillaro, M., Brennan, L., Grassi, A., Jeanes, Y. M., Joham, A. E., Kulkarni, J., Couch, L. M., Lim, S. S., & Moran, L. J. (2019). Disordered eating behaviours and eating disorders in women in Australia with and without polycystic ovary syndrome: A cross-sectional study. *Journal of Clinical Medicine*, 8(10). <https://doi.org/10.3390/jcm8101682>

Pittman, L. D., & Richmond, A. (2008). University belonging, friendship quality, and psychological adjustment during the transition to college. *Journal of Experimental Education*, 76(4), 343-361. <https://doi.org/10.3200/JEXE.76.4.343-362>

Polivy, J., & Herman, C. P. (1993). Etiology of binge eating: Psychological mechanisms. In C. G. Fairburn & G. T. Wilson (Eds.), *Binge eating: Nature, assessment and treatment* (pp. 173-205). Guilford Press.

Ponto, J. A., Ellington, L., Mellon, S., & Beck, S. L. (2010). Predictors of adjustment and growth in women with recurrent ovarian cancer. *Oncology Nursing Forum*, 37(3), 357-364. <https://doi.org/10.1188/10.ONF.357-364>

Ponto, J. (2015). Understanding and evaluating survey research. *Journal of the Advanced Practitioner in Oncology*, 6(2), 168-171.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4601897/>

Potterton, R., Richards, K., Allen, K., & Schmidt, U. (2020). Eating disorders during emerging adulthood: A systematic scoping review. *Frontiers in Psychology*, 10(3062).

<https://doi.org/10.3389/fpsyg.2019.03062>

Puhl, R., & Brownell, K. D. (2001). Bias, discrimination, and obesity. *Obesity Research*, 9(12), 788-805. <https://doi.org/10.1038/oby.2001.108>

Puhl, R., & Suh, Y. (2015). Health consequences of weight stigma: Implications for obesity prevention and treatment. *Current Obesity Reports*, 4(2), 182-190.

<https://doi.org/10.1007/s13679-015-0153-z>

Qian, J., Wu, Y., Liu, F., Zhu, Y., Jin, H., Zhang, H., Wan, Y., Li, C. & Yu, DD. (2022). An update on the prevalence of eating disorders in the general population: A systematic review and meta-analysis. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, 27, 415-428. <https://doi.org/10.1007/s40519-021-01162-z>

Quality Tertiary Institutions Nga Wananga Kounga. (2022). *About us – our story*.

<http://www.qti.org.nz/About-us>

Rahat, E., & Ilhan, T. (2016). Coping styles, social support, relational self-construal, and resilience in predicting students' adjustment to university life. *Educational Sciences: Theory & Practice*, 16(1), 187-208. <https://doi.org/10.12738/estp.2016.1.0058>

Rajan, R. P. (2022). 'Go hard, go early': New Zealand's COVID-19 elimination strategy. In P. Pachauri, & A. Pachauri (Eds.), *Health Dimensions of COVID-19 in India and Beyond* (pp. 319-334). Springer. https://doi.org/10.1007/978-981-16-7385-6_18

Ratner, C. (1989). A social constructionist critique of naturalistic theories of emotion. *Journal of Mind and Behaviours*, 10, 211-230. <http://www.jstor.org/stable/24859883>

Raveneau, G., Feinstein, R., Rosen, L. M., & Fisher, M. (2014). Attitudes and knowledge levels of nurses and residents caring for adolescents with an eating disorder. *International Journal of Adolescent Medicine and Health*, 26(1), 131-136. <https://doi.org/10.1515/ijamh-2013-0015>

Reas, D. L. (2017). Public and healthcare professionals' knowledge and attitudes toward binge eating disorder: A narrative review. *Nutrients*, 9(11). <https://doi.org/10.3390/nu9111267>

Recio-Román, A., Recio-Menéndez, M., & Román-González, M. V. (2020). Food reward and food choice: An inquiry through the liking and wanting model. *Nutrients*, 12(3), 639. <https://doi.org/10.3390/nu12030639>

Rees, C. E., Crampton, P. E. S., & Monrouxe, L. V. (2020). Re-visioning academic medicine through a constructionist lens. *Academic Medicine*, 95(6), 846-850. <https://doi.org/10.1097/ACM.0000000000003109>

Ricciardelli, L. A., & McCabe, M. P. (2001). Dietary restraint and negative affect as mediators of body dissatisfaction and bulimic behaviour in adolescent girls and boys. *Behaviour Research and Therapy*, 39(11), 1317-1328. [https://doi.org/10.1016/s0005-7967\(00\)00097-8](https://doi.org/10.1016/s0005-7967(00)00097-8)

Richardson, J. (1994). Mature students in higher education: I. A literature survey on approaches to studying. *Studies in Higher Education* 19(3), 309-325.

<https://doi.org/10.1080/03075079412331381900>

Richardson, J. C., Caskurlu, S., & Lv, J. (2017). Social presence in relation to students' satisfaction and learning in the online environment: A meta-analysis. *Computers in Human Behaviours*, 71, 402-417. <https://doi.org/10.1016/j.chb.2017.02.001>

Rico-Uribe, L. A., Caballero, F. F., Martin-Maria, N., Cabello, M., Ayuso-Mateos, J. L., & Miret, M. (2018). Association of loneliness with all-cause mortality: A meta-analysis. *PLoS ONE*, 13(1). <https://doi.org/10.1371/journal.pone.0190033>

Robbins, J. A., Bertakis, K. D., Helms, L. J., Azari, R., Callahan, E. J., & Creten, D. A. (1993). The influence of physician practice behaviours on patient satisfaction. *Family Medicine Home*, 25(1), 17-20.

Rodgers, R. F., Berry, R., & Franko, D. L. (2018). Eating disorders in ethnic minorities: An update. *Current Psychiatry Reports*, 20(10), 90. <https://doi.org/10.1007/s11920-018-0938-3>

Rodgers, R. F., Lombardo, C., Cerolini, S., Franko, D. L., Omori, M., Fuller-Tyszkiewicz, M., Linardon, J., Quartet, P., & Guillaume, S. (2020). The impact of the COVID-19 pandemic on eating disorder risk and symptoms. *International Journal of Eating Disorders*, 53(7), 1166-1170. <https://doi.org/10.1002/eat.23318>

Roehrig, J. P., & McLean, C. P. (2010). A comparison of stigma toward eating disorders versus depression. *International Journal of Eating Disorders*, 43(7), 671-674. <https://doi.org/10.1002/eat.20760>

Romano, K. A., Becker, M. A. S., Colgary, C. D., & Magnuson, A. (2018). Helpful or harmful? The comparative value of self-weighing and calorie counting versus intuitive eating

on the eating disorder symptomology of college students. *Eating and Weight Disorders*, 23(6), 841-848. <https://doi.org/10.1007/s40519-018-0562-6>

Rothaupt, J. W., & Morgan, M. M. (2007). Counselors' and counselor educators' practice of mindfulness: A qualitative inquiry. *Counselling and Values*, 52(1), 40-54. <https://doi.org/10.1002/j.2161-007X.2007.tb00086.x>

Rucks-Ahidiana, Z., & Hare Bork, R. (2020). How relationships support and inform the transition to community college. *Research in Higher Education*, 61(5), 588-602. <https://doi.org/10.1007/s11162-020-09601-z>

Russell, G. M., & Kelly, N. H. (2002). Research as interacting dialogic processes: Implications for reflexivity. *Forum: Qualitative Social Research*, 3(3). <https://doi.org.10.17169/fqs-3.3.831>

Salazar-Fernández, C., Palet, D., Harger, P. A., & Mella, F. R. (2021). The perceived impact of COVID-19 on comfort food consumption over time: The mediational role of emotional distress. *Nutrients*, 13(6). <https://doi.org/10.3390/nu13061910>

Salvy, S. J., Elmo, A., Nitecki, L. A., Kluczynski, M. A., & Roemmich, J. N. (2011). Influence of parents and friends on children's and adolescents' food intake and food selection. *The American Journal of Clinical Nutrition*, 93(1), 87-92. <https://doi.org/10.3945/ajcn.110.002097>

Sanjari, M., Bahramnezhad, F., Fomani, F. K., Shoghi, M., & Cheraghi, M. A. (2014). Ethical challenges of researchers in qualitative studies: The necessity to develop a specific guideline. *Journal of Medical Ethics and History of Medicine*, 7(14). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4263394/>

Schaumberg, K., Welch, E., Breithaupt, L., Hübel, C., Baker, J. H., Munn-Chernoff, M. A., Yilmaz, Z., Ehrlich, S., Mustelin, L., Ghaderi, A., Hardaway, A. J., Bulik-Sullivan, E. C.,

Hedman, A. M., Jangmo, A., Nilsson, I. A. K., Wiklund, C., Yao, S., Seidel, M., & Bulik, C. M. (2017). The science behind the academy for eating disorders' nine truths about eating disorders. *European Eating Disorders Review*, 25(6), 432-450.

<https://doi.org/10.1002/erv.2553>

Schebendach, J. E., Mayer, L. E., Devlin, M. J., Attia, E., Contento, I. R., Wolf, R. L., & Walsh, B. T. (2008). Dietary energy density and diet variety as predictors of outcome in anorexia nervosa. *The American Journal of Clinical Nutrition*, 87(4), 810-816.

<https://doi.org/10.1093/ajcn/87.4.810>

Schebendach, J. E., Uniacke, B., Walsh, B. T., Mayer, L. E. S., Attia, E., & Steinglass, J. (2019). Fat preference and fat intake in individuals with and without anorexia nervosa.

Appetite, 139, 35-41. <https://doi.org/10.1016/j.appet.2019.04.008>

Schlossberg, N. K., Waters, E. B., & Goodman, J. (1995). *Counseling adults in transition: Linking practice with theory* (2nd ed.). Springer: New York, NY, USA.

Schrempft, S., Jackowska, M., Hamer, M., & Steptoe, A. (2019). Associations between social isolation, loneliness, and objective physical activity in older men and women. *BMC Public Health*, 19(1). <https://doi.org/10.1186/s12889-019-6424-y>

Schvey, N. A., Puhl, R. M., & Brownell, K. D. (2011). The impact of weight stigma on caloric consumption. *Obesity*, 19(10), 1957-1962. <https://doi.org/10.1038/oby.2011.204>

Schwartz, S. E. O., Kanchewa, S. S., Rhodes, J. E., Gowdy, G., Stark, A. M., Horn, J. P., Parnes, M., & Spencer, R. (2017). "I'm having a little struggle with this, can you help me out?": Examining impacts and processes of a social capital intervention for first-generation college students. *American Journal of Community Psychology*, 61(1-2), 166-178.

<https://doi.org/10.1002/ajcp.12206>

SCOOP. (2020). *Two mental health advocates collaborate to create eating disorders recovery app* [Press release]. <https://www.scoop.co.nz/stories/GE2008/S00153/two-mental-health-advocates-collaborate-to-create-eating-disorders-recovery-app.htm>

Seah, X. Y., Tham, X. C., Kamaruzaman, N. R., & Yobas, P. K. (2018). Nurses' perception of knowledge, attitudes and reported practice towards patients with eating disorders: A concurrent mixed-methods study. *Archives of Psychiatric Nursing*, 32(1), 133-151. <https://doi.org/10.1016/j.apnu.2017.11.011>

Serra, R., Kiekens, G., Vanderlinden, J., Vrieze, E., Auerbach, R. P., Benjet, C., Claes, L., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Tarsitani, L., Green, J. G., Kessler, R. C., Nock, M. K., Mortier, P., & Bruffaerts, R. (2020). Binge eating and purging in first-year college students: Prevalence, psychiatric comorbidity, and academic performance. *International Journal of Eating Disorders*, 53(3), 339-348. <https://doi.org/10.1002/eat.23211>

Sevinç, S., & Gizir, C. A. (2014). Factors negatively affecting university adjustment from the views of first-year university students: The case of Mersin University. *Educational Sciences: Theory and Practice*, 14(4), 1301-1308. <https://doi.org/10.12738/estp.2014.4.2081>

Shanahan, M. (2006). Being that bit older: Mature students' experience of university and healthcare education. *Occupational Therapy International*, 7(3), 153-162. <https://doi.org/10.1002/oti.116>

Sheehan, D. V., & Herman, B. K. (2015). The psychological and medical factors associated with untreated binge eating disorder. *The Primary Care Companion for CNS Disorders*, 17(2). <https://doi.org/10.4088/PCC.14r01732>

Smith, G., & Wayman, S. (2009). Meet the parents: The experiences of students with children in further and higher education. National Union of Students London.

<https://www.nusconnect.org.uk/resources/meet-the-parents-the-experience-of-students-with-children-in-further-and-higher-education-2009>

Smolak, L., & Murnen, S. K. (2001). Gender and eating problems. In R. H. Striegel-Moore & L. Smolak (Eds.), *Eating disorders: Innovative directions in research and practice* (pp. 91–110). American Psychological Association. <https://doi.org/10.1037/10403-005>

Smolak, L., & Striegel-Moore, R. H. (2001). Challenging the myth of the golden girl: Ethnicity and eating disorders. In R. H. Striegel-Moore & L. Smolak (Eds.), *Eating disorders: Innovative directions in research and practice* (pp. 111–132). American Psychological Association. <https://doi.org/10.1037/10403-006>

Sogari, G., Velez-Argumedo, C., Gómez, M. I., & Mora, C. (2018). College students and eating habits: A study using an ecological model for health behaviour. *Nutrients*, *10*(12). <https://doi.org/10.3390/nu10121823>

Solly, J. E., Chamberlain, S. R., Lust, K., & Grant, J. E. (2021). Binge-eating disorder in university students: High prevalence and strong link to impulsive and compulsive traits. *CNS Spectrums*, 1-28. <https://doi.org/10.1017/S1092852921000882>

Sotardi, V. A., & Brogt, E. (2016). *Common student problems with assessment during the transition to university: Support staff perspectives, insights, and recommendations*. <https://ako.ac.nz/knowledge-centre/addressing-common-student-problems-with-assessment-support-staff-perspectives/common-student-problems-with-assessment-during-the-transition-to-university-support-staff-perspectives-insights-and-recommendations/>

Sotardi, V. A., & Friesen, M. D. (2017). Student reflections on learning and studying during the transition to university: Implications for tertiary learning advisors. *Association of*

Tertiary Learning Advisors of Aotearoa New Zealand Journal, 2(1), 19-35.

<https://doi.org/10.26473/ATLAANZ.2017.2.1/002>

Spence, C. (2017). Comfort food: A review. *International Journal of Gastronomy and Food Science*, 9, 105-109. <https://doi.org/10.1016/j.ijgfs.2017.07.001>

Srinivasan, T. N., Suresh, T. R., Jayaram, V., & Fernandez, M. P. (1995). Eating disorders in India. *Indian Journal of Psychiatry*, 37(1), 26-30.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2970945/>

Staffieri, J. R. (1967). A study of social stereotype of body image in children. *Journal of Personality and Social Psychology*, 7(1), 101-104. <https://doi.org/10.1037/h0021227>

Stallman, H. M., Ohan, J. L., & Chiera, B. (2018). The role of social support, being present, and self-kindness in university student psychological distress. *Australian Psychologist*, 53(1), 52-59. <https://doi.org/10.1111/ap.12271>

Statistics New Zealand. (2019). *New Zealand as a village of 100 people: 2018 Census* [Fact Sheet]. <https://www.stats.govt.nz/assets/Uploads/Infographics/New-Zealand-as-a-village-of-100-people-2018-Census/new-zealand-village-of-100-people-2018-census.pdf>

Steinglass, J., Albano, A. M., Simpson, H. B., Carpenter, K., Schebendach, J., & Attia, E. (2012). Fear of food as a treatment target: Exposure and response prevention for anorexia nervosa in an open series. *International Journal of Eating Disorders*, 45(4), 615-621. <https://doi.org/10.1002/eat.20936>

Steinglass, J., Foerde, K., Kostro, K., Shohamy, D., Walsh, B. T. (2015). Restrictive food intake as a choice – a paradigm for study. *International Journal of Eating Disorders*, 48(1), 59-66. <https://doi.org/10.1002/eat.22345>

Steinhausen, H. C., & Jensen, C. M. (2015). Time trends in lifetime incidence rates of first-time diagnosed anorexia nervosa and bulimia nervosa across 16 years in a Danish

nationwide psychiatric registry study. *International Journal of Eating Disorders*, 48(7), 845-850. <https://doi.org/10.1002/eat.22402>

Stewart, M. C., Keel, P. K., & Schiavo, R. S. (2006). Stigmatisation of anorexia nervosa. *International Journal of Eating Disorders*, 39(4), 320-325. <https://doi.org/10.1002/eat.20262>

Stewart, M. C., Schiavo, R. S., Herzog, D. B., & Franko, D. L. (2008). Stereotypes, prejudice and discrimination of women with anorexia nervosa. *European Eating Disorders Review*, 16(4), 311-318. <https://doi.org/10.1002/erv.849>

Stickley, A., & Koyanagi, A. (2016). Loneliness, common mental disorders and suicidal behaviours: Findings from a general population survey. *Journal of Affective Disorders*, 197, 81-87. <https://doi.org/10.1016/j.jad.2016.02.054>

Stickley, A., & Koyanagi, A. (2018). Physical multimorbidity and loneliness: A population-based study. *PLoS ONE*, 13(1). <https://doi.org/10.1371/journal.pone.0191651>

Stiles-Shields, C., Rienecke Hoste, R., M Doyle, P., & Le Gange, D. (2012). A review of family-based treatment for adolescents with eating disorders. *Reviews on recent clinical trials*, 7(2), 133-140. <https://doi.org/10.2174/157488712800100242>

Stoliker, B. E., & Lafreniere, K. D. (2015). The influence of perceived stress, loneliness, and learning burnout on university students' educational experience. *College Student Journal*, 49. 146-160.
https://www.researchgate.net/publication/282817514_The_Influence_of_Perceived_Stress_Loneliness_and_Learning_Burnout_on_University_Students'_Educational_Experience

Striegel, R. H., Bedrosian, R., Wang, C., & Schwartz, S. (2012). Why men should be included in research on binge eating: Results from a comparison of psychosocial impairment in men and women. *International Journal of Eating Disorders*, 45(2), 233-240.
<https://doi.org/10.1002/eat.20962>

Striegel-Moore, R. H., Silberstein, L. R., Frensch, P., & Rodin, J. (1989). A prospective study of disordered eating among college students. *International Journal of Eating Disorders*, 8(5), 499-509. [https://doi.org/10.1002/1098-108X\(198909\)8:5<499::AID-EAT2260080502>3.0.CO;2-A](https://doi.org/10.1002/1098-108X(198909)8:5<499::AID-EAT2260080502>3.0.CO;2-A)

Strober, M., Freeman, R., Lampert, C., Diamond, J., & Kaye, W. (2000). Controlled family study of anorexia nervosa and bulimia nervosa: Evidence of shared liability and transmission of partial syndromes. *American Journal of Psychiatry*, 157(3), 393-401. <https://doi.org/10.1176/appi.ajp.157.3.393>

Stunkard, A. J. (1959). Eating patterns and obesity. *Psychiatry Quarterly*, 33, 284-295. <https://doi.org/10.1007/BF01575455>

Sundarasan, S., Chinna, K., Kamaludin, K., Nurunnabi, M., Baloch, G. M., Khoshaim, H. B., Hossain, S. F. A., & Sukayt, A. (2020). Psychological impact of COVID-19 and lockdown among university students in Malaysia: Implications and policy recommendations. *International Journal of Environmental Research and Public Health*, 17(17), 6206. <https://doi.org/10.3390/ijerph17176206>

Suzuki, A., Amrein-Beardsley, A., & Perry, N. (2012). A summer bridge program for underprepared first-year students: Confidence, community, and re-enrollment. *Journal of the First-Year Experience & Students in Transition*, 24(2), 85-106.

Tavolacci, M. P., Grigioni, S., Richard, L., Mayrignac, G., Déchelotte, P., & Ladner, J. (2015). Eating disorders and associated health risks among university students. *Journal of Nutrition Education and Behaviour*, 47(5), 412-420. <https://doi.org/10.1016/j.ineb.2015.06.009>

Tavolacci, M. P., Ladner, J., & Dechelotte, P. (2021a). COVID-19 pandemic and eating disorders among university students. *Nutrients*, *13*(4294).

<https://doi.org/10.3390/nu13124294>

Tavolacci, M. P., Wouters, E., de Velde, S. V., Buffel, V., Dechelotte, P., Hal, G. V., & Ladner, J. (2021b). The impact of COVID-19 lockdown on health behaviours among students of a French university. *International Journal of Environmental Research and Public Health*, *18*(4346). <https://doi.org/10.3390/ijerph18084346>

Taylor, C. A., & Harris-Evans, J. (2018). Reconceptualising transition to higher education with Deleuze and Guattari. *Studies in Higher Education*, *43*(7), 1254-1267.

<https://doi.org/10.1080/03075079.2016.1242567>

Te Pōkai Tara Universities New Zealand (2022). *About the university sector*.

<https://www.universitiesnz.ac.nz/about-university-sector>

Te Pūkenga. (2022). *Our network*. <https://www.xn--tepkenga-szb.ac.nz/our-work/our-network/>

Terry, G., & Braun, V. (2017). Short but often sweet: The surprising potential of qualitative survey methods. In V. Braun, V. Clarke, & D. Gray (Eds.), *Collecting Qualitative Data: A Practical Guide to Textual, Media and Virtual Techniques* (pp. 15-44). Cambridge University Press. [https://www.cambridge.org/core/books/abs/collecting-qualitative-](https://www.cambridge.org/core/books/abs/collecting-qualitative-data/short-but-often-sweet/AA3A8DCE11280541BC454A7BC5880955)

[data/short-but-often-sweet/AA3A8DCE11280541BC454A7BC5880955](https://www.cambridge.org/core/books/abs/collecting-qualitative-data/short-but-often-sweet/AA3A8DCE11280541BC454A7BC5880955)

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In C. Willig, & W. Rogers (Eds.), *The SAGE Handbook of Qualitative Research in Psychology* (pp. 17-36).

SAGE Publications. <https://doi.org/10.4135/9781526405555.n2>

Tertiary Education Commission (2018). *'Transition to tertiary life' event: Entering and re-entering tertiary education in New Zealand*. <https://www.tec.govt.nz/assets/Publications-and-others/Transition-to-Tertiary-Life-Event-Final.pdf>

Testa, R. J., Michaels, M. S., Bliss, W., Rogers, M. L., Balsam, K. F., & Joiner, T. (2017). Suicidal ideation in transgender people: Gender minority stress and interpersonal theory factors. *Journal of Abnormal Psychology*, 126(1), 125-136. <https://doi.org/10.1037/abn0000234>

Thomas, L., Talbot, C. V., & Briggs, P. (2021). The digital lives of student mothers: A consideration of technologies that support or erode student/parent boundary. *International Journal of Human – Computer Studies*, 154(102689). <https://doi.org/10.1016/j.ijhcs.2021.102689>

Thompson-Brenner, H., Satir, D. A., Franko, D. L., & Herzog, D. B. (2012). Clinician reactions to patients with eating disorders: A review of the literature. *Psychiatric Services*, 63(1), 73-78. <https://doi.org/10.1176/appi.ps.201100050>

Thompson, M., Pawson, C., & Evans, B. (2021). Navigating entry into higher education: The transition to independent learning and living. *Journal of Further and Higher Education*, 45(10), 1398-1410. <https://doi.org/10.1080/0309877X.2021.1933400>

Thörel N., Thörel E., Tuschen-Caffier B. Differential stigmatization in the context of eating disorders: Less blame might come at the price of greater social rejection. *Stigma and Health*, 6(1), 100-112. <https://doi.org/10.1037/sah0000274>

Thu, M., & Edda, M. (2017). Transition to university life: Insights from high school and university female students in Wolaita Zone, Ethiopia. *Journal of Education and Practice*, 8(4), 45-54. <https://eric.ed.gov/?id=EJ1132933>

Tinto, V. (2009, February 5). *Taking student retention seriously: Rethinking the first year of university* [Keynote address]. ALTC FYE Curriculum Design Symposium, Queensland University of Technology, Brisbane, Australia.

https://www.researchgate.net/publication/228747694_Taking_student_retention_seriously_Rethinking_the_first_year_of_university

Toerien, M., & Wilkinson, S. (2004). Exploring the depilation norm: A qualitative questionnaire study of women's body hair removal. *Qualitative Research in Psychology*, 1(1), 69-92.

Touyz, S., Lacey, H., & Hay, P. (2020). Eating disorders in the time of COVID-19. *Journal of Eating Disorders*, 8(1), 19. <https://doi.org/10.1186/s40337-020-00295-3>

Tozzi, F., Thornton, L. M., Klump, K. L., Fichter, M. M., Halmi, K. A., Kaplan, A. S., Strober, M., Woodside, D. B., Crow, S., Mitchell, J., Rotondo, A., Mauri, M., Cassano, G., Keel, P., Plotnicov, K. H., Pollice, C., Lilienfeld, L. R., Berrettini, W. H., Bulik, C. M., & Kaye, W. H. (2005). Symptom fluctuation in eating disorders: Correlates of diagnostic crossover. *The American Journal of Psychiatry*, 162(4), 732-740. <https://doi.org/10.1176/appi.ajp.162.4.732>

Tuna, M. E. (2003). *Cross-cultural differences in coping strategies as a predictor of university adjustment of Turkish and U.S. students* [Doctoral dissertation, Middle East Technical University]. Retrieved from <https://etd.lib.metu.edu.tr/upload/3/579318/index.pdf>

Turner, L., & Tobbell, J. (2018). Learner identity and transition: An ethnographic exploration of undergraduate trajectories. *Journal of Further and Higher Education*, 42(5), 708-720. <https://doi.org/10.1080/0309877X.2017.1311993>

Udo, T., & Grilo, C. M. (2019). Psychiatric and medical correlates of DSM-5 eating disorders in a nationally representative sample of adults in the United States. *International Journal of Eating Disorders*, 52(1), 42-50. <https://doi.org/10.1002/eat.23004>

Ünlü Ince, B., Cuijpers, P., van 't Hof, E., & Riper, H. (2014). Reaching and recruiting Turkish migrants for a clinical trial through Facebook: A process evaluation. *Internet Interventions*, 1(2), 74-83. <https://doi.org/10.1016/j.invent.2014.05.003>

United Nations. (2010). *State of the world's indigenous people: Indigenous peoples' access to health services*. <https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/03/The-State-of-The-Worlds-Indigenous-Peoples-WEB.pdf>

University of Waikato. (2020, September 30). Grades show University of Waikato students fared well through COVID-19 lockdown. *University of Waikato*. <https://www.waikato.ac.nz/news-opinion/media/2020/grades-show-university-of-waikato-students-fared-well-through-covid-19-lockdown>

Urquhart, B. A., & Pooley, J. (2007). The transition experience of Australian students to university: The importance of social support. *The Australian Community Psychologist*, 19(2), 78-91. [https://groups.psychology.org.au/Assets/Files/19\(2\)_07_Pooley.pdf](https://groups.psychology.org.au/Assets/Files/19(2)_07_Pooley.pdf)

Vanderlinden, J., Dalle Grave, R., Vandereycken, W., & Noorduyn, C. (2001). Which factors do provoke binge eating? An exploratory study in female students. *Eating Behaviours*, 2(1), 79-83. [https://doi.org/10.1016/S1471-0153\(00\)00025-8](https://doi.org/10.1016/S1471-0153(00)00025-8)

Van Deursen, A. J., & Van Dijk, J. A. (2019). The first-level digital divide shifts from inequalities in physical access to inequalities in material access. *News Media & Society*, 21(2), 354-375. <https://doi.org/10.1177/1461444818797082>

van der Zanden, P. J. A. C., Denessen, E., Cillessen, A. H. N., & Meijer, P. C. (2018). Domains and predictors of first-year student success: A systematic review. *Educational Research Review*, 23, 57-77. <https://doi.org/10.1016/j.edurev.2018.01.001>

van Hoeken, D., & Hoek, H. W. (2020). Review of the burden of eating disorders: Mortality, disability, costs, quality of life, and family burden. *Current Opinion in Psychiatry*, 33(6), 521-527. <https://doi.org/10.1097/YCO.0000000000000641>

van Strien, T., Gibson, E. L., Baños, R., Cebolla, A., & Winkens, L. H. H. (2019). Is comfort food actually comforting for emotional eaters? A (moderated) mediation analysis. *Physiology & Behaviours*, 211(112671). <https://doi.org/10.1016/j.physbeh.2019.112671>

Vanthournout, G., Gijbels, D., Coertjens, L., & Donche, V. (2012). Students' persistence and academic success in a first-year professional bachelor program: The influence of students' learning strategies and academic motivation. *Education Research International*, 6, 1-10. <https://doi.org/10.1155/2012/152747>

Vartanian, L. R. (2010). Disgust and perceive control in attitudes toward obese people. *International Journal of Obesity*, 34(8), 1302-1307. <https://doi.org/10.1038/ijo.2010.45>

Vartanian, L. R., & Novak, S. A. (2012). Internalised societal attitudes moderate the impact of weight stigma on avoidance of exercise. *Obesity*, 19(4), 757-762. <https://doi.org/10.1038/oby.2010.234>

Vartanian, L. R., & Porter, A. M. (2016). Weight stigma and eating behaviour: A review of the literature. *Appetite*, 102, 3-14. <https://doi.org/10.1016/j.appet.2016.01.034>

Vartanian, L. R., & Smyth, J. M. (2013). Primum non nocere: Obesity stigma and public health. *Journal of Bioethical Inquiry*, 10(1), 49-57. <https://doi.org/10.1007/s11673-012-9412-9>

Vijayalakshmi, P., Thimmaiah, R., Gandhi, S., & BadaMath, S. (2018). Eating attitudes, weight control behaviours, body image satisfaction and depression level among Indian medical and nursing undergraduate students. *Community Mental Health Journal*, 54(8), 1266-1273. <https://doi.org/10.1007/s10597-018-0333-x>

Vila-Martí, A., Elío, I., & Sumalla-Cano, S. (2021). Eating behaviour during first-year college students, including eating disorders - RUVIC-RUNEAT-TC project: Protocol of an observational multicentric study. *International Journal of Environmental Research and Public Health*, 18(18), 1-10. <https://doi.org/10.3390/ijerph18189457>

Vindegard, N., & Benros, M. E. (2020). COVID-19 pandemic and mental health consequences: Systematic review of the current evidence. *Brain, Behaviours, and Immunity*, 89, 531-542. <https://doi.org/10.1016/j.bbi.2020.05.048>

Vitolo, M. R., Bortolini, G. A., & Horta, R. L. (2006). Prevalence of binge eating among university students from different areas of study. *Revista de Psiquiatria do Rio Grande do Sul*, 28(1), 20-26. <https://doi.org/10.1590/S0101-81082006000100004>

Wang, M. L., Peterson, K. E., McCormick, M. C., & Austin, S. B. (2014). Environmental factors associated with disordered weight-control behaviours among youth: A systematic review. *Public Health Nutrition*, 17(7), 1654-1667. <https://doi.org/10.1017/S1368980013001407>

Wang, S. D., Devjani, S., Chillakanti, M., Dunton, G. F., & Mason, T. B. (2021). The COMET study: Examining the effects of COVID-19-regulated perceived stress on Los Angeles mothers' dysregulated eating behaviours, child feeding practices, and body mass index. *Appetite*, 163. <https://doi.org/10.1016/j.appet.2021.105209>

Wang, X., Hegde, S., Son, C., Keller, B., Smith, A. & Sasangohar, F. (2020). Investigating mental health of US college students during the COVID-19 pandemic: Cross-

sectional survey study. *Journal of Medical Internet Research*, 22(9).

<https://doi.org/10.2196/22817>

Ward, A., & Mann, T. (2000). Don't mind if I do: Disinhibited eating under cognitive load. *Journal of Personality and Social Psychology*, 78(4), 753-763.

<https://doi.org/10.1037/0022-3514.78.4.753>

Ward, Z. J., Rodriguez, P., Wright, D. R., Austin, S. B., & Long, M. W. (2019). Estimation of eating disorders prevalence by age and associations with mortality in a simulated nationally representative US cohort. *JAMA Network Open*, 2(10).

<https://doi.org/10.1001/jamanetworkopen.2019.12925>

Watson, R. J., Veale, J. F., & Saewyc, E. M. (2016). Disordered eating behaviours among transgender youth: Probability profiles from risk and protective factors. *International Journal of Eating Disorders*, 50(5), 515-522. <https://doi.org/10.1002/eat.22627>

Weltzin, T. E., Weisensel, N., Franczyk, D., Burnett, K., Klitz, C., & Bean, P. (2005). Eating disorders in men: Update. *The Journal of Men's Health Gender*, 2(2), 186-193.

<https://doi.org/10.1016/j.jmhg.2005.04.008>

Wheaton, B. (1990). Life transitions, role histories, and mental health. *American Sociological Review*, 55(2), 209-223. <https://doi.org/10.2307/2095627>

White, S., Reynolds-Malear, J. B., & Cordero, E. (2011). Disordered eating and the use of unhealthy weight control methods in college students: 1995, 2002, 2008. *Eating Disorders: The Journal of Treatment & Prevention*, 19(4), 323-334.

<https://doi.org/10.1080/10640266.2011.584805>

Wilfley, D. E., Pike, K. M., & Striegel-Moore, R. H. (1997). Toward an integrated model of risk for binge eating disorder. *Journal of Gender, Culture, and Health*, 2(1), 1-32.

Wildes, J. E., Emery, R. E., & Simons, A. D. (2001). The roles of ethnicity and culture in the development of eating disturbance and body dissatisfaction: A meta-analytic review.

Clinical Psychology Review, 21(4), 521-551. [https://doi.org/10.1016/s0272-7358\(99\)00071-9](https://doi.org/10.1016/s0272-7358(99)00071-9)

Willig, C., & Stainton Rogers, W. (2017). *The SAGE Handbook of Qualitative Research in Psychology*. SAGE Publications.

<https://ebookcentral.proquest.com/lib/massey/detail.action?docID=4882015>

Wiltshire, L. (2020, June 11). *Students not happy with Victoria University's plan to scale grades*. Stuff. [https://www.stuff.co.nz/national/education/121789671/students-not-](https://www.stuff.co.nz/national/education/121789671/students-not-happy-with-victoria-universitys-plan-to-scale-grades)

[happy-with-victoria-universitys-plan-to-scale-grades](https://www.stuff.co.nz/national/education/121789671/students-not-happy-with-victoria-universitys-plan-to-scale-grades)

Wingfield, N., Kelly, N., Serdar, K., Shivy, V. A., & Mazzeo, S. E. (2011). College students' perceptions of individuals with anorexia and bulimia nervosa. *International Journal of Eating Disorders*, 44(4), 369-375. <https://doi.org/10.1002/eat.20824>

Wolfe, B. E., Baker, C. W., Smith, A. T., & Kelly-Weeder, S. (2009). Validity and utility of the current definition of binge eating. *International Journal of Eating Disorders*, 42(8), 674-686. <https://doi.org/10.1002/eat.20728>

Wonderlich, J. A., Crosby, R. D., Engel, S. G., Crow, S. J., Peterson, C. B., Le Grange, D., Wonderlich, S. A., & Fischer, S. (2022). Negative affect and binge eating: Assessing the unique trajectories of negative affect before and after binge-eating episodes across eating disorder diagnostic classification. *International Journal of Eating Disorders*, 55(2), 223-230. <https://doi.org/10.1002/eat.23548>

Wong, N. M. L., Yeung, P. P. S., & Lee, T. M. C. (2018). A developmental social neuroscience model for understanding loneliness in adolescence. *Society for Neuroscience*, 13(1), 94-103. <https://doi.org/10.1080/17470919.2016.1256832>

Wong, P. C., Hsieh, Y. P., Ng, H. H., Kong, S. H., Chan, K. L., Au, T. Y. A., Lin, C. Y., & Fung, X. C. C. (2019). Investigating the self-stigma and quality of life for overweight/obese children in Hong Kong: A preliminary study. *Child Indicators Research*, *12*, 1065-1082.

<https://doi.org/10.1007/s12187-018-9573-0>

World Health Organisation. (2020). *WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 march 2020* [Press release]. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

Wott, C. B., & Carels, R. A. (2010). Overt weight stigma, psychological distress and weight loss treatment outcomes. *Journal of Health Psychology*, *15*(4), 608-614.

<https://doi.org/10.1177/1359105309355339>

Wu, H., Carza, E., & Guzman, N. (2015). International students' challenge and adjustment to college. *Educational Research International*, *2015*(202753), 1-9.

<https://doi.org/10.1155/2015/202753>

Wu, X. Y., Yin, W. Q., Sun, H. W., Yang, S. X., Li, X. Y., & Liu, H. Q. (2019). The association between disordered eating and health-related quality of life among children and adolescents: A systematic review of population-based studies. *PLoS One*, *14*(10).

<https://doi.org/10.1371/journal.pone.0222777>

Yager, Z., & O'Dea, J. A. (2008). Prevention programs for body image and eating disorders on university campuses: A review of large, controlled interventions. *Health Promotion International*, *23*(2), 173-189. <https://doi.org/10.1093/heapro/dan004>

Yaseen, S. F. M., & Joshi, S. R. (2021). Positive impact of COVID-19 on education. *International Research Journal on Advanced Science Hub*, *3*(06S), 182-185.

https://rspsciencehub.com/article_15323_8369972babe711668fcc3879729cec30.pdf

Ye, C., Chiem, K., Park, J. G., Silvas, J. A., Vasquez, D. M., Sourimant, J., Lin, M. J., Greninger, A. L., Plemper, R. K., Torrelles, J. B., Kobie, J. J., Walter, M. R., de la Torre, J. C., & Martinez-Sobrido, L. (2021). Analysis of SARS-CoV-2 infection dynamic in vivo using reporter-expressing viruses. *Biological Sciences*, *118*(41).

<https://doi.org/10.1073/pnas.2111593118>

Yilmaz, H. Ö., Aslan, R., & Unal, C. (2020). Effect of the COVID-19 pandemic on eating habits and food purchasing behaviours of university students. *National Public Health Journal*, *15*(3). <https://doi.org/10.21109/kesmas.v15i3.3897>

Yu, J., Hildebrandt, T., & Lanzieri, N. (2015). Healthcare professionals' stigmatisation of men with anabolic androgenic steroid use and eating disorders. *Body Image*, *15*, 49-53.

<https://doi.org/10.1016/j.bodyim.2015.06.001>

Zhao, H. (2020). Explicating the social constructionist perspective on crisis communication and crisis management research: A review of communication and business journals. *Journal of Public Relations Research*, *32*(3-4).

<https://doi.org/10.1080/1062726X.2020.1802732>

Zwicker, K., & Rieger, E. (2013). Stigmatising attitudes towards individuals with anorexia nervosa: An investigation of attribution theory. *Journal of Eating Disorders*, *1*(5), 1-10. <https://doi.org/10.1186/2050-2974-1-5>

TABLES.

Table 1.

Definitions and New Zealand-based examples of Tertiary Institutions.

Type of Tertiary Institution.	Definition.	Examples.
Universities	Institutions primarily concerned with developing intellectual independence with more advanced learning, meeting international standards of research and teaching requirements for professions such as medicine, law, teaching, accounting, and engineering (Education and Training Act, 2020; Te Pōkai Tara Universities New Zealand, 2022; Ministry of Education, 2022).	Massey University (MU), University of Auckland (UoA), and University of Otago (UoO).
Institutes of Technology and Polytechnics	Institutions that provide a wide variety of technical, vocational, and professional education and applied research (Ministry of Education, 2022; Te Pūkenga, 2022).	Universal College of Learning (UCOL), Unitec Institute of Technology, and Wellington Institute of Technology (WeITec).
Wānanga	Education that contributes to the survival and well-being of Māori as people, using Māori ways of teaching and learning (Ministry of Education, 2022).	Te Wānanga o Aotearoa, Te Wānanga o Raukawa, and Te Whare Wānanga o Awanuiāraangi.
Private Training Establishments	Post-School education or vocational training operated by various companies, trusts, and other entities. These establishments are diverse in regards to location, ethnicity, culture, and areas of educational expertise (Ministry of Education, 2022; Quality Tertiary Institutions Nga Wananga Kouna, 2022).	Pacific International Hotel Management School, Institute of the Pacific United (IPU) New Zealand, and the International Travel College of New Zealand.
Government Training Establishments	State-owned organisations that offer education or training (Ministry of Education, 2022).	New Zealand Police Training Services and the New Zealand Army.

Table 2.*Defining Characteristics of Eating Disorders According to the DSM-5.*

Eating Disorder (ED).	Characteristics.	Subtypes of Disorders within the Diagnosis.	Types of Disordered Eating Behaviours.	Similarities and Differences between types of Eating Disorders.
Anorexia Nervosa (AN)	Extremely underweight (BMI below 17.5 for adults); Intense fear of gaining weight; a distorted body image; Persistent behaviours to avoid gaining weight; Preoccupation with food and weight.	Two: Restricting Subtype and Binge Eating/Purging Subtype.	Restrictive, Bingeing, and Compensatory DEBs depending on the subtype.	Individuals with the Binge Eating/Purging Subtype will only carry out bingeing and compensatory DEBs while individuals with the Restricting subtype will only carry out restrictive DEBs.
Bulimia Nervosa (BN)	Eating substantial amounts of food within a short time period; Loss of control during BE episode; BE episodes are followed by compensatory behaviours to prevent weight gain; Fear of gaining weight despite weighing in the normal range (BMI between 18.5 and 29.9 for adults).	Two: Purging Subtype and Non-Purging Subtype.	Restrictive, Bingeing, and Compensatory DEBs.	Although symptoms between BN and Binge Eating/Purging subtype of AN are similar, individuals with BN maintain near normal weight.
Binge Eating Disorder (BED)	Eating substantial amounts of food within a short time period; Loss of control during BE episode; Feeling intense levels of guilt and disgust about BE episode.	None.	Bingeing and Restrictive DEBs.	Individuals with BED do not use compensatory behaviours after a BE episode. Individuals with BED may restrict after a BE episode, but will engage in BE soon after.
Avoidant Restrictive Food Intake Disorder (ARFID)	Lack of interest or avoidance in eating due to an intense dislike for specific tastes, smells, textures, or colours; Impairs social functioning; Inhibits individual from eating with others; Leads to significant weight loss and micronutrient deficiencies.	Two: Pica Disorder and Rumination Disorder.	Restrictive DEB.	Weight and shape concerns are not a feature of these disorders. ARFID typically affects individuals within the first seven years of their life, but it can sometimes persist into adulthood.

Other Specified Feeding and Eating Disorder (OSFED)	Concern about eating, body shape, and weight; Behaviours do not meet the previous EDs due to the individual experiencing these behaviours at a lower frequency or severity.	Six: Purging Disorder; Night Eating Syndrome; Orthorexia; Atypical AN; and sub-clinical BN and BED.	Restrictive, Bingeing, and Compensatory DEBs.	Same concerns for weight and shape as AN, BN, and BED but symptoms are not as severe or as frequent.
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References: APA (2013).

Table 3.*Summary of the Key Theoretical Frameworks associated with Binge Eating Behaviours.*

Theoretical Framework	Author(s)	Summary	Key Risk Factors	Limitations	References
The Escape Theory (ET)	Heatherton & Baumeister (1991).	BE can be conceptualised as a behaviour that served to allow the individual to escape from negative affect and narrow their cognitive focus temporarily through using BE behaviours as negative reinforcement.	Negative Affect, High Expectations of oneself, Interpersonal Difficulties, Low self-awareness, and Negative Reinforcement.	Mixed findings regarding how well negative reinforcement maintains BE behaviours.	Neyland, Shank & Lavender (2020); Haedt-Matt & Keel (2011); Leehr et al. (2015); & Berg et al. (2017).
Affect Regulation Theory (ART)	Lacey (1986).	BE acts as a way for individuals to temporarily moderate and avoid experiences involving aversive emotions and affective states. BE behaviours are negatively reinforced due to the temporary reduction in negative emotions or temporary relief from boredom. BE results from a lack of adaptive coping skills due to various environmental, social, and psychological factors, as well as significant life events.	Negative Affect, Negative Reinforcement, and Lack of Adaptive Coping Mechanisms.	Mixed findings regarding the concept of negative reinforcement and the extent to which negative emotions are diminished following a BE episode.	Polivy & Herman (1993); Lavender et al. (2015); Oldershaw et al. (2015); Berg et al. (2015); & Neyland, Shank & Lavender (2020).
The Dual Pathway Model (DPM)	Stice & Agras (1998).	BE acts as a behaviour that results from the sociocultural pressures to be thin and the internalisation of the thin body ideal. This promotes body dissatisfaction, dieting, behaviours associated with AN, which then leads to the dual pathways to the onset of BE in response to food deprivation or as a maladaptive coping mechanism to AN.	Sociocultural Pressures relating to body weight and shape, Affect Regulation, and Dietary Restraint.	Mixed findings on the model's application to BED.	Burton & Abbott (2017); Stice et al. (1996); Holmes et al. (2015); Fairburn et al. (2003); Fairburn et al. (1993); & Neyland, Shank & Lavender (2020).
Transdiagnostic Model of Eating Disorders (TMED)	Fairburn et al. (2003).	BE is a core transdiagnostic behaviour which has been promoted by an individual's overevaluation of oneself regarding eating, weight, and shape, and this has	Perfectionism, Emotion Regulation, and Interpersonal Difficulties.	Inconsistent findings between the relationship of perfectionism, low self-esteem, interpersonal difficulties and negative affect with	Lampard et al. (2011); Lampard et al. (2013); Dakanalis et al. (2015); Halmi et al. (2005); Dingemans et

been influenced by perfectionism and low self-esteem. As a result of these vulnerabilities, individuals promote extreme and maladaptively controlling behaviours in terms of their weight, which may then promote excessive weight loss and a cycle of BE and compensatory behaviours.

ED psychopathology.

al. (2016); Vall & Wade, 2015; Dakanalis et al. (2014); & Neyland, Shank & Lavender (2020).

Table 4.*Stereotypes commonly found to be associated with EDs, BN, and BED.*

Aspect of Stereotype	Eating Disorders in General	Bulimia Nervosa	Binge Eating Disorder
Responsibility	Blameful and Responsible for their situation ^{1-9,26} .	Blameful and Responsible for their situation ^{1-5,9,26} .	Blameful and Responsible for their situation ^{1-5,8,10,11,26} .
Character Traits	Dangerous, incompetent, hard to talk to, attention-seeking, unreliable, manipulative, disrespectful, deceitful, and non-compliant with treatment ^{2,12-14,26} .	Self-destructive ^{8,15,26} .	Weak, lazy, and careless ^{12,13,16,26} . Assumed to have a "larger" body than others ^{16,26} .
Gender	Primarily affects women; increasing awareness of EDs amongst people of other genders ^{8,9,16-19,26} .	Primarily affect women ^{9,26} .	Less likely to affect women; prevalence of BED for men was not statistically significant. ^{8,17,26} .
Disorder Severity and Control	Severe and disabling conditions that are difficult to treat ^{1,5,20,26} . AN has been praised due to the individual's ability to control their behaviours and lose weight ^{21,26} .	Recognised as a severe and disabling condition that is difficult to treat ^{5,20,26} . Rarely minimized or perceived to be beneficial for the individual ^{1,2,26} .	Viewed to be more psychopathological ^{10,26} . Some have viewed these individuals to have less control while others have viewed individuals with BED to have more personal control over their illness ^{8,18,26} .
Supposed Causes	Causes are mainly internalization (i.e. perceived to be the result of personal responsibility) ²⁶ . Lack of self-discipline was noted as a common cause ^{4,12,22,23,26} . Lack of social support and family problems were also noted ^{4,18,22,23,26} .	Specific causes: low self-esteem, use of media, parents' role, sexual abuse, being overweight or obese during childhood or adolescence, and a desire for attention was widely reported ^{4,18,22-24,26} . Genetic factors not perceived to be involved ^{2,26} .	Lack of self-discipline was more pronounced for BED ^{11,12,26} . Linked to a lack of self-control and willpower ^{12,25,26} . No family problems are linked ^{23,26} .

References: See Appendix F.

Table 5.*Participant Demographic Summary.*

Pseudonym	Gender	Age	Ethnicity	On/Off-Campus Living	Self-/Non-Self-Catered
Emma	Female	23	NZ European	Off-Campus	Self-Catered
Ava	Female	28	NZ Māori	Off-Campus	Self-Catered
Amelia	Female	23	NZ European	Off-Campus	Self-Catered
Charlotte	Female	23	NZ European	Off-Campus	Self-Catered
Isabella	Female	24	NZ European	Off-Campus	Self-Catered
Mia	Female	27	NZ Māori	Off-Campus	Self-Catered
Evelyn	Female	25	NZ European	Off-Campus	Both
Harper	Female	24	NZ European/Māori	Off-Campus	Self-Catered
Camila	Female	25	Mixed	Off-Campus	Self-Catered
Gianna	Female	20	NZ European	Off-Campus	Self-Catered
Abigail	Female	24	NZ European	Off-Campus	Self-Catered
Luna	Female	26	NZ European	Off-Campus	Self-Catered
Elizabeth	Female	20	NZ European	Off-Campus	Self-Catered
Liam	Male	23	NZ European	Off-Campus	Self-Catered
Emily	Female	25	NZ European	Off-Campus	Self-Catered
Scarlett	Female	31	NZ Māori	Off-Campus	Self-Catered
Madison	Female	25	NZ European	Off-Campus	Self-Catered
Penelope	Female	33	Australian	Off-Campus	Self-Catered
Chloe	Female	28	NZ European	Off-Campus	Self-Catered
Quinn	N/A	40	NZ European	Off-Campus	Self-Catered
Noah	Male	20	NZ European	Off-Campus	Self-Catered
Grace	Female	25	NZ European	On-Campus	Self-Catered
Zoe	Female	23	NZ European	Off-Campus	Self-Catered
Lily	Female	20	Irish/Italian	Off-Campus	Self-Catered
Sophia	Female	23	Indian	Off-Campus	Self-Catered
Hannah	Female	21	NZ European	Off-Campus	Self-Catered
Isla	Female	27	NZ Māori/European	Off-Campus	Self-Catered
Leah	Female	35	NZ European	Off-Campus	Self-Catered
Addison	Female	35	NZ European	Off-Campus	Self-Catered
Lucy	Female	27	British	Off-Campus	Self-Catered
Paisley	Female	32	NZ Māori	Off-Campus	Self-Catered
Natalie	Female	25	British/Irish	Off-Campus	Self-Catered
Naomi	Female	25	NZ European	Off-Campus	Self-Catered
Brooklyn	Female	38	NZ European	Off-Campus	Self-Catered
Elena	Female	32	Australian	Off-Campus	Self-Catered
Aubrey	Female	22	NZ European	Off-Campus	Self-Catered
Claire	Female	19	NZ Māori/European	Off-Campus	Self-Catered
Ella	Female	24	NZ European	Off-Campus	Self-Catered
Bella	Female	22	NZ European	On-Campus	Self-Catered
Savannah	Female	23	NZ European	Off-Campus	Self-Catered
Anna	Female	24	NZ European	Off-Campus	Self-Catered
Delilah	Female	26	Māori/Samoan	Off-Campus	Self-Catered
Kennedy	Female	52	NZ Māori/European	Off-Campus	Self-Catered
Alice	Female	30	NZ European	Off-Campus	Self-Catered

Hailey	Female	23	NZ European	Off-Campus	Self-Catered
Allison	Female	24	NZ European	Off-Campus	Both
Morgan	Female	23	Pasifika	Off-Campus	Self-Catered
Sarah	Female	21	NZ European	Off-Campus	Self-Catered
Olivia	Female	39	NZ European	Off-Campus	Self-Catered
Piper	Female	28	NZ European	Off-Campus	Self-Catered
William	Male	25	NZ European	Off-Campus	Self-Catered
Lucas	Male	38	Asian	Off-Campus	Self-Catered
Lydia	Female	25	NZ European	Off-Campus	Self-Catered
Riley	Non-Binary	43	NZ European	Off-Campus	Self-Catered
Kendall	Female	46	Arabic	N/A	Self-Catered

APPENDICES.

Appendix A: Digital Poster Graphic for Participant Recruitment.

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

PARTICIPANTS NEEDED

Are you interested in participating in a study on binge eating behaviours during your first year of tertiary education?

<https://bit.ly/bingeatingsurvey>

RECEIVE A \$20 PREZZEE SMART EGIFT CARD!

WANT MORE INFORMATION? CONTACT SAMANTHA ON 0220100211 OR HHARRISON.SAMANTHAA@GMAIL.COM

Appendix B: Survey Questions.

**SURVEY 1
QUESTION SCHEDULE.**

INCLUSION/EXCLUSION CRITERIA QUESTIONS.

Question No.	Question
1	Are you over 18 years of age?
2	Do you attend a tertiary institution?
3	Do you study at a New Zealand Institution?
4	Are you currently completing a first-year paper?

DEMOGRAPHIC QUESTIONS.

Question No.	Question
1	How old are you?
2	Which gender identity do you most identify with?
3	What ethnicity do you identify with?
4	Do you live on- or off-campus?
5	Are you self-catered or do you have food provided for you?

CONSENT QUESTION.

Question No.	Question
1	Thank you for answering the demographic questions. If you would like to continue on to the rest of the survey, please select "Yes, I would like to continue". If you wish to no longer participate, please select "No, I would no longer like to do this survey". If you would like to leave the study that is completely acceptable, and no questions will be asked. Thank you again for your interest.

EATING, EXERCISING, AND TRANSITIONING/ADJUSTING TO TERTIARY EDUCATION.

Question No.	Question
---------------------	-----------------

1	To start, it would be helpful to know about how you would describe your relationship with food and exercise. In broad terms, how would you describe this relationship?
2	In terms of tertiary education, there are a lot of sudden and unexpected challenges and events when you first begin studying. What has adjusting to tertiary education looked like for you?
3	Has your mental health been impacted by this adjustment? If so, could you say a little more about how?

BINGE EATING BEHAVIOURS.

Question No.	Question
1	Since you started studying at tertiary education, have you been engaging in binge eating behaviours? What has that been like for you?
2	<p>Please select the options that best apply to your experiences of binge eating and adjustment to tertiary education. For those that apply to you, could you please expand on how these options have impacted your experience of tertiary education?</p> <ul style="list-style-type: none"> <input type="checkbox"/> A change in your mental health. <input type="checkbox"/> No change in your mental health. <input type="checkbox"/> A change in how you feel about yourself and your body. <input type="checkbox"/> No change in how you feel about yourself and your body. <input type="checkbox"/> Felt in control of your eating and exercising behaviours. <input type="checkbox"/> Felt out of control of your eating and exercising behaviours. <input type="checkbox"/> Hidden your eating behaviours because you felt embarrassed. <input type="checkbox"/> Eating a lot of food in one sitting to the point where you were uncomfortably full. <input type="checkbox"/> Did not eat a lot of food in one sitting, you did not eating to the point where you were uncomfortably full.
3	Is there anything else you would like to add?

SUMMARY QUESTION.

Question No.	Question
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1	<p>Thank you very much for taking the time to participate in this survey. Your responses are highly appreciated. As a token of my appreciation, I would like to give you an NZD\$20 Prezzy Smart eGift Card. You will receive this eGift Card via email once enough responses have been submitted. If you do not wish to receive an eGift Card, but wish to view a summary of the findings you may save this link which will lead you to a website regarding this study: https://bit.ly/bingeeatingbehaviours . This will be made available at the end of Autumn 2022.</p> <p>If would like to receive an eGift Card, please be aware that contact details are required when you select the “Yes” option. You will be taken to a different survey page where you can enter your contact details. I will ensure that these details will not be directly linked to your survey responses. If you would either not like an eGift Card or do not wish to supply any contact information, please select the “No” option.</p> <p>Would you like to receive an eGift Card?</p>
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**SURVEY 2 – CONTACT INFORMATION
QUESTION SCHEDULE.**

CONSENT QUESTION.

Question No.	Question
1	Would you still like to provide contact details?

CONTACT INFORMATION.

Question No.	Question
1	Please state your first name and a contact email address I can the eGift Card to:

SUMMARY OF FINDINGS.

Question No.	Question
1	Would you like a summary of the findings once the study has been completed?

Appendix C: Ethics Approval Letter.



Dear:

Thank you for the above application that was considered by the Massey University Human Ethics Committee:

at their meeting held on

On behalf of the Committee I am pleased to advise you that the ethics of your application are approved.

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely



Dr Brian Finch Chair, Human Ethics Chairs' Committee and Director (Research Ethics)

Appendix D: Letter to ITS for Distribution of Web-Based Survey.

Attn: ITS Associate Director, Service Delivery
Re: Approval to distribute a web-based survey

To whom it may concern,

Transitioning into tertiary education is often an important time in people's lives as people are often discovering life away from their parents or caregivers for the first time. Finding the balance between personal, social, and academic life can have an impact on their physical and mental health.

Disordered eating behaviours such as binge eating behaviours are becoming increasingly common among young adults in tertiary education. However, we still know relatively little about binge eating behaviours during this period of life, especially in relation to behaviours associated with anorexia nervosa and bulimia nervosa. This exploratory research will contribute to conversations about binge eating behaviours during tertiary education.

I have received Human Ethics approval and their letter is attached.

The Human Ethics Committee has approved this as Approval number 21/32.

My supervisor is Andrea LaMarre.

As per the requirements of Human Ethics Application (Question E.2), we are requesting the authority to distribute access details to an electronic web-based survey and collect the data on-line into a data file for later analysis. The survey will be hosted on the secure Qualtrics survey system (<http://qualtrics.com>) using the Massey University license. This survey system is secured under the https protocol and the survey is anonymised when in use. The survey will be set up with an opening information page describing the project and research along with any required contacts regarding the researcher and ethics requirements. Implicit consent is required by answering a question to proceed to this form of data collection.

The survey itself is based upon a web form system and the data is held by the Qualtrics server system for later collection by usercode/password access by the research team. A copy of the Questionnaire can be made available on request.

Thanking you for your time and kind consideration.

Samantha Harrison.

Binge eating behaviours: Experiences associated with tertiary education.

INFORMATION SHEET

Researcher(s) Introduction.

My name is Samantha Harrison, and I am a Master's of Science student at Massey University, School of Psychology in Palmerston North, New Zealand. I have always been interested in binge eating disorder and the associated behaviours because it is an eating disorder that does not receive as much attention as other eating disorders. So it would be very interesting to dig deeper into this topic. My supervisor is Dr. Andrea LaMarre, a Lecturer in Critical Health Psychology at Massey University. Andrea has approximately 8 years of qualitative research experience focusing mostly in eating disorders and critical health psychology. She has also supervised qualitative projects in the past.

Project Description and Invitation.

Transitioning into tertiary education is often an important time in people's lives. Finding the balance between personal, social, and academic life can have an impact on their physical and mental health. Disordered eating behaviours such as binge eating behaviours are becoming increasingly common among young adults in tertiary education. However, we still know relatively little about binge eating behaviours during this period of life, relative to behaviours associated with anorexia nervosa and bulimia nervosa. You are invited to participate in a qualitative survey study to understand experiences of binge eating behaviours in relation to tertiary education. Whether you participate or not is completely up to you. If you decide to participate, but then decide that you no longer want to participate, you may leave your internet browser and the survey at any time, however these responses will be recorded and used. In other words, you have the right to stop participating in this survey but the answers submitted will be recorded and used for the study. If you want to participate but there are questions you do not want to answer, you can leave those responses blank. It is assumed that you have consented to take part in this study by submitting any incomplete responses.

Please read this information sheet, as it is designed to help you have a clear understanding of the study and make sure you are making an informed decision about whether or not to participate. If you have any questions as you read through, please contact us using the contact information listed below. Before making your decision about your participation, you are more than welcome to discuss it with other people, such as family, friends, or healthcare professionals. If you decide to participate in this study, you will be required to complete the Consent Form at the end of this document. Please make sure you have read and understood all of the information provided before completing the Consent Form and beginning the survey.

Participant Identification and Recruitment.

Thank you for your interest in participating in this study. You are invited to participate if you:

- Are at least 18 years old
- Study at a tertiary institution (University, Polytech, UCOL, apprenticeship etc) within New Zealand.
- Are currently studying a first-year paper (100 level) or a first-year course or have previously studied a first-year paper or course within the last five years.

Please make sure that you meet all aspects of the inclusion criteria before participating in the study.

What are the Benefits?

This study could aid in taking the first step toward better understandings of binge eating behaviours compared to restrictive and bulimic eating behaviours amongst tertiary education students, especially in New Zealand. So you will be helping to contribute to a developing and exciting field of research by participating. As a token of our appreciation, you will receive a NZD\$20 Prezzye|Smart eGift Card once you complete the survey. Within the survey you will be asked whether you would like to give personal contact details to receive the eGift Card. If you click "Yes", you will be directed to a new survey to provide those details. If you are not comfortable with giving personal contact information or do not want an eGift Card you do not have to provide any contact information.

What are the Risks?

Your survey responses and contact details will remain confidential and only be viewed by members of the Research Team. As the survey is anonymous, no attempt will be made to match survey data with your personal contact information. There is a possible risk of mild emotional distress with this study if you have ever experienced trauma, eating disorders, depression, or other mental distress due to the survey asking about your personal experiences, attitudes, and beliefs in relation to binge eating behaviours. If you wish to seek support during or after the survey, please contact your existing support networks or one of the support resources listed at the end of this form.

Project Procedures.

Participation involves completing a one-time online survey. This should take about 30-45 minutes total. The researchers declare no conflict of interest. How will the data be managed? All survey responses will be stored securely in password protected electronic files for five years after completion of the project and then be permanently deleted. Contact information will be deleted once the eGift Cards have been sent out. My supervisor and I will ensure that any information about the study, your responses to the questions, and your contact details will only be shared through secure pathways. To preserve confidentiality, a pseudonym (fake name) will be selected for each participant to ensure that all information collected is not linked to you in any way that would reveal your identity.

What are your rights as a participant?

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- decline to answer any particular question;
- ask any questions about the study at any time during participation;
- provide information on the understanding that a pseudonym will be used instead of your real name;
- be given access to a summary of the project findings when it is concluded.

Want to contact us?

If you have any questions or concerns at any time please contact us:

Samantha Harrison
+64220100211

Dr. Andrea LaMarre
+6492136106

hharrison.samanthaa@gmail.com

A.LaMarre@massey.ac.nz

Support Resources

Need to talk? - Free Calls and Texts to 1737 any time for support from a trained counsellor. Lifeline - 0800 543 354 (0800 LIFELINE) or free text 4357 (HELP) for counselling and support.

Suicide Crisis Helpline - 0508 828 865 (0508 TAUTOKO)

Healthline - 0800 611 116

Samaritans - 0800 726 666 EDANZ – improving outcomes for people with eating disorders and their families.

Freephone 0800 2 EDANZ or 0800 233 269, or in Auckland 09 522 2679. Or email info@ed.org.nz

Depression and Anxiety Helpline - 0800 111 757 or free text 4202 (to talk to a trained counsellor about how you are feeling or to ask any questions). thelowdown.co.nz – or email team@thelowdown.co.nz or free text 5626

Family Services 211 Helpline – 0800 211 211 for help finding (and direct transfer to) community based health and social support services in your area. Rural Support Trust - 0800 787 254. For those earning a living off the land in times of stress, suicidal ideation, anxiety and depression.

MUHEC APPLICATIONS

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 21/32. 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.

Consent Form.

I have read or have had read to me in my first language, and I understand the Information Sheet provided to me. I have had the details of the study explained to me, any questions I had have been answered to my satisfaction, and I understand that I may ask further questions at any time. I have been given sufficient time to consider whether to participate in this study and I understand participation is voluntary.

By submitting a completed or incomplete survey:

1. I have read and understood the information sheet.
2. I have read the participant criteria and meet the requirements for this study.
3. I understand that it is my choice to provide any contact details for my reimbursement and if I wish to receive a summary of the findings. I do not have to provide this information if I do not wish to.
4. I understand that my survey responses will be stored in an electronic file in which only the researchers have access to.
5. I voluntarily agree to participate in the study.

- Yes, I agree to participate in this study.
 No, I do not agree to participate in this study.

Appendix F: References for Table 4.

1. Caslini et al. (2016).
2. Lupo et al. (2020).
3. Geerling & Saunders (2015).
4. Stewart et al. (2006).
5. McLean et al. (2014).
6. Anderson et al. (2016).
7. Roehrig & McLean (2010).
8. O'Connor et al. (2016).
9. Wingfield et al. (2011).
10. Ellis et al. (2020).
11. Thörel et al. (2021).
12. Ebnetter & Latner (2013).
13. Murakami et al. (2016).
14. Seah et al. (2018).
15. Griffiths et al. (2015).
16. Hollett & Carter (2021).
17. McNicholas et al. (2016).
18. Ogutlu & McNicholas (2021).
19. Thompson-Brenner et al. (2012).
20. Mond et al. (2004a)
21. Mon et al. (2006).
22. Stewart et al. (2008).
23. Ebnetter et al. (2011).
24. Mond et al. (2004b).
25. Anderson et al. (2015).
26. Brelet et al. (2021).