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Motivations for healthfulness: Exploring experiences of 'orthorexia'

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## Abstract

There is a fine line between maintaining a healthy balanced lifestyle and adopting obsessive dietary practices. Not currently recognised in the DSM-5, Orthorexia Nervosa is a proposed eating disorder characterized by an unhealthy obsession with eating healthy foods. In this qualitative study, I explored experiences of highly significant dietary and exercise practices, which whilst considered to be healthful may paradoxically become problematic or result in dysfunction for the person instead. The role of social media platforms in encouraging and perpetuating 'orthorexic' beliefs and behaviours was also explored. Fifteen participants participated in two semi-structured interviews, the second including a social media 'go-along' component. I analysed this data using reflexive thematic analysis through a post structuralist theoretical lens. Three key themes were developed from the data set: (1) feeling good and looking good; (2) relationality; (3) how influenced are you?, with each theme highlighting how sociocultural influences impacted upon participants daily dietary and exercise practices. Participants spoke about their health practices in highly individualised ways and endorsed several reasons for engaging in specific dietary and exercise practices, which included embodied sensations, appearance/weight loss, health management and disease prevention and psychological wellbeing. They spoke about "transgressions" and compensations, as well as how their eating and exercise practices dovetailed with their lives in both helpful and problematic ways. Participants also spoke to the achievement of balance in the context of their health practices. Social media, although discredited by participants as unrealistic and unreliable, was still highly influential in promoting high dietary and exercise engagement and unattainable appearance ideals to which participants continued to work towards. Findings indicate that whilst dietary and exercise practices were motivated by a range of embodied experiences, they were also significantly subject to sociocultural influences which impacted how food choices were made, how health practices were perceived, understood and engaged with, as well as the appearance goals participants worked towards. Overall, findings indicate that achieving 'a healthy balance' may be easier said than done and point to the need for nuanced analyses of the tensions that exist within first-person accounts of engaging with "health" in both "healthful" and potentially problematic ways.

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## Chapter 1 – Overview

In recent years, the ‘clean eating’ movement has been well documented in both the scholarly literature and media. In particular, social media platforms such as Instagram have been highly influential in perpetuating the ideal of a living a clean, healthy lifestyle (Turner & Lefevre, 2017). Whilst there are clear benefits to eating healthy foods and exercising regularly, such as lowering the risk of non-communicable diseases such as diabetes, cancer and stroke (Ministry of Health, 2016), a fine line exists between maintaining a healthy lifestyle and adopting obsessive dietary practices which can lead to adverse health outcomes.

The term orthorexia nervosa (ON) was first introduced by Bratman (1997) in his book ‘Health Food Junkies’, who later described orthorexia as an unhealthy ‘fixation on eating healthy food’ (Bratman & Knight, 2000, p.9). The word orthorexia is derived from the Greek “*orthos*” which means correct or right, and “*orexis*” meaning hunger or appetite (Bratman, 2017). Individuals described as orthorexic place significant emphasis on food quality, as opposed to quantity, which differentiates orthorexia conceptually from other eating disorders (Bratman & Knight, 2000). An obsessive focus on “optimal” nutrition may result in ritualised behaviours and a restrictive diet. Individuals may become progressively selective in their food choices and systematically omit entire food groups from their diet in the pursuit of health. A disproportionate amount of time may be spent planning and preparing meals, with great importance placed on the perceived purity, or healthfulness of food (e.g. often organic, seasonal, unprocessed produce, without additives, preservatives or pesticides) (Koven & Abry, 2015). Seemingly paradoxically, orthorexia can lead to significant impairment when the pursuit of health results in nutritional deficiencies, the development of other medical issues, strained relationships, and lower quality of life (Koven & Abry, 2015).

### 1.1 The Construction of a Proposed New Eating Disorder

Bratman (1997) himself has been referred to as orthorexia’s patient zero (Hanganu-Bresch, 2019). The transition from Bratman’s (2000) ‘personal anecdote’, to emerging concept worthy of further investigation followed the first academically published article describing orthorexia as a “maniacal obsession” with the pursuit of healthy food (Donini et al., 2004). A number of case studies were subsequently published, detailing clinical presentations which had resulted in severe medical complications and social dysfunction, observed to have resulted from ‘orthorexic’ beliefs and practices (Morozé et al., 2005; Park et al., 2011; Saddicha et al., 2012; Zamora et al., 2011). Reported medical complications included “significant malnutrition, testosterone deficiency, constipation, bradycardia, poor

dentition, osteoporosis, leukopenia thrombocytopenia, starvation hepatitis and metabolic alkalosis” (Moroze et al., 2015, p. 398)

Observed commonalities across case studies have served to substantiate and support Bratman’s initial conceptualisation of ‘orthorexia’. Illness or health related issues as a precipitating factor for the motivation to alter diet or adapt health behaviours were commonly reported across the case study literature (Moroze et al., 2005; Park et al., 2011; Saddicha et al., 2012; Zamora et al., 2011). Drastic dietary changes such as the elimination of multiple food groups were implemented by one individual in response to intense acne which was not able to be improved with conventional interventions (Zamora et al., 2004). Another reported consuming only 3-4 spoons of brown rice and fresh vegetables per day over a period of 3 months to treat his tic disorder (Park, 2011).

Magical beliefs about food and self-determined food rules based upon individually established criteria were further commonalities reported across case studies. Cooking food was believed by one individual to destroy natural food qualities, with raw food considered to be superior and healthier (Saddichia, 2012). Similarly, controlling intake to specific times of the day, such as the consumption of vitamins (half in the morning and half a night) in the belief these times provided optimal consumption to increase energy (Moroze et al., 2015). Another case study noted the requirement for meals to be eaten slowly, chewing each bite many times whilst meditating (Zamora et al., 2004). This had resulted in food only able to be consumed once a day to ensure such conditions were met. Spiritual beliefs, particularly those regarding food purity, were also observed (Zamora et al., 2004), however ideological, philosophical and religious beliefs were also noted as underlying the reported often unrelenting adherence to food rules and structured practices (Zamora et al., 2004).

Orthorexia is not currently recognised as an eating disorder in the DSM-5 and debate continues as to whether it should be classified as a unique disorder, a subset of an existing disordered eating category, a behavioural addiction (Marazziti et al., 2014) extreme dietary pattern (Varga et al., 2014) or sociocultural development (Nicolosi, 2006). Diagnostic criteria have been proposed by a number of researchers (Barthels et al. 2015; Donini, 2004; Dunn & Bratman, 2016; Moroze et al., 2015; Varga et al., 2014) however, at this time a formal and universally agreed set of diagnostic criteria are yet to be agreed upon. In 2018, an orthorexia taskforce was established, with the intention of producing a formal definition, establishing agreed diagnostic criteria and to extending the currently limited orthorexia knowledge base (Bratman et al., 2017).

It has been Bratman’s own ‘orthorexic’ journey and subsequent work which has led to advocate for the recognition of orthorexia as an eating disorder (Hanganu-Bresch, 2019). Media interest surrounding the obsession with healthy eating has filtering through to health

and personal blog content, all of which has served to substantiate this proposed new eating disorder. Although popular and social media interest towards orthorexia has somewhat preceded academic attention, 141 articles have been published since 2018 (Cena et al., 2019). Much of the research to date and focused on the development of measurement tools, establishing prevalence, and defining clinical parameters on the individual level. Few qualitative studies exploring individual experiences of 'orthorexia nervosa' have been undertaken to date, with no known research published in New Zealand. Further, the majority of literature has focused on analysing blog and social media content, rather than obtaining perspectives directly from individuals. Even less consideration has been granted to the wider socio-cultural and political context within which this proposed new eating disorder is being constructed.

The following chapter firstly considers orthorexia from an individual perspective and reviews the clinical literature base. Orthorexia is then considered from a wider sociocultural perspective, within which this research is positioned. The implications of social media use and the relationship between orthorexic beliefs and behaviours are social media content are discussed, together with the relationship between social media, body dissatisfaction and disordered eating development. Chapter 3 moves on to outline the research methods adopted, procedures undertaken, reflexivity, ethical considerations and the theoretical framework adopted. Thematic analysis is presented in chapter 4, with the discussion and research conclusions following in chapter 5.

## Chapter 2 - Literature Review

### 2.1 Orthorexia and the Individual

Crawford (2006) argues that “meaningful practice of health is inextricably linked to the science, practice and layered meanings of biomedicine” (p. 403). Medicine is therefore considered to be highly influential in shaping our understandings of health, constructing what comes to be considered as healthy/unhealthy and normalising behaviours which fall on either side of a diagnostic boundary.

As noted, the majority of literature has focused on the individual and has sought to examine orthorexia nervosa as a distinct isolable construct from a positivist medicalised perspective. Such research has sought to isolate the causes and correlates of orthorexia nervosa and explore ways of assessing orthorexia, primarily through the use of quantitative experimental methodologies from an objectivist approach. However, by adopting this perspective, notions of healthism and individual responsibility become reinforced through ‘therapeutic practice which isolates the individual from the social context in which disease is acquired’ (Crawford, 1980, p. 372).

Whilst neoliberalism, healthism and sociocultural influences on health beliefs and behaviours are discussed in more detail in the following section, it is important to review the positivist orientated literature base to understand how orthorexia is currently being constructed as an individual pathology. Such constructions are of interest as they have implications for proposed diagnostic boundaries, treatment access and options and how people who engage in high levels of dietary and exercise practices come to see and understand themselves.

#### 2.1.1 Measuring ‘Orthorexia’ and Establishing Prevalence

Attempts to establish orthorexic prevalence, have been somewhat difficult to date. This is largely attributable to the lack of agreed diagnostic criteria against which potentially problematic behaviours are being assessed and the lack of validated psychometric assessment tools. The two most commonly adopted measures have been the Bratman Orthorexia Test (BOT) and the ORTO-15 and (Cena et al., 2019). The first available assessment tool, the BOT, was developed by Bratman himself (Bratman & Knight, 2000) and is considered to be an ‘informal’ self-test. The ORTO-15, the mostly commonly adopted measure of orthorexia, is a 15-item self-report questionnaire developed by Donini, et al. (2004), based upon Bratman’s (2000) original 10 question self-test.

Despite common use of the OTRO-15, a range of measurement limitations are noted throughout the literature. The validity of the OTRO-15 is often omitted from the literature, or

when cited varies considerably (Missbach et al., 2017; Varga et al., 2014) and reliability is yet to be established (Donnini et al., 2005). However, perhaps the biggest limitation has been the overestimation of prevalence rates, with variability ranging from 6.9% (Donini et al., 2004) to 71% (Dunn et al., 2017). It is therefore likely that the ORTO-15 may not be suitably reliable to differentiate between normal healthy eating and the spectrum of pathological healthy eating consistent with initial constructions of orthorexia. Additional tools such as the EHQ (Eating Habits Questionnaire) (Gleaves et al., 2013) and the DOS (Dusseldorf Orthorexia Scale) (Barthels et al., 2015) and TOS (Teruel Orthorexia Score) (Barrada & Romero, 2018) have subsequently been developed to address existing limitations, with improved psychometric properties indicated (Gleaves et al., 2013; Chard et al., 2018).

However, when comparing assessment tools against the currently proposed diagnostic criteria, a number of incongruities are apparent (Valente et al., 2019). The basis from which the currently proposed diagnostic criteria and assessment tools have been developed has primarily stemmed from Bratman's initial conceptualisations of orthorexia and a small number of case studies. Few empirical studies have sought to increase initial descriptions of behaviours characterised as orthorexic, and a notable lack of qualitative research has been undertaken to further expand understandings and experiences of high dietary and exercise engagement. It is also likely that questionnaire-based measurement tools which seek to identify and isolate individual factors associated with extreme diet and exercise practices are insufficient to capture the entanglement between other aspects of individual lives and broader sociocultural and political contexts which impact on health beliefs and behaviours.

### ***2.1.2 Orthorexia and Prevalence Within Specific Populations***

Clinical research to date has primarily sought to establish prevalence rates within populations who already engage in high levels of dietary and exercise behaviours. Perhaps not surprisingly, participants in these studies have been found to exhibit high levels of orthorexic behaviours. Individuals who work in health and fitness industries and gym attendees for example, have been found to be more likely to engage in healthy eating habits which may become extreme (Segura-Garcia et al., 2012; Ruldoph, 2017). Similarly, students studying in health-related fields such as medicine (Bağcı Bosi et al., 2007; Fidan et al., 2010) and nutrition/dietetics (Bo et al., 2014; Asil, 2015) have been found to display higher orthorexic symptoms (Plichta & Jezewska-Zychowicz, 2019). Professional athletes (Segura-García et al., 2012) and ashtanga yoga practitioners (Herranz et al., 2014) have additionally reported higher orthorexic scores. Prevalence within non-health specific and general populations however is visibly lacking, with the continued focus on health, diet and exercise populations somewhat serving to help substantiate the clinical basis of orthorexia.

Certain diets such as vegetarian, vegan, or raw food diets have also been associated with higher orthorexic symptomology (Zamora et al., 2005; Varga et al., 2014; Dell’Osso et al., 2016; Missbach et al., 2017; Bardone-Cone et al., 2012; Dittfeld et al., 2017). Some research has indicated that vegetarian and vegan diets may be adopted as a socially acceptable way to mask and legitimise food restriction or avoidance, in order to manage weight (Barnett et al., 2016; Bardone-Cone et al., 2012; Dellava et al., 2011). Other findings have reported ethical, rather than weight loss considerations as the primary motivator for vegetarian or vegan dietary update (Barthels et al., 2018).

However, dietary theories (e.g. veganism, raw food, macrobiotic, other individualised healthy eating beliefs) are not themselves considered to be indicative of disordered, or orthorexic eating according to Bratman (2017). Rather, it is the response, both in the approach to, and resulting impact away from, such ways of eating that the development of orthorexia is said to occur (Cheshire et al., 2020). It is this response whereby ‘obsessive thinking, compulsive behaviour, self-punishment, escalating restriction and all other dynamics of conventional eating disorders take hold’ (Bratman, 2017, p. 383). Bratman does however note that the more complex a dietary theory, the more scope it may provide for ‘orthorexic acceleration’. For example, dietary theories which emphasise food or body purity, may transition to individual issues related to impurity, or uncleanness. Dietary theories based upon food sensitivities may encourage increased fear, whereas morally prescribed diets may enhance feelings of superiority over others (Bratman, 2017).

Gender differences for orthorexic prevalence and severity have also been inconsistently reported across the literature (Brytek-Matera, 2012). Prevalence rates have been reported as being higher for women (Donini et al., 2005; Keller & Konradson, 2013) with women also found to experience more severe symptomology (Arusoğlu et al., 2008; Eriksson et al., 2008; Koven & Senbonmatsu, 2013). In contrast, other studies have shown higher prevalence rates for men (Donini et al., 2004; Fidan, et al., 2010) or found no gender differences (Dunn et al., 2017; Varga et al., 2014). Much of the existing qualitative research has relied on social media content analysis rather than obtaining accounts directly from individuals themselves (Hanganu-Bresch, 2019). Online representations of orthorexia have predominantly consisted of experiential accounts which commonly take a ‘confession genre’ format (Hanganu-Bresch, 2019). This style of content is characteristic of eating disorder recovery stories (see Chalmers, 2017; Fasanella, 2018) with accounts of disordered eating experiences predominantly shared by women. Accounts from men, whilst in existence, notably fewer (Hanganu-Bresch, 2019). Future qualitative research would certainly benefit from the inclusion of more experiential perspectives from men, non-binary and transgender

people to enable gendered perspectives of high dietary and exercise engagement to be represented and understood.

A range of demographic variables and their associations to orthorexic health practices have also been investigated. The relationship between orthorexic symptomology and age remains inconclusive. Younger adults have reported higher orthorexic symptomology in some studies (Segrura-Garcia et al., 2012; Rudolph, 2017; Missbach et al., 2015; Fiden et al., 2010; Dell'Osso et al., 2016a), with others indicating orthorexia is more likely to present in older age groups (Varga et al., 2014; Donini et al., 2004). Other studies have found no distinctions between age groups (Bundros et al., 2016; Depa et al., 2017; Reynolds, 2018). Orthorexia has also been indicated as more prevalent in people with higher income due to the costs associated with purchasing speciality health food items and access to specialist nutritional knowledge (McCombe & Mills, 2019). Higher educational attainment has been indicated in one Australian sample with orthorexia found to be more common with those holding bachelor degrees when compared to high school only qualifications (Barnes & Caltabiano, 2017).

### **2.1.3 Orthorexia and Other Eating Disorders**

Research investigating orthorexic eating patterns has sought to explore links between healthful eating and other eating disorders. Whilst orthorexia is said to present with its own unique features and behavioural patterns, some overlap with other eating disorders such as anorexia have been observed (Koven & Abry, 2015). Similarities include high trait anxiety, perfectionism, the desire for control, cognitive rigidity and the potential for significant weight loss to occur (Koven & Abry, 2015; Fidan et al., 2010; Donini et al., 2004). Individuals with orthorexia and anorexia are also described as being achievement orientated, value self-discipline particularly where diet adherence is concerned, and may consider dietary indiscretions as failures of self-control (Koven & Abry, 2015). Other authors have characterised orthorexia as a less severe subset of anorexia (Barthels et al., 2017) whereas others argue that orthorexia can lead to anorexia, or vice versa, or that the two may exist across a continuum (Matthews, 2017).

From a clinical perspective, orthorexic behaviours have been considered to be less dangerous in terms of longer-term health outcomes than anorexia and bulimia (bingeing/purging) and were consciously adopted to maximize nutritional components, whilst keeping calorie intake low (Segura-Garcia et al., 2015). Orthorexia may therefore act as a façade for other disordered eating (Syurina et al., 2018; Segura-Garcia et al., 2014), with orthorexic eating potentially providing a more socially acceptable way to hide anorexic symptomology (Cartwright, 2004).



It has also been theorised that orthorexia may provide a transitional pathway to, and away from other eating disorders. As such orthorexia has been indicated as a potential risk factor for the development of other eating disorders (Brytek-Matera et al., 2015b) and may precede the onset of other eating disorders (Segura-Garcia et al., 2015). Orthorexic behaviours have been associated with anorexia and bulimia and observed prior to treatment for such eating disorders. Orthorexic eating patterns have also been observed to increase post treatment with positive associations observed between clinical improvement for both anorexia and bulimia (Segura-Garcia et al., 2015).

Orthorexic eating styles have also been suggested as providing a sense of autonomy and competence for anorexia patients during remission and recovery, as they learn to navigate more 'normal' ways of eating (Koven & Abry, 2015). Orthorexic eating may therefore act as a coping strategy, providing a healthier way to control food intake and enable the transition from low calorie to healthier foods (Barthels et al., 2018).

However, despite the similarities observed between orthorexia and anorexia, there are also observable points of departure. Perhaps of most significance are the motivations driving the disordered eating (Koven & Abry, 2015). Orthorexia is characterised by a range of 'pathological' dietary and eating practices, which are not undertaken in the pursuit of thinness, but rather in the pursuit of health (Valente et al., 2020, Moroze et al., 2015; Saddicha et al., 2012; Zamora et al., 2011; Park et al., 2011). It is this primary motivation of health attainment, which is considered to differentiate orthorexia conceptually from other eating disorders. Proposed diagnostic criteria are reflective of this distinction and do not currently include a fear of fatness (Brytek-Matera & Donini, 2018).

Whilst weight loss is not considered to be the primary motivator of orthorexic dietary practices, Bratman (2017) maintains that weight loss is a resulting side effect of healthful eating, rather than the primary driver (Bratman, 2017). Interestingly, this notion has been contradicted with research indicating that healthful eating which could be labelled as orthorexic has been positively correlated with weight control, which does not align with initial case study findings which report health as the motivating factor for dietary behaviours (Depa et al., 2019). Similarly, higher orthorexic levels have been associated with higher rates of physical activity and fear of gaining weight (Al Kattan, 2016). Appearance concerns and a preoccupation with weight have also been associated with higher orthorexic tendencies (Barnes & Caltabiano, 2017; Brytek-Matera et al., 2014, 2015a, 2015b; Parra-Fernandez et al., 2018) together indicating that appearance concern may be more important than initially conceptualised.

However, in contemporary Western society it has also become increasingly difficult to separate weight from health. Health and appearance have become conflated, with lower

body weight considered to be reflective of health status (Lupton, 2013). Additionally, losing weight is considered a means of improving health (Clark, 2019). It therefore becomes difficult to distinguish between healthful behaviours which may be undertaken in the pursuit of optimal health alone, when the achievement of a specific body aesthetic (thin and toned) is considered to be reflective of a healthy body and healthy personhood (Webb & Quennerstedt, 2010). Health indicators such as the BMI are further implicated in how we understand health, with numbers characterising who is considered to be healthy and who is not (Riley et al., 2018). Furthermore, healthful practices take on a moralistic value, whereby responsible, healthful choices signify virtue and good moral citizenship which are reflected by how healthful one looks (Crawford, 2006).

Despite sociocultural and political influences which may provide alternative understandings and explanations for high dietary and exercise engagement, positivist approaches investigating the relationship between orthorexic practices and weight loss remain focused on the micro, individual level. Given the importance placed on the pursuit of health as the primary motivation behind orthorexic eating, further research is required to explore how individuals understand their own motivations for high dietary and exercise practices in relation to the sociocultural contexts which influence such practices.

The relationship between orthorexia and body image disturbance also remains unclear. No associations between orthorexia and body image disturbance have been found in some studies (Fidan et al., 2010; Oberle et al., 2017). Other studies report higher orthorexic tendencies associated with high body image satisfaction (Brytek-Matera et al., 2015a). Orthorexic symptomology has also been indicated as higher for those who consider themselves to be muscular and thin (Oberle & Lipschuetz, 2018). Other research has found similar levels of body image disturbance between anorexic and orthorexic groups, however, the orthorexic group were more pleased with their appearance, in comparison to the anorexic group who were not (Bathels et al., 2018).

Appearance anxiety has also been associated with higher orthorexic tendencies (Hayes et al., 2017; Eriksson et al., 2008). Similarly, individuals with higher orthorexia tendencies tended to negatively self-evaluate their appearance (Roncero & Barrada, 2018). Self-perceived fatness and muscularity have also been associated with higher orthorexic scores, with leaner and more muscular individuals found to be at greater risk for orthorexic development (Oberle & Lipschuetz, 2018). Body image dissatisfaction is also more likely for those with orthorexia in comparison to those without (Parra-Fernandez et al., 2018a). Low body satisfaction, high fitness orientation, high overweight and appearance orientation have also been shown as predictors for higher levels of healthy eating preoccupation (Brytek-Matera et al, 2020).

Other authors have suggested that body image distortion is present with orthorexia, however the presentation differs, with individuals feeling they are not as healthy enough, as opposed to not thin enough (Barthels et al., 2018). This relationship has been disputed more recently with weight and body appearance found to be correlative with orthorexic tendencies (Parra-Fernandez et al., 2018; Barnes & Caltibiano, 2017). Varga et al. (2014) similarly found higher orthorexic rates to be associated with body image disturbance. Preoccupation with body shape has been associated with higher orthorexic tendencies in Australian students (Reynolds, 2018) with more recent findings indicating that individuals who feel anxious about their bodies and value appearance may be at higher risk for developing orthorexia (McCombe & Mills, 2019). Taken together, these findings are of interest as they appear to suggest that researchers are attempting to understand somewhat contradictory findings. Such findings however, also make sense within the neoliberal context of healthism whereby people are expected to negotiate often conflicting and competing demands of health and morality discourses which shape health beliefs and practices, but also influence the healthful appearance goals people work towards (Crawford, 2006).

#### **2.1.4 Orthorexia, OCD and Perfectionism**

Dietary and exercise practices described as orthorexic have also been explored in relation to other clinical constructs such as obsessive compulsive disorder (OCD) and perfectionism. Similarities between (OCD) and orthorexia have been observed through compulsive food related behaviours such as highly rigid and ritualised food procurement, planning, preparation and consumption, intrusive thoughts and intense guilt experienced when failing to adhere to their diet (Bratman & Knight, 2000; Brytek-matera, 2012; Koven & Senbonmatsu, 2013; Ramacciotti et al., 2011; Vandereycken, 2011). Fear of food contamination has also been observed (Koven & Abry, 2015). Some authors have characterised orthorexia as an obsessive-compulsive disorder (Brytek-Matera, 2012; Mathieu, 2005) with correlations observed between food preoccupation, food rituals, rule driven exercise and orthorexic symptomology (Segura-Garcia et al., 2015). This classification has however been challenged, with the obsessive-compulsive nature of orthorexia considered to be better characterised by ego-syntonic, rather than ego-dystonic behaviour (Barthels et al., 2015).

Perfectionism has similarly been indicated with orthorexic beliefs and behaviours. Perfectionism has been characterised by the setting of excessively high standards, striving for flawlessness and the tendency to be excessively critical of oneself and others (Frost et al., 1990). Research has indicated that individuals with orthorexia possess characteristics of perfectionism as demonstrated through their strong commitment to maintaining pure dieting

regimes and intense feelings of guilt following food indiscretions (Koven & Abry, 2015; Mathieu, 2005). A correlation between higher orthorexic tendencies and higher perfectionism scores has further been reported (Barnes & Caltabiano, 2017; Oberle et al., 2017 and Hayes et al., 2017).

However, by contextualising the behaviours described as orthorexic within the current sociocultural context, alternative ways of making sense of such behaviours without pathologising the individual become apparent. Risk discourses and concerns surrounding contemporary food systems as described by Nicolosi's (2006) 'orthorexic society' for example, provide one such context whereby what is eaten has increasingly become conflated with health (Madden & Chamberlain, 2010). This combined with notions of individual responsibility for not only achieving and maintaining health, but also preventing future disease (Crawford, 2006) create a context from which high dietary and exercise engagement may flourish and be perceived as normative response (Musolino et al. 2015a).

### **2.1.5 Improving Health, Somatisation and Health Anxiety**

According to Bratman and Knight (2000), orthorexic dietary practices may develop from an initial motivation to improve health, or to aid or enable recovery from chronic illness. While empirical evidence supporting this assumption has been limited and primarily derived from case studies (Morozze et al., 2015; Park et al., 2011; Saddicha et al., 2012; Zamora et al., 2011) more recent qualitative findings have provided support to this notion. Initial motivators commonly cited on personal blog sites for engaging in dietary change by individuals who self-identify as orthorexic have outlined the desire to address health difficulties (Greville-Harris et. al., 2019). Health disturbances relating to gastrointestinal or digestive concerns in particular often involved the elimination of certain food groups in the search to discover the cause of health concerns (Greville-Harris et. al., 2019). Food restriction or elimination have also been found to result from fears associated with the development of certain diseases or conditions (Ramacciotti et al., 2011; Sellin, 2013).

As orthorexia commonly follows a medical issue or disease diagnosis, patients may, as a result, adapt their diets to eliminate foods believed to be contributing to the illness. Such dietary changes are suggested as leading to fixations where alternative diet followers are more likely to experience orthorexic symptomology (Barnett et al., 2016). In such instances, food choices are not only determined by the healthy quality of food, but also what has been associated with alleviating unwanted sensations (Kiss-Leizer et al., 2019).

Somatisation, where psychological distress is experienced physically, is also of interest to those who have been labelled, or self-identify as orthorexic. Some studies have reported that somatisation, particularly gastrointestinal related, has been strongly linked with

orthorexic eating styles (Barthels et al., 2015). Body sensations, most commonly gastrointestinal, have also been associated with healthy eating practices. Healthful eating may therefore be used as a preventative strategy, particularly in the presence of pain (Barthels et al., 2019). Food choices may also be associated with personal beliefs about the causal relationship between bodily sensations and food consumption. People who practice this kind of restriction or avoidance report feeling energetic when they eat a certain way, and may have obsessive thought patterns whereby they catastrophize about what would happen if they were to consume a food they typically restrict (Barthels et al., 2019). However, we know relatively little about the unique impact of orthorexic-like thoughts and behaviours on somatization and vice-versa. Thus, some have suggested that the restrictive practices associated with orthorexia find a stronger corollary in relation to anorexia, versus as a means of controlling somatic concerns (Cena et al., 2019; Barthels et al., 2017).

Despite the health focus of orthorexic dietary and exercise practices, few studies have investigated the role of health anxiety and orthorexia. Of the limited research conducted to date, hypochondrial fears have not been found to be of key importance to orthorexic symptomology (Barthels et al., 2017). More recent research has, however, found health anxiety to be a strong predictor of orthorexic symptomology (Kiss-Leizer et al., 2019). This research suggests that individuals adopting 'pure' nutrition may transition to compulsive eating behaviours in order to protect their health, with orthorexic behaviours acting as a coping mechanism against health anxiety.

Crawford (2006) argues that in the current neoliberal context, to be health conscious, is also to be danger conscious. As such, healthist discourses which position individuals as responsible for their own health, also mean that one must also remain aware of the potential risks to health, with such risks continually required to be identified and controlled according to the imperative of health. The importance of obtaining health however, also creates anxiety, so it is important to consider how individuals are being positioned within healthist discourses as when constructs such as health anxiety are considered in relation to health practices.

### ***2.1.6 High Exercise Engagement and Orthorexia***

As exercise frequently forms a part of healthy lifestyles, high exercise engagement has also been implicated with health practices which have been described as orthorexic. Exercise, a subcategory of physical activity, is defined as 'activity that is planned, structured, repetitive and aims to improve or maintain one or more components of physical fitness' (World Health Organisation, 2020). Participation in regular exercise has been found to produce a number of advantageous physical effects such as increased cardiovascular

fitness, reduced blood pressure, weight loss, increased muscle mass, bone health, improved energy levels and sleep promotion (World Health Organisation, 2020), in addition to aiding the prevention of non-communicable disease such as diabetes, cancer and stroke (Ministry of Health, 2016). Mental health benefits have also been associated with regular exercise, including improvements to anxiety, depression, and stress states (Mikkelsen et al., 2017), as well as overall improvements in general well-being (Mandolesi et al., 2018).

However, where exercise engagement reaches levels which could be described as excessive, compulsive or addictive, adverse health outcomes may result. Whilst there is not currently a clear definition of problematic exercise engagement, nor is there a set of agreed DSM-5 diagnostic criteria, it has been theorised that individuals with orthorexic symptomology may initially engage in physical activity to improve overall health. Overtime, engagement may escalate to rigid exercise regimes which have the potential to result in physical injury and illness (Oberle et al., 2018). Examples of physical impairment reported within the literature have included bone fractures (Landolfi, 2013), stress fractures and continued exercise despite the presence of an injury (LaBan et al., 1995). Psychological impairment associated with high exercise engagement has included anxiety, depression, social implications (Landolfini, 2013; Fortier & Farrell, 2009) and feeling compelled to exercise rather than participating for enjoyment (Klien et al., 2004).

A number of studies have indicated that exercise engagement may be positively associated with orthorexic risk (Håman et al., 2017; Malmberg et al., 2017; Ruldoph, 2017; Segura-Garcia et al., 2012). People described as orthorexic also tend to exercise more frequently than the average population (Varga et al., 2014; Eriksson et al., 2008; Stochel et al., 2013) and the level of exercise engagement has predicted higher orthorexic scores in both Hungarian and Polish university students (Hyrnik et al., 2016; Varga et al., 2014) and Italian athletes (Segura-Garcia et al., 2012). Other research has also shown positive correlations between orthorexic symptomology and the frequency (hours undertaken per week) of physical exercise participation (Dunn et al., 2017; Rudolph, 2017). Higher levels of 'obsessive' healthy eating have also been associated with greater exercise activity, as indicated by the duration of time devoted to strength training and aerobic exercise (Oberle et al., 2018). However, in contrast other studies have reported non-significant associations between orthorexia and hours spent exercising per week by health care professionals (Maghetti et al., 2015), university students (Bo et al., 2014) and the number of sessions undertaken each week by fitness club members (Eriksson et al., 2008). However as previously noted, much of clinical research to date has sought to identify 'orthorexic' exercise patterns within populations who already engage in high levels of physical activity. It is therefore not surprising that high levels of exercise activity are reported for such populations.

Additionally, as healthy eating and exercise are characteristic of healthy lifestyles (Kirk & Colquhoun, 1989), it is further not unexpected that healthy eating would be associated with high exercise engagement.

High exercise engagement is not specific to orthorexia alone. High levels of exercise engagement have been considered to be more likely to occur in conjunction with other disordered eating (Trott et al, 2019). Exercise has also been associated with other eating disorders such as anorexia and bulimia (Kiss-Leizer et al.,2019; Sussman et al., 2011; Brehm & Steffen, 2013) with exercise as a method to regulate emotional state, also observed with disordered eating (Bratland-Sanda et al., 2010). The relationship between high exercise engagement and OCD has also been investigated. Bóna et al., (2018) found no association between excessive exercise and OCD, with findings perhaps indicating that differences in engagement observed between fitness populations, who may engage with exercise for healthful lifestyle reasons, compared to clinical populations who be motivated by more pathologically related obsessive-compulsive dimensions or personalities. An investigation of personal trainers' client experiences indicated excessive exercise as a key characteristic of orthorexia, with individuals requiring control over their rigid dietary and exercise plans (Håman, et al., 2015).

Exercise engagement is not currently included in the proposed diagnostic criteria for orthorexia, nor does Bratman (1997) consider it to be characteristic of conceptualisations of 'orthorexia'. Håman, et al. (2015) question whether orthorexia itself has extended or whether conceptualisations of orthorexia are being extended to encompass additional behaviours. Either way, exercise does commonly form an important component of daily health practices and has the potential to be problematic at highly significant levels of engagement.

Whilst the relationship between orthorexia and exercise has been under researched to date, this relationship appears to be complex and further research is required to understand the motivations behind high exercise engagement in relation to the context within which such practices occur. As healthful eating and exercise can both be framed as culturally accepted healthy lifestyle practices, it is important to consider the motivations behind more problematic or pathological behaviours and take into consideration the sociocultural context which such behaviours are undertaken. Healthist discourses position individuals as responsible for their health, with exercise highly implicated as a way to increased health and reduce disease susceptibility (Crawford, 2006). Within this context, exercising more could therefore be understood as being healthier, or achieving healthiest health (Kirk & Colquhoun, 1989; Wright et al., 2006). Given the current sociocultural context where individuals are positioned as being responsible for their own health, healthism discourse shape health practices such as diet and exercise. However, such practices also have the potential to

become problematic when public health messages may be taken too far in response to perceived health risks and the desire to achieve optimal health (Crawford, 2004).

### **2.1.7 When Healthy Becomes Unhealthy**

Despite the fact that orthorexia is not a clinically diagnosable entity, people tend to present to dietitians and psychologists and to be represented in the media as “orthorexic” when their behaviours lead to significant life impairments (Dunn & Bratman, 2016; Moroze, 2015; Missbach & Barthels, 2017). Bratman (2017) describes orthorexia as having two stages. The first involves the choice to adopt a healthful diet, whereas the second involves the intensification of such health pursuits, resulting in obsession which is indicative of pathology. Whilst the first stage may include the adoption of ‘non-standard’ dietary practices and/or irrational or unscientific ideas guiding choices, this would be considered too early to indicate pathology. Heath practices which are described as orthorexic are considered to become problematic when they lead to significant consequences which may be physical, psychological or impact upon social relationships (Bratman, 1997; Bratman & Knight, 2000). Donini et al. (2004) considers healthy eating to have become ‘orthorexic’ when the individual transitions away from their normal lifestyle.

Anecdotal reports from case studies have described orthorexia as resulting in nutritional deficiencies experienced due to the extremely restrictive diet adopted can lead to similar health issues as those observed in anorexia (Koven & Abry, 2015). Observed medical complications have included: “significant malnutrition, testosterone deficiency, constipation, bradycardia, poor dentition, osteoporosis, leukopenia thrombocytopenia, starvation hepatitis and metabolic alkalosis” (Moroze et al., 2015, p. 398). However, accounts of physical impairment have been primarily derived from case studies, with little empirical research focusing on physical or medical implications to date. Nor have such outcomes been explored in relation to the wider sociocultural contexts within which impairment may result.

Beyond the physical impact of orthorexic behaviours, such practices also have the potential to cause disruption for those who engage in them. Individuals with orthorexia are described as devoting large proportions of time to planning, sourcing and preparing foods subjectively considered to be healthy or pure. From a psychological perspective, impairment is considered to result from intense frustration where food practices are interrupted, quality of food is compromised and from guilt experienced after food transgressions, culminating in issues of imperfection and fears of sub-optimal health (Mathieu, 2005). Food indiscretions or rule violations may also result in further food restriction or purification by way of fasting (Bratman & Knight, 2000). Beliefs that adherence to the ‘perfect diet’ will yield purity or



perfection, may therefore interfere with daily life and negatively impact quality of life (Bratman & Knight, 2000). What may begin as gaining a sense of control over health, transitions instead to the individual being controlled by their diet (Getz, 2009; Greville-Harris et. al., 2019).

People engaging in high dietary practices may also experience significant social consequences; for instance, they may withdraw and isolate from others, believing their healthful eating practices can only be maintained when alone (Mathieu, 2005). Feelings of virtuosity, or superiority over others who consume unhealthy foods may also impact how individuals see themselves and others (Mathieu, 2005). Social impact may further extend to vocational or academic functioning, where for example, an individual may perform sub-optimally at work due to obsessive dietary thoughts and self-isolate themselves during mealtimes to ensure their diet can be adhered to, or to avoid food they may consider to be unhealthy or impure (Dunn & Bratman, 2016; Oberle et al., 2019). Reports of orthorexic impact however have primarily stemmed from case reports and non-clinical cross-sectional studies, making causal inferences difficult and generalisations impossible (Strahler & Stark, 2020). The range of impairment and personal distress experiences are additionally limited and rarely described in detail (Barthels et al., 2015).

It is also important to note that not all individuals who may be described as orthorexic consider their dietary or exercise practices to cause impairment. Barthels et al, (2015) have suggested that orthorexic impairment may not only be ignored or denied by individuals but also interpreted and understood as additional symptomology resulting from underlying health issue. They further suggest that orthorexic behaviours, may be adopted as a coping technique to alleviate hypochondrial fears with an even more restrictive, or healthier diet undertaken to reduce, or cure perceived somatic symptomology.

From a wider sociocultural perspective, neoliberal and healthist context also offer alternative explanations as to why people may not consider highly significant dietary or exercise practices to be problematic. Where dietary behaviours are experienced as aligning with the individual's self-image, they may not be perceived by the individual as problematic, nor may dysfunction be experienced (Strahler & Stark, 2020). Further, disordered eating may not always be understood as disordered but rather as productive. Individuals may instead rationalise their disordered behaviours, considering them to be important parts of their daily lives which can be justified under the premise of healthism and self-care (Musolino et al., 2015a). Indeed, the current sociocultural and political context makes it difficult to argue against engaging in health-related behaviours, when neoliberal and healthist values of individual responsibility for health endorse, promote and encourage healthy eating and exercise (Crawford, 2006).

## **2.2 Sociocultural Factors and Orthorexia**

As outlined in the previous section, much of the ON research to date has tended to adopt a positivist, quantitative approach, whereby orthorexic beliefs and behaviours are pathologized and reduced to residing within the individual. As a result, sociocultural considerations have been commonly omitted from clinical literature (Eli 2018; Håman et al., 2015; Musolino et al., 2015a), despite wide acceptance that disordered eating manifests through a complex interaction between biological, genetic, psychological, cultural and social factors (Fursland et al., 2010). Consequently, insufficient consideration has been provided to the wider social-cultural and political contexts within which daily health practices are performed, the meanings attributed to such practices, and how such influences are taken up, experienced and embodied.

Further, by focusing only on the individual, research has also served to reproduce healthism (Crawford, 1980), placing the individual as responsible for their own health and perpetuating surveillance behaviours in response to normative sociocultural pressures. It is from such pressures, that problematic or dysfunction eating, and exercise behaviours may result when taken up to highly significant levels (Håman et al., 2015).

### **2.2.1 Neoliberalism and Healthism**

Neoliberalism is most simply described as the transition between macro governance of the state, to the individual and this extension into commercial markets (Pirie, 2016). Since the 1970's, neoliberalism has been the dominant economic/political philosophy guiding Western governments. In New Zealand, neoliberalism emerged between 1984 and 1990 under the Labour government and has become further entrenched with the following National government between 1990-1996. The three tenets of neoliberalism include: the economic restructuring of markets and privatisation allowing for greater commercial freedom and globalisation, reduced public expenditure, including healthcare, and the deregulation and the promotional of individual responsibility and 'choice' (Barnett & Bagshaw, 2020).

In the past thirty years, healthcare became privatised, private health insurance was introduced and range of health inequalities have resulted (Barnett & Bagshaw, 2020). Under neoliberal ideology, responsibility for maintaining health transitioned to the individual and moved into the domain of lifestyle (Crawford, 2006). Health also extended into a wide range of holistic spheres, now encompassing mind, body and spirit, in what Crawford describes as the 'medicalisation of everyday life' which served to promote health and wellness to a 'super value' (Crawford, 2006). As a result, healthism discourses now encapsulate an increasing

number of domains which were not previously considered in relation to health. What is now considered to be health relevant has expanded to include a disproportionately wide medicalised lens through which we view and experience society (Brown, 2018).

The transition to individual responsibility and choice and the associated commercialisation of health is of key importance to the study of orthorexia. Neoliberalism provided the context from which healthism arose, with ideal citizens expected to make the right healthy choices to manage risk (Crawford, 2006) and for the development of what Nicolosi (2006) describes as 'orthorexic society' positioning ON as a cultural development. Healthy lifestyle choices are considered as desirable and empowering in the current neoliberal climate, and the responsibility to achieve this status is placed on the individual.

### **2.2.2 Healthism**

The importance of health has increased dramatically in the past thirty years (Crawford, 2006). Healthism is defined as "the preoccupation with personal health as a primary, often the primary, focus for the definition and achievement of well-being; a goal which is to be attained primarily through the modification of lifestyles" (Crawford, 1980, p.368). What is required to secure health, is now a multifaceted project, guided by the notion that health is something which must be achieved (Crawford, 2006). Within this context, personal responsibility for healthy choices have become moralised, whereby one is compelled to make good choices to be considered a good citizen (Crawford, 2006; Lupton, 2000) with diet and exercise now implicated in both disease causation and avoidance (Madden & Chamberlain, 2010). Health is now considered to be "what is to be done" and representative "of possibility for the good life, or even the good life itself" (Crawford, 2006, p404).

Individuals are required to obtain medical information and implement this knowledge into their daily lives. The individual is further expected to maintain good health, despite receiving often contradictory health information, and having to meet unreasonable requirements to do so (Kirk & Colquhoun, 1989). Healthism discourses also position health as something which can be achieved 'unproblematically' achieved through individual effort, and primarily focus on regulating body weight and shape (Kirk & Colquhoun, 1989). Crawford (2006) argues that "in a health-valuing culture, people come to define themselves in part by how well they succeed or fail in adopting healthy practices and by the qualities of character or personality believed to support healthy behaviours" (Crawford, 2006, p. 402). Others are also judged by the same criteria. In this regard, healthism positions the achievement of health as a moral imperative. Healthism also assumes individuals have control over their actions and understand the implications of behaviour for future health outcomes. Unhealthy behaviour, is therefore positioned as 'bad' behaviour, leaving one open

to moral criticism, with those who do not take up healthy lifestyles positioned as lazy and responsible for their own ill health (Brown, 2018).

However, according to Crawford (2006) to be health conscious is also to be danger conscious. Individuals must also remain vigilant to the continuous array of potential risks to health, with the 'imperative of health' dictating that such risks must also be controlled. Ironically, the more health conscious or preoccupied we become about improving or achieving health, the less secure we feel (Crawford, 2006). Today, health has become one of the more important practices of modern life. Health dominates social resources and is evident at institutions levels, as well as encompassing professional and commercial enterprises which include a vast array of products, services and knowledge (Crawford, 2006). Health also holds emotional importance in that it is meaningful. Health is considered to be a goal, yet it also creates anxiety. It is also the site of identity creation, generating social capital and value for the self and others (Crawford, 2006; Bourdieu, 1986).

Discourses implicating personal responsibility around the benefits and risks of healthy versus unhealthy food consumption are highly prevalent in contemporary media and health promotional messaging (Lupton, 2000). Contemporary health promotional messages work to reinforce healthism due to their focus on individual lifestyle change in order to avoid disease development and progression. Such messaging in effect works to generate perceived risk and anxiety, with health no longer considered to be absence of disease, but extended to include freedom from future risk of disease (Brown, 2019; Crawshaw, 2013). Healthism therefore encourages the universal imperative of health through an ongoing requirement to identify any factors which may also impact our future health (Brown, 2018).

Healthism discourses therefore fail to recognise the wide variance in sociocultural, economic and relational contexts within which individuals live. Public health messaging continues to focus on individual responsibility, ignoring the social determinants of health and wider cultural and political contexts within which health behaviours occur. Healthism also fails to account for health issues which may arise despite adopting healthy lifestyles or for genetic or physiological variations which may also influence health (Riley et al., 2018). Further the relationship between appearance and health is also problematic because healthism discourses entangle health, weight, individual responsibility, and morality resulting in a body-anxious culture whereby health and weight are seemingly interchangeable (Riley et al., 2018).

### **2.2.3 Orthorexic Society**

In what has been described as an 'Orthorexic Society' (Nicolosi, 2006), not only has what and how we eat has increasingly become increasingly conflated with health (Madden &

Chamberlain, 2010), but specific diets and lifestyle choices are considered to hold higher sociocultural value over others, with the adoption of an 'orthorexic' lifestyle affording symbolic capital (Bourdieu, 1986). Eating purely, perfectly, or correctly within an industrialised and technologically orientated food system, creates a range of contradictions surrounding the risks and benefits of certain foods, many of which are now pre-packaged and heavily processed, extending the food chain further away from natural or whole food sources. Additionally, what is considered to be good/bad, healthy/unhealthy food choices are blurred, due to unstable and often contradictory nutritional knowledge intersecting with moral judgements, which now also include a range of ethical considerations such as animal rights, sustainability, supporting locally grown (Askegaard et al., 2014). These factors together result in feelings of fear, powerlessness and anxiety (Håman et al., 2015; Rangel et al., 2012; Nicolosi, 2006) which are reflective of Bratman's conceptualisation of orthorexia, as an unhealthy obsession with healthy eating.

#### **2.2.4 Healthism and Body Appearance**

Commercial and media interests have further perpetuated an 'aesthetic' model of health. Health is typically depicted by, and associated with beauty, which through ongoing clean healthy living and self-denial, you too may achieve (Brown, 2018). Healthism discourses work to position the body as an indicator of health, fitness and beauty, and unrealistically work to conflate and promote the relationship between health and body size and shape (Wright et al., 2006). As a result, thin and toned bodies are considered to be signifiers of health, and consequently, larger bodies are indicators of unhealthiness (Webb & Quennerstedt, 2010). In Western cultures, bodies outwardly observed to be overweight or obese, are also considered to be unattractive and imperfect (Brown, 2018; Puhl & Brownell, 2001).

Healthism discourses also position individuals as being able to transform their bodies through simple behavioural changes such as eating and exercise (Johnston & Stambulova, 2015). They further work to position large body sizes as an individual failure to control one's lifestyle (Evans et al., 2013). This moralisation of health and associated appearance, therefore positions individuals with larger body sizes to be lazy, irresponsible and lacking discipline (Puhl & Heuer, 2010; Rich et al., 2015). In contemporary society, a 'healthy' body has come to signify moral virtue and worthy citizenship (Musolino et al., 2015a; LeBesco, 2011). For women in particular, 'taking care of oneself' in terms of maintaining an appropriate appearance has also become a moral imperative (Fullager, 2002), with body weight constructed as a key determinant of health (Paechter, 2009). In this sense, the transition from health as the absence of disease, to health as an expansive domain which

encompasses the physical, mental and wellbeing in general, perpetuates the conflation of health with everything 'good' and encourages healthiness as a desirable goal.

### **2.2.5 Post feminism and Healthism**

Healthism is also gendered, intersecting with post-feminist sensibility, a term used by Gill (2007) to describe the changing and often contradictory patterns of modern gender relations. Health self-management often entails a transformation imperative for women, whereby women are constantly encouraged to pursue ideals of health perfection (Evans et al., 2020). Further, ongoing self-management through constant transformation is supported through consumption which includes biomedical domains, but also extends way beyond them (Evans et al., 2020).

Body transformations, or the transformation imperative to work on oneself, implicates individual responsibility and morality, often depicted through social and popular media representations of transformation efforts which are depicted as fun, rather than work. Surrounding this 'work', however, are also discourses of agency, empowerment, pleasure and individual freedom (Riley & Evans, 2018). For example, food restriction undertaken for weight loss purposes may be reframed as pleasurable and empowering (Cairns & Johnston, 2015) or something one can be good at (Rich & Evans, 2008). Such discourse also transition beyond the body exterior to include the mind, such that a healthy body leads to a healthy mind, or vice versa (Riley et al., 2017). Given that women should look and feel healthy, the result in increased pressure to work on oneself but also understand oneself as flawed (Riley et al., 2017; Riley et al., 2018).

This body regulation imperative further locates failure to achieve the idealised look as within the individual. For example, not achieving the socially desired healthy appearance, positions oneself as the abject other. However, at the same time one does also not want to be obsessed or over restricted, one must still love their body, but also want to transform it (Riley et al., 2018). Berlant (2011) refers to this as a 'cruel optimism' in that promise of health, and a healthy appearance, are achieved through avenues which actually prevent them from being achieved (Riley et al., 2017; Riley et al., 2018). Despite notions of empowerment and choice, women are still situated by appearance which constantly needs to be worked on to achieve a disciplined body. This constant requirement to engage in body work to achieve unattainable ideals of health together with notions that good health equates to a good life, generate feelings of anxiety (Evans et al., 2020). Such discourses further perpetuated through social media platforms and digital consumer culture. (Evans et al., 2020; Riley et al., 2018).

### **2.2.6 Social Media and Orthorexia**

Social media platforms are increasingly used to access health information (Goodyear et al., 2018; Rich & Maih, 2014). Rather than relying on health information from experts or professionals, many now turn to social media ‘influencers’ or ‘lifestyle gurus’ for health advice instead (Baker & Rojek, 2020). Information can not only be obtained at unprecedented rates, but global communities which transcend time zones and geographic locations can also be established with like-minded others (Baker & Walsh, 2019). Social media platforms are increasingly used to inform food choices and consumption, through the sharing of visual images, recipes, and in response to the ‘obesity epidemic’, a proliferation of health and wellness advice and information (Cinquegrani & Brown, 2018).

Social media has undoubtedly changed how food is consumed, talked about, and the meanings it holds (Baker & Walsh, 2020). The images curated for posting reveal much of the current sociocultural context by producing and reproducing discourses and meanings currently attributed to food, health practices and idealised bodies and lifestyles. They also say much about how food and bodies are used to represent moral citizenship and personal identity (Baker & Walsh, 2020). Social media spaces therefore have real implications for both public health and individual health practices, as they have the capacity to disrupt more traditional sources of health information and expertise (Lupton, 2015), relocating authority and understandings away from professionals to the lay public and influencing how people understand and perform healthful practices.

### **2.2.7 Instagram, Clean Eating and Fitspiration**

Much of the research investigating the relationship between social media and orthorexia has focused on Instagram, a social media platform which privileges the sharing the visual content. Instagram enables users to create an account and share image and video content, which may be edited and enhanced, enabling consumers to also become producers of content themselves (Bruns, 2008). Posts may be captioned by text and accompanied by hashtags which are used to identify, organise and categorise content. The use of hashtags also makes content discoverable (Baker & Walsh, 2018). Community hashtags further enable a posts reach to be extended to other likeminded users, which enables the creation of online communities (Moorley & Chinn, 2014). Users may follow other users accounts and amass followers themselves. Such communities have been described as an intersection between people, practice and community (Boyd, 2011).

By amassing large numbers of followers through the strategic posting of content, some users attain ‘influencer’ or ‘micro-celebrity’ status (Marwick, 2015). Unlike more traditional celebrities, micro-celebrities achieve their status through ‘self-mediating’ strategies (Khamis

et al., 2017), which requires the branding and positioning oneself as a product and selling the image of how they would like to be portrayed to others (Hearn, 2008). This version of celebrity can be performed by anyone with online access. Social media platforms therefore afford 'ordinary' people a platform to become entrepreneurial subjects (Bandinelli & Arvidsson, 2013) where such 'micro-celebrities' of influencers, can share certain representations of their lives, in a manner which appears to be authentic and trustworthy (Berryman & Kavka, 2017).

Instagram has become the platform of choice for a large health and fitness community. Health influencers, form part of this community and have the capacity to influence or persuade large numbers of followers (DeVierman et al., 2017). For example, Kayla Itsines has amassed in excess of 12 million followers on Instagram by posting fitspiration style content, including 'before and after' weight loss images of followers who have undertaken her exercise programs (Kayla Itsines, 2020). Within online spaces, influencers therefore are able to profoundly impact food, exercise and health discourses (Goodman et al., 2017; Sandal, 2018). In this digital space, the apparent authenticity and credibility of an influencer's personal experiential authority and the transformational health and wellness claims of their content, intersect to create the perfect storm for their digital success (Bruan & Carruthers, 2020).

Social media platforms are also designed to seek affirmation through consumers liking and commenting on posts and through metrics such as followers. Thus, specific foods, ways of eating and body representations associated with healthy lifestyles become validated through the number of likes and comments they receive with popular content subsequently likely replicated and reproduced by other posters (Baker & Walsh, 2020). For popular influencers and micro-celebrities, the reach of posted content may be wide. This process elevates certain identities through social validation and comes to represent the values of a particular community (Baker & Walsh, 2020)

However, much of the diet, nutrition and exercise content posted by influencers depicts restricted and regimented food consumption and strict exercise regimes required to achieve or maintain a specific body image (Pilgrim & Bohnet-Joscho, 2019). Content further attempts to build a connection between appearance and perceived wellbeing, which is inclusive of mental health (Pilgrim & Bohnet-Joscho 2019). This is subsequently commercialised to indicate that such goals cannot be achieved without the purchase of specific products. Happiness is seen to be associated with a specific look, implying only those who are beautiful can be happy (Pilgrim & Bohnet-Joscho 2019)



### **2.2.8 Clean Eating**

The term 'clean eating' is highly prevalent on Instagram (48 million posts as at Jan 2021). Whilst there is no single definition of clean eating, a number of dietary theories (e.g. vegetarian, vegan, ketogenic) are grouped under this term, which typically refers to foods considered to be unprocessed or as close to their natural form as possible (McCartney, 2016). Clean eating is further contrasted against foods which are processed or refined, or those which contain sugar, gluten, dairy, red meat, preservatives, additives, chemicals, and pesticides (Nevin & Vartanian, 2017; Goodman et al, 2012). Much of the language surrounding clean eating seeks to dichotomise food as clean or unclean, healthy or unhealthy, with clean food considered to be morally superior and associated with thin bodies (Baker & Walsh, 2020). 'Clean' also affords a morally superior quality to certain foods or ways of eating, whereby anything other than clean eating is therefore dirty by default, and reflective of one being careless with their lives and bodies (McCartney, 2016).

Often the body is presented on Instagram as depicting the positive results of clean eating as evidenced by an improvement in physical appearance, rather than images of clean food itself (Baker & Walsh, 2020). The 'before and after' shot is also used to depict physical weight loss transformations which have resulted from clean eating, with young, toned and thin bodies representative of a healthy appearance (Boepple & Thompson, 2014; Lupton, 2018). 'After' images further serve to illustrate the functional importance of clean eating for this transformational self-improvement process to health and wellness. Such images collectively serve to reinforce the logic of adhering to a clean diet (Baker & Walsh, 2020; Lupton, 2018).

Authors of clean eating content are often presented as health or wellness 'experts', despite lacking formal qualifications (Allen et al., 2018). As such, the potential exists for inaccurate or harmful dietary advice to be communicated to vulnerable consumers who may be at risk for developing disordered eating (Striegel-Moore & Bulik, 2007). Content often idealises a thin appearance accompanied by unhealthy nutritional messaging. Further, many authors self-identify as living with an eating disorder, body image concerns and restricted or restrained eating practices (Boepple & Thompson, 2014). Blog content has similarly been found to promote beliefs and behaviours associated with restricted eating (Lynch, 2010), and advise the elimination of food groups such as dairy, gluten in contravention to nutritional guidelines (Schneider et al., 2013).

Allen et al. (2018) found that women who took on dietary advice from clean eating sites, engaged in more restrained eating and perceived clean eating positively. However, clean eating messaging can also work to justify the adoption of extreme diets, with social media providing the platform for food obsessions to develop (Allen et al., 2018). This is

particularly the case for those with lower health and nutrition literacy (Hardman & Prendergast, 2015). Restrained eating is also a strong predictor for disordered eating (Calder & Mussap, 2015). Adopting unsubstantiated dietary advice from a social media platform in an unregulated environment has the potential to result in negative health consequences such as nutritional deficiencies (Allen et al., 2018).

### **2.2.9 Fitspiration**

'Fitspiration' (the combination of the words fitness and inspiration) or 'fitspo' refers to a particular type of social media content which promotes healthy eating and exercise (Boepple et al., 2016; Boepple & Thompson, 2014). Fitspiration is frequently characterised by appearance based visual content which features prominently on Instagram (Chamacho-Minano et al., 2019). Fitspo content largely consists of posed body images, primarily of women, often engaged in physical activity and wearing tight exercise attire (Lupton, 2013). These images of thin and toned female bodies are often objectified and sexualised (Boepple et al., 2016; Carrotte et al., 2017; Tiggemann & Zaccardo, 2018). Men however are also sexualised in fitspo content and often depicted as shirtless so that their muscular bodies are exposed and highlighted (Lupton, 2018). Body perfection is framed through the presentation of 'active' 'strong', 'fit' and 'healthy' bodies, which are thin but not emancipated and which have been obtained through hard work and 'clean living' (Boepple et al., 2016, Boepple and Thompson, 2014; Chamacho-Minano et al., 2019; Tiggemann and Zaccardo 2018). Similarly, selfies tagged with #fitspo or #fitspiration also privilege and champion this specific body presentation (Boepple & Thompson, 2014; Tiggemann and Zaccardo, 2018).

Self-discipline and self-control are highlighted throughout fitspo content as indicating responsible management of the self (Lupton, 2018; Peterson & Lupton, 2000) which serves to reinforce healthism discourses of individual responsibility (Crawford, 1980). Content commonly consists of visual representations of fit, toned, and strong bodies, which are depicted as being obtained through clean eating, dedication and body work which is empowering (Rich & Maih, 2014). The notion of the ideal citizen is further promoted through such content, as one who is autonomous, controlled, and who make responsible 'proper' decisions (Riley & Evans, 2018).

Baker & Walsh (2020) found that 67% of Instagram posts depicted an individual person, engaging in some kind of physical activity or exercise setting, promoting the notion of self-discipline and self-control. Posts often include inspirational memes, quotes or slogans which are reflective of healthism discourses of individual effort, personal challenge, continued self-improvement, and empowerment and therefore by virtue morally superior (Hodler & Lucas-Carr, 2016; Tiggemann and Zaccardo, 2018). Hashtags assigned to content

such as #cleaneating, #organic, #sugarfree, #determination, #motivation, #healthychoices further serve to support notions that health is an individual responsibility and a choice. The achievement of health is further indicated as residing with the individual, by content accompanied by hashtags such as #noexcuses, #nevergiveup (Baker & Walsh, 2018). Hashtags also obscure the fact that food choices and health behaviours take place within broader life contexts and are influenced by socio-cultural, economic and political contexts (Baker & Walsh, 2020).

Fitspo content has also been described as a form of biopedagogy by (Wright et al., 2006) as it normalises and regulates practices health practices through the provision of knowledge which can influence how people understand themselves and the behaviours they adopt. This relates to Foucault's (1987) concept of bio-power, whereby individuals are regulated and governed through body practices. In this sense, Fitspo content works to produce certain truths about health, fitness and body shapes which encourage people to take action to work on, or improve themselves (Camacho-Minano et al., 2019).

Fitspiration has been described as a 'healthier' alternative to thinspiration, which promotes a thin body, weight loss and is often associated with disordered eating behaviours (Ghaznavi & Taylor, 2018). However, whilst such content does have the ability to motivate and inspire the adoption of healthy lifestyles, fitspo has also been associated with a number of problematic outcomes. The focus on body appearance presents a limited range of acceptable body shapes, with the presentation of both thin and toned bodies making this idealised body shape harder to obtain (Tiggerman & Zaccardo, 2018). Despite appearing to endorse healthful practices, fitspiration images have been associated with negative appearance self-esteem, lower body satisfaction and lower mood (Camacho-Minano et al., 2019; Tiggemann & Zaccardo, 2015). Body image issues and disordered eating has also been reported in similar manner to those elicited from 'thinspiration' with both containing content which reflects restricted eating, thinness, body weight and guilt surrounding eating (Boepple & Thompson, 2016; Rodgers et al., 2016). Uhlmann et al. (2018) concluded that the drive for fitness in line with 'fitspiration' content, was not healthier than thinspiration in terms of disordered eating outcomes, with body dissatisfaction a risk factor for disordered eating (Franko & StriegelMoore, 2018).

### **2.2.10 Social Media and Disordered Eating**

Unsurprisingly, a strong relationship between social media, body image and disordered eating has been established (Aparicio-Martinez et al., 2019; Holland & Tiggemann, 2016). Social media has been found to amplify exposure to sociocultural health and beauty ideals and therefore has been implicated in the development of disordered eating

due to their perpetuation of modern western ideals of unattainable feminine beauty (Valente et al., 2020; Tiggemann, 2011). Social media usage has been associated with greater thin ideal internalisation, appearance comparisons, drive for thinness and weight dissatisfaction (Tiggemann & Miller, 2010; Tiggemann & Slater, 2013). This has been found to result in body dissatisfaction and disordered eating in women (Grabe et al., 2008) together with feelings of shame, inadequacy, anxiety experienced by those whose bodies do not confirm (Hesse-Biber et al., 2006, Whitehead & Kurz, 2008). Internalisation of the thin beauty ideal has also been linked compulsive exercise and body image disturbance (Homan, 2010).

A range of social media usage variables have further been implicated in body image concern and disordered eating (Holland & Tiggemann, 2016), such as duration of use (Mabe et al., 2014; Tiggemann & Miller, 2010; Tiggemann & Slater, 2014) frequency of use (De Vries et al., 2016) and the number of 'friends' on Facebook (Kim & Chock, 2015; Tiggemann & Slater, 2014). Facebook use has been associated with thin ideal internalisation, body dissatisfaction, body surveillance and disordered eating (Tiggeman & Slater, 2013; Meier & Gray, 2014; Mabe et al., 2014). Meier & Gray (2014) similarly found that photo-based engagement on Facebook was related to body dissatisfaction and disordered eating. Instagram use also has been associated with higher orthorexic tendencies (Turner & Lefevre, 2017). Although the majority of research has focused on women, men are also impacted by sociocultural influences (Culbert et al., 2015), with media exposure to idealised bodies and weight loss pressures have also been found to predict body-image concern in men (Hausenblas et al., 2013). Together, research to date indicates that visual, appearance related content characteristic of social media platforms, is most impactful with regard to body image and the development of disordered eating (Tiggerman & Zaccardo, 2018).

Sociocultural theoretical models have sought to incorporate social influences such as social media fitspo content, on understandings of body dissatisfaction and disordered eating development. Further, social media provides an extensive platform for comparisons to be made between one's own body and the thin, toned aspirational, yet mostly unattainable, bodies presented by influencers, celebrities and fitness models (Carrotte et al, 2015; Ghaznavi & Taylor et al, 2015; Santarossa et al., 2019).

Sociocultural theories (Thompson et al., 1999; Tiggemann, 2011) propose that women and girls internalise pervasive media representations of the thin ideal, which despite being aspirational are also unattainable for most women, resulting in body dissatisfaction (Ata et al., 2007; Keery et al., 2004; Stice, 1994; Tiggemann, 2002). These unrealistic portrayals of beauty ideas further encourage women to internalise such representations and compare themselves to the presented ideals. As a result, internalisation and appearance comparisons

are indicated as causal mechanisms for the development and maintenance of body dissatisfaction (Keery et al., 2004; Stice, 1994; Stice et al., 1994).

Objectification theory (Fredrickson & Roberts, 1997) is another framework which has been used to explain the relationship between body, disordered eating and media. Objectification theory proposes that in Western cultures, the female body has been socially constructed as an object to be observed and evaluated primarily upon appearance. Further, the ongoing representation of beauty ideals which are often sexualised, encourage women to self-objectify and constantly surveil and monitor their own their own bodies and appearance.

According to such theoretical perspectives, underlying processes of internalisation, comparisons, self-objectification and body surveillance, are overtime considered to result in body dissatisfaction and disordered eating (Holland & Tiggemann, 2016). However, whilst such models do incorporate social influences on the individual, they are still largely positivist in orientation, and work to place responsibility for body dissatisfaction and disordered eating development back on the individual. Wider sociocultural and political contexts within which experiences are situated are still ignored, with social media influences on dietary and exercise behaviours left decontextualised, under explained and insufficiently unaccounted for.

### **2.3 Research Aims**

In comparison to other eating disorders, orthorexia has received little attention to date despite 'orthorexic' behavioural patterns being regularly observed in clinical settings (Bratman & Night, 2000). This research study therefore intended to expand the currently limited qualitative research base and aims to investigate the motivations and meanings individuals articulate for adopting and engaging in diet and exercise practices which, whilst considered to be 'healthful', take on such a high level of significance for the individual that they may instead become problematic or result in dysfunction for the individual. Findings are further intended to increase current understandings of what participants identify as the demarcation between 'healthful' versus problematic (or 'orthorexic') health practices, and gain insight into the contribution social media content plays in constructing and maintaining online environments which encourage and perpetuate 'orthorexic' beliefs and behaviours.

More specifically, my research questions were:

1. What do individuals articulate as their motivations for adopting and engaging in daily health practices which have become highly significant and/or problematic in their lives?

These include practices which have the potential to, or have been labelled “orthorexic.”

2. What meanings do individuals ascribe to these health practices in their daily lives?

3. “According to participants, what role(s) do social media platforms such as Instagram play in encouraging and perpetuating behaviours and beliefs which have been labelled as “orthorexic”?”

## **Chapter 3 - Methods**

### **3.1 Research Design Overview**

This chapter provides an overview of the qualitative research design adopted and rationale for the selected data collection methods and analysis process. Data was collected via semi-structured interviews and a social media 'go-along' with 15 participants all residing in Auckland, New Zealand. Data was analysed using reflexive thematic analysis (Braun & Clarke, 2006; 2012) with a post structuralist theoretical lens informing analysis. Whilst reflexivity is more thoroughly discussed later in this chapter, various reflexive practices I engaged with throughout the research process are also sequentially discussed under the various headings that follow. This is similarly the case for ethical considerations, which have also been discussed sequentially under the relevant research process headings.

### **3.2 Participants**

#### **3.2.1 Recruitment**

Participant recruitment took place between the months of May to August 2020. An invitation to participate in the format of a digital poster graphic (see Appendix A) was posted on the researcher's personal social media platforms (Facebook, Instagram and Twitter), the Massey University Nutrition and Dietetic Centre Facebook page and various Massey University student Facebook groups. This post was subsequently shared by friends and other interested parties to their own personal and professional pages such as the NZ Eating Disorders Clinic, to increase distribution. Hard copy flyers (see Appendix B) were additionally placed on notice boards throughout the Massey University Albany campus and Massey University Recreation Centre, also located on the Albany campus. Permission to advertise was obtained by both the Massey University Nutrition and Dietetic Centre and the Massey University Recreation Centre prior to poster distribution (see Appendix C).

Previous research has indicated higher incidence of orthorexic symptomology in student populations (Missbach et al., 2015; Varga et al., 2014). More specially, students studying health related fields such as dietetics (Asil & Surucuoglu 2015), nutrition (Bo et al., 2014) and exercise population (Segura-García et al., 2012) have reported higher ON symptomology. Such populations were therefore primarily targeted throughout the recruitment process, in addition to regular gym attendees, who have additionally been correlated with higher orthorexic behaviour (Segura-Garcia et al., 2014).

Initially, I sought to engage with 7-10 participants, as per suggested participant numbers indicated by Braun & Clarke, (2013) for a small to medium sized masters analysis project and bearing in mind the time and resources available to conduct the research

(O'Reilly & Parker, 2012). However, due to the unexpectedly high volume of inquiries received from interested potential participants, the number of participants was subsequently increased to 15. This level of participation provided a large enough number to enable experiential diversity to be captured and suitable data depth to allow patterns to be established across the data set, but also small enough to as retain a rich and complex focus on individualised experiences (Braun & Clarke, 2013).

Participants received one \$20 Countdown voucher for each of the two interview sessions they attended as a token of appreciation of their time. One participant elected not to receive vouchers and two participants requested the value of their vouchers be instead donated to Food Bank ([www.foodbank.co.nz](http://www.foodbank.co.nz)).

### **3.2.2 Inclusion / Exclusion Criteria**

Participants were individuals who responded to research advertising as self-identifying as engaging in 'healthful' dietary and exercise practices which had become highly significant and/or problematic for them in their day to day lives. Participants did not need to have been told they have, or have been diagnosed with "orthorexia" to participate, nor were any psychometric measures adopted to indicate the presence of orthorexic symptomology.

Respondents who followed a medically prescribed diet for a previously diagnosed health condition (e.g., celiac disease) were not considered suitable participants and were therefore excluded. The rationale for exclusion was that elimination of food groups (such as gluten as required for celiac disease) would therefore not be due to personal beliefs or motivations, but necessary for medical reasons. Such motivations could therefore differ from participants making conscious choices to eliminate gluten from their diet for idiosyncratic health beliefs or weight loss motivations, the specifics of which this research aims to ascertain.

Participants were required to be over 18 years of age. The minimum age cut off was guided by the assumption that adult participations would be more in control of their food choices, more likely to be purchasing their own food, preparing their own meals and therefore more likely to be engaging in healthful behaviours more reflective of their own beliefs, rather than the family unit. It was assumed that individuals under 18 years of age were more likely to be living at home with their parents, have less choice over their food intake and perhaps less likely to be purchasing or preparing their own food. This decision was subsequently supported by a number of participant responses indicating that moving out of home, did indeed align with transitions in their dietary practices, whereby eating with the family no longer constrained how and what they consumed.



The Auckland geographic area was initially specified with the expectation that face-to-face interviews would be conducted in the city where I reside. However due to Covid-19 restrictions and social distancing requirements, interview protocols were subsequently adapted to Zoom interviews. Recruitment efforts however remained in the Auckland region, resulting in all participants residing in Auckland. No further participant demographics were specified for inclusion. No participants were previously known to the researcher.

### **3.2.3 Participant Demographics**

Demographic information was collected from participants prior to the commencement of the first interview. This information was collected to show the diversity of the sample and to illustrate the strengths or limitations of what the data can claim (Braun & Clarke, 2013). All participants were asked open ended questions about their age, gender identity, ethnicity and occupation to avoid the possibility of incorrect assumptions or categorisation (see Appendix D). The average age of participants was 28.5 years, with ages spanning 20 to 43 years. The participant group consisted of 11 people who self-identified as women and 4 who self-identified as men. Participants represented a range of ethnicities; New Zealand European/Pakeha (8), Malaysian (1), Bangladeshi (1), Middle Eastern (1), English (2) and Australian (1). A wide range of occupations was also represented across the group (sales, finance, researcher, lecturer, gym worker, office worker, administration, barista, chef, psychology students and nutrition/dietetic students). A participant demographic summary is provided in Table 2.

### **3.3 Cultural Responsiveness**

Cultural consultation was sought prior to ethics approval to ensure all relevant bicultural ethical standards were being met. Whilst a wide range of cultural identities were represented by the participant group, no responses were received by Māori. All participants were fluent in English and translation services were not required. Due to the cultural demographic of the participant group, further bicultural consultation or bicultural specific research requirements were not required and therefore not undertaken.

### **3.4 Procedures**

Participants who had viewed recruitment material and were interested in participating or obtaining further information initially responded to me via email, text message or Facebook message to express their interest. An information sheet (see Appendix F) was subsequently provided to all respondents, together with any additional information they may

have requested. After having read the information sheet and agreeing to participate, Zoom interview sessions were scheduled at the participants convenience.

Written informed consent was obtained prior to interview commencement online via a Qualtrics survey link. At the start of each interview session, participants were taken through the information sheet, consent processes and asked if they had any questions. After interview commencement, ongoing consent was obtained through the interview process. Participants were asked if they would like to select a pseudonym to protect their privacy, however all participants declined and were happy to have their real names used. However, to ensure that the ethical standards of privacy and confidentiality were maintained, I considered it ethically prudent to subsequently allocate pseudonyms to participants myself. This decision was made limit the potential for retrospective harm to participants. Should participants not feel comfortable with the analytical frame of the research, or how they had been portrayed or their experiences interpreted throughout the analysis, their stories and experiences could therefore remain anonymous and they were not identifiable.

### **3.4.1 Data Collection**

Data collection commenced in May 2020, with the final interview taking place on August 14<sup>th</sup>, 2020. Data was collected via two separate online (Zoom) semi-structured interview sessions held with each participant (see Appendix E). Semi-structured interviews were selected due to their ability to enable participants to provide responses which are individualised in nature and allow for an emphasis to be placed on the depth of the information obtained (Murray & Chamberlain, 1999). Semi-structured interviews are further advantageous in that they allow for greater rapport to be established between the researcher and respondent and enable a flexible coverage of topics which allow for transition into additional areas of interest (Smith, 1995). The ability to use probes and engage active listening skills with semi-structured interviews is also advantageous to ensure that further information can be elicited and expanded upon where required (Given, 2012).

In all but two instances, second interviews were conducted approximately one to two weeks following the initial interview. The specified delay between first and second interview were intended to allow for the transcription process for first interview to be completed before the second interview took place and to allow for both participant and interviewer reflection to occur before meeting again and follow up on topics of interest, as well as assisting participants to feel more comfortable sharing personal information. Where participants had indicated lower levels of social media engagement and in particular, where hesitation towards being able to contribute sufficiently to justify a second interview were indicated, both interviews were conducted concurrently to alleviate participant concerns. Interviews ranged

in duration between 18 and 57 minutes, with the average interview times of 40 minutes (interview 1) and 20 minutes (interview 2). Male participants widely reported low social media engagement and therefore their second interview duration was significantly shorter than female participants. All interviews were audio recorded directly to PC and backed up immediately upon interview termination and password protected.

Each interview was subsequently transcribed to verbatim for analysis. Completed transcripts were then re-read alongside the audio to ensure accuracy and data integrity. Seven participants elected to receive a copy of their transcripts to review. Transcripts from each of the two interviews were provided simultaneously, with participants allocated a two-week time frame to provide feedback, clarification or make any desired amendments. No requests for changes or amendments were received by participants with all transcripts subsequently considered final and approved for analysis.

### **3.4.2 Covid-19 and Online Data Collection**

Due to the Covid-19 pandemic, related lock-down periods and social distancing restrictions employed by the New Zealand government in 2020, semi-structured interviews were not able to be held face-to-face. Zoom, a cloud-based video conferencing platform (Zoom Video Communications Inc., 2021), therefore provided an alternative platform which enabled the collection of interview style data, where face to face data collection was not possible (Hanna & Mwale, 2020).

A number of notable advantages became apparent through the use of Zoom for interviewing purposes. Interviews were able to be scheduled with greater flexibility and increased convenience for participants, allowing interviews to be joined via phone, tablet, or laptop from any location (Archibald et al., 2019). Zoom also enabled interviews to be cost effective for both interviewer and participant, with removal of travel time to attend in person interview sessions and enabling participants to participate with little time or cost involved (Hanna & Mwale, 2017). Further, risk to safety for both research and participant were eliminated with the avoidance of unfamiliar interview locations and increased privacy. In light of the Covid-19 restrictions in place at the time of ethical approval and data collection, Zoom was therefore an optimal alternative to in person interviewing as it maintained the ability to visually see and interact with the participants in real time (Hanna & Mwale, 2017).

However, slow internet speeds in some participant locations however meant two interviews had to be conducted with the video function disabled, to enable the interview to proceed by audio only. Difficulties reading verbal cues due to technical / connectivity issues (Weller, 2014) were minimally disruptive at times, however all challenges were negotiated well between myself and participants and this did not significantly reduce the quality of the

interview experience. Rapport was established quickly and easily, with all interviews flowing well with positive engagement. Participants were observed as relaxed and at ease during the interview process. No instances of participant distress or risk were observed. The majority of participants quickly positioned themselves as experts and were extremely enthusiastic and motivated to share their knowledge, opinions and experiences which was hugely beneficial to the data collection process.

### **3.4.3 Social Media Go-Along Methodology**

The second interview incorporated a social media 'go-along' methodology (Jørgensen, 2016; Hine, 2015; Møller & Robards, 2019), which entailed participants interactively viewing, narrating and discussing their thoughts, feelings and reactions to content they had purposefully identified and nominated for discussion with me prior to the interview. This methodology was selected due to the relationship between social media use (primarily Instagram) and higher ON symptomatology (Turner & Lefevre, 2017) and was intended to encourage real time discussion about how social media content impacted participants own dietary and health beliefs and practices. The 'go-along' was initially intended to be conducted in person with participants, however, Zoom's desk top sharing function enabled participants to share pertinent social media pages with the researcher and discussion to develop during such content 'scrolling's' successfully within the Covid-19 context.

The use of a 'go-along' provides a number of strengths by including verbal, sensorial material and kinetic elements which blend together to enhance understandings whilst also creating a situation of knowledge co-production (Jørgensen, 2016). It combines the act of using social media (scrolling, looking, and interacting) with simultaneous discussion, giving the participants the ability to act as a 'tour guide' of their chosen content. In this regard, it can be empowering for participants as they retain control of the discussion and its content, through the selected examples they have chosen for discussion. A semi-structured interview schedule (see Appendix E) further acted as a thematic media touring invitation (Jorgeson, 2016) from a researcher perspective, by ensuring that discussion remained adequately aligned to my research questions.

A number of limitations were, however, observed with the social media 'go-along' methodology. Desktop sharing was not enthusiastically embraced by all participants, with privacy concerns appearing to be the reason for the reluctance to engage. In such instances, participants preferred to talk about content and specific accounts or pages of interest rather than granting access to their personal feeds. A number of participants offered to instead provide links to accounts discussed via email, whilst others held their smart phones up to the Zoom video camera to share the pages they were referring to. In other instances, I shared

my screen and searched their requested pages through my own Instagram account, with participants guiding the scrolling process and identifying which images they wished to discuss. Whilst the intended protocol was therefore not always adopted as initially intended by all participants, the resulting interview discussion was not negatively impacted. Interview engagement remaining strong despite the range of adaptations adopted by participants and myself to accommodate their preferences and privacy.

#### **3.4.4 Data Analysis**

Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2006; 2012) was adopted for data analysis. RTA is ‘a method for systematically identifying, organising, and offering insight into patterns of meaning (themes) across a data set’ (Braun & Clarke, 2012, p. 57). By concentrating on meanings across a data set, the researcher is able to make sense of both collective and shared meanings and experiences (Braun & Clarke, 2012).

One of the key benefits of TA, is its flexibility. TA does not specify a particular ontological or epistemological framework, it is not tied to a specific theory, nor does it specify how data should be collected. Further, due to TA’s ability to facilitate the exploration of ‘patterns of experience’ within and across a dataset, it was considered a useful method for investigating lived experiences of high dietary and exercise engagement. TA therefore enabled a combination of semi-structured and social media ‘go-along’ interview content to be transcribed and subsequently analysed through a post structuralist lens. My analysis combined elements of both experiential and critical TA, as detailed below through the 6 phases of thematic analyses (Braun & Clarke, 2006; 2012).

##### *Stage 1 – Familiarising Yourself with the Data*

Familiarisation with the data commenced with the reading and re-reading of interview transcripts. Throughout this ‘immersion’ in the data process, initial thoughts, ‘noticings’ and overall impressions were both written on the transcripts themselves and in the research journal. A number of commonalities between participants experiences initially became apparent and these were noted, together with any discrepancies between experiences or contradictions.

This phase additionally involved starting to read the “data as data” (Braun & Clarke, 2012). Rather than considering only surface meanings, a more active engagement with the data commenced whereby further thought was provided to what the data actually means. I was guided during the process by the questions suggested by Braun and Clarke (2013) “how does the participant make sense of their experience, why might they be making sense of their experience in this way, what assumptions do they make about the world” (p. 205).

### *Stage 2 – Generating Initial Codes*

An inductive “bottom up” approach was used whereby coding development was strongly linked to the explicit data content of the entire data set. This approach allowed for participants experiences and meanings to be reflected in the coding, with codes aligned to, or mirroring participants own use of language. Interview 1 and interview 2 transcripts were initially coded separately due to their different research question focus. Two ‘master coding documents’ were created, within which all instances of similar codes and their related text excerpts were collated together. Codes that were perceived to be similar and potentially important, such as ‘health as weight’, ‘dietary transgressions’ and ‘exercise as self-care’ were grouped together. Codes that did not naturally group together were collated into a miscellaneous category. These documents were then reviewed to ensure coding accuracy and to allow for second thoughts after having gone through the data set once.

### *Phase 3 – Searching for Themes*

After reviewing the master coding documents multiple times, codes and their associated data extracts were collated into more substantial potential central organising concepts. These initial central organising concepts contained similar, related, or overlapping ideas and concepts which grouped together meaningfully upon initial organisation. This process was repeated, with further consideration then provided to proposed themes and resulted in the reshuffling of some groupings. Visual thematic mapping was also used to aid with concept development and to further explore relationships between and across the data. A number of initially proposed concepts were later collapsed into each other where they were found to be in alignment. Exceptions or contradictions to organising concepts were also noted. The boundaries of each proposed theme were also considered; what were the parameters of inclusion and exclusion, and did each theme hold sufficient and meaningful data to justify itself (Braun & Clarke, 2012; 2013). It was difficult to set aside some of the features of the data which were extremely interesting in themselves, however not relevant or meaningful to the research questions. Codes and potential theme which did not answer the research question were also collated under miscellaneous at this time. This category was retained however, in case they later become relevant during the analysis process.

A number of candidate themes resulted from this process and again thematic mapping was used to visually depict proposed themes and their relationships to each other (Willig & Stainton Rogers, 2017). Reflexivity was also particularly important during the analysis process. Biases and preconceived ideas which had the potential to influence how the data was being read or interpreted were identified and acknowledged.

### *Phases 4 and 5 – Reviewing Themes and Defining and Naming Themes*

This phase of analysis involved considerable “quality control” (Terry et al., 2017) through the process of revision and redefinition of initial candidate themes. Initial themes were again reviewed against the master coding documents to ensure data integrity, that the themes worked in relation to each other and the selected text excerpts aligned. Significant reorganisation of themes then resulted in the further collapse of some themes, the creation of two new key themes and an overarching theme. Care was taken to ensure that each theme was distinct from each other yet still related and that the research questions were being answered (Willig & Stainton Rogers, 2017). Themes were also considered in relation to the entire data set. Excerpts were rechecked for their suitability, with some quotes swapped out to accommodate ongoing thematic adjustments.

Working theme names were also reconsidered for their ongoing appropriateness. Many theme names had been chosen directly from participant responses and were reassessed for their suitability to capturing the theme effectively. Best endeavours were made to ensure that the resulting themes and theme names were both meaningful and reflective of the data itself (Terry et al., 2017). Throughout phase 4 and 5, analysis also transitioned from being data driven, to a theoretically informed interpretation of the data.

As coding and deeper analysis are never fully complete (Lowe et al., 2018 ) there is not necessarily a predetermined or obvious end point, with interpretative judgements having to be made as to when to move between each phase of the analysis process (Braun & Clarke, 2019). Given the time frame of the project, it was challenging at times not to be able to allocate more time to analysis and further explore what I felt was a very rich and interesting data set. I was also mindful that my interpretations were only one version of ‘reality’, and that others from different experiences and perspectives, may offer different interpretations (Clifford & Marcus, 1996).

#### *Phase 6 – Producing the Report*

The final stage of analysis was undertaken as a distinct and defined process of refinement, whereby the data, analysis and relevant literature were interwoven to produce a combination of illustrative and analytic results commentary (Terry et al., 2017). Some findings were considered more optimally presented in an illustrative manner, whereas other more pertinent sections excerpts benefited from an analytical approach (Braun & Clarke, 2012).

### **3.5 Researcher Information**

I am a middle-aged, middle-class, Australian born, New Zealand based, white heterosexual female master’s student. I situate myself as both an insider and outsider of this research. An insider due to my lived experience of orthorexia, however I also consider

myself to be an outsider, as I conduct this research from a place of recovery, where for the most part, I find it exceedingly difficult to identify with my previous extreme eating and exercise beliefs and behaviours.

My personal experiences of orthorexia align with the proposed diagnostic criteria. Following a partial gastrectomy for the removal of a gastrointestinal stromal tumour (GIST), I experienced significant weight loss and found my fasted state during this time to be a mentally and physically positive experience – I felt euphoric, extremely “pure” and light, almost spiritual. Upon discharge, I was provided with little guidance as to how to eat ‘normally’ with a smaller stomach and found eating more than a few mouthfuls of food painful, but also terrifying as I feared tearing my newly stitched stomach or worse, that the tumour would return. This transitioned into years of highly restricted eating (only foods personally considered ‘nutritionally superior’ enough to eat) and compulsive exercise behaviours which were undertaken in the pursuit of ‘optimal health’. For me, such behaviours were however accompanied by the fear of gaining weight, which remains a contested diagnostic criterion for ON. Whilst my dietary and exercise beliefs and behaviours were most definitely ‘orthorexic’, according to current DSM-5 diagnosis they would however, also have extended into other eating disorder categories due to weight concern.

A reflexive journal was kept throughout the research process for documenting analytic insights, personal reflections, questions, potential concept connections and possible biases to ensure a transparent audit trail for decision making (Buetow, 2019). The journal was further useful during interviewing for noting follow up questions in the second interview, or where clarification would be useful. Whilst personal experiences may in some instances help enrich data interpretation, they are not considered to be systematic engagement with the data itself and such thoughts were usefully journaled. Instances of reflective practices through the research process are also outlined throughout the method section as discussed they were undertaken throughout this process.

When commencing this research, my knowledge of orthorexia was limited to the individual aspects of orthorexic beliefs and behaviours. It was not until I engaged further and more deeply with the literature, that I became aware of the sociocultural contexts within which highly significantly health practices were being enacted. This somewhat changed the shape and direction of my research to include a more critical element to what was initially intended, perhaps naively, to be a more experiential piece of research. Resultingly, a post structuralist theoretical framework was used to interpret and analyse participants experiences of highly significant diet and exercise behaviours.



### 3.6 Reflexivity

As qualitative research is contextual, it is essential to acknowledge factors which may influence the researcher, the research process and the knowledge generated, so that the relevance and applicability of findings can be transparently determined (Dodgson, 2019). Reflexivity involves the researcher consciously turning the research lens back onto themselves, recognising their situatedness, personal history, values, biases, assumptions and making these visible. It further requires taking an active responsibility to acknowledge how you may be personally impacting and shaping the research process, interpretations and resulting outcomes (Berger, 2015; Bradbury-Jones, 2007). In the following section, I firstly situate myself in relation to this research, referring to Hellowell's (2006) discussions of the insider/outsider, and then discuss the functional aspects of reflexivity which were adopted throughout the research process.

Merton (1972) describes insiders as "the members of specified groups and collectivises or occupants of specified social statuses; Outsiders are the non-members" (p.21). However, there are also shades of insiderism and outsiderism, which the researcher may transition between during the research process (Hellowell, 2006). For example, levels of understanding and empathy may alter as one moves from being an insider to an outsider during the analysis process. Hellowell argues that ideally the researcher should be both inside and outside the perceptions of the 'researched' as this enables both empathy and alienation, a combination of which is considered useful for qualitative researchers (Hammersley, 1993).

A range of inside benefits were observed during the research process. I was able to approach this research with a level of knowledge and understanding that I felt produced strong rapport with participants during the interview process. It further allowed me to gently probe during discussions and perhaps better understand some of the implied meanings behind certain responses or lack of responses (Berger, 2015). However, I was also cautious of the disadvantages of being an insider and the risks associated with the blurring of boundaries and the potential to impose my own values or beliefs on participants, where it was imperative to let them tell their own unique stories (Drake, 2010). The many transitions between considering myself to be in or out at different junctures of this research have been most interesting to observe and reflect upon.

Throughout the data collection process, I remained conscious of how my situatedness may potentially impact my interactions with both participants and their responses. My personal disclosure strategy throughout the recruitment and interviewing process was to not disclose my insider status to participants as it did not seem appropriate or necessary to share my history in most instances. This strategy additionally removed any concerns about

how much to disclose or any issues which may arise from disclosing too much. Further, given participants were self-identifying as high engagers of dietary practices, I did not wish to assume that high engagement was necessarily experienced by participants as disordered or problematic. Indicating that some 'healthy' behaviours had historically been problematic for me may have been confrontational or resulted in feelings of discomfort for participants. In one instance where disclosure did take place, it manifested in expressions of understanding and empathy, where the participant described experiences were acknowledged as shared and understood (Oakley, 1981).

Reflexivity was particularly important during the analysis process to account for subjectivity in reading and interpreting data. During the generation of initial codes, I noted that coding would inevitably be influenced to some degree by my personal experiences and education to date, making particular meanings or experiences more salient or obvious. As noted by (Gerstl-Pepin & Patrizio 2009, p. 303) "each interaction with the data, beginning with the collection results in some form of analysis by the researcher. These present opportunities to absorb, react to, question, agree with or make connections with what the researcher knows". The choice to use an inductive bottom-up approach for coding and theme generation, was therefore made to help bracket any preconceived ideas that I may have about what was important and let the data be the basis for analysis structure. It was important to me and for the fidelity of the research, that I establish how people were articulating their own experiences and understandings of their dietary and exercise behaviours.

To some degree it was impossible not to compare my own experiences with those of participants. There were notable similarities with my own experiences, but also many differences and departures which were just as pertinent in shaping the overall patterns observed across the data set. Notably there were also varying levels of participant insight and disclosure, and differing levels (or severities) of dietary engagement which were perceived subjectively (both positively and negatively) which also elicited a nuanced range of responses and experiences which were truly valuable in understanding how participants positioned themselves in terms of their health practices and how such practices shaped their identities.

### **3.7 Ethical Approval**

Ethical approval was granted by the Massey University Human Ethics Committee, Northern prior to commencing participant recruitment (see Appendix G). Relevant ethical issues are addressed throughout the method section under the relevant section headings.

### **3.8 Theoretical Framework**

This research adopts a post structuralist theoretical lens to explore participants experiences of 'orthorexic' dietary and exercise practices. Although health practices are taken up in an individualised manner (Bisogni et al., 2012), they not undertaken in a vacuum. As such, adopting a poststructural theoretical framework therefore situates participants' lived experiences within a specific sociocultural, economic and political context (Lather, 2007; Miller, 2005). This research is situated within the current sociocultural context, whereby extreme diet and exercise practices are problematised due to their potential for negative health outcomes and the impairment which may result from the uptake of extreme health behaviours (Håman et al., 2015).

This framework further enables discourses which regulate knowledge, practices, subjectivities and experiences, to be explored. As outlined within the literature review, healthism discourses are highly relevant to the study of orthorexia. By considering how health, body and disordered eating discourses are being produced, reinforced, contested and resisted by people who self-identify as engaging in highly significant dietary and exercise practices, such a framework enables a greater understanding of how the motivations and meaning individuals ascribes to their own dietary and exercise practices are understood in the many ways that people do health.

#### ***3.8.1 Poststructuralism and the Constructive Nature of Language***

Essentialist approaches conceptualise the person as a unique, rational, coherent, stable originator of their own feelings, behaviours, experiences and meanings. In contrast, poststructuralism adopts as 'anti-humanism' perspective, whereby the essence of the person is relocated into the social realm (Burr, 2015). As such, to understand the social world, we must look to the linguistic space within which people interact, as it is here that the person is considered to be produced through language and social interaction (Burr, 2015). From a poststructural perspective, language is therefore considered to be constructive of reality (Parker, 1990). Poststructuralist perspectives view the world as having underlying structures, which whilst not directly visible, influences how individuals think, talk and behave within social situations (Scott & Morrison, 2015).

Poststructuralist approaches enable taken for granted meanings of experience to be challenged. The constructive nature of language considers the person and their identity to be in constant flux, dependent upon situation, circumstance and who they are interacting with. Further, meanings are never considered to be fixed or permanent, they are always contestable and subject to change over time and context (Burr, 2015). What may be considered as experience, is also situated within the broader sociocultural, and historical

context (Smith & Watson, 2010). Scott (1992) argues that experience will always be influenced by specific sociocultural and historical circumstances and politically interpreted. This renders experience as open to a multitude of possible meanings, which has implications for how the person is understood, their identity and the possibilities available for personal and social change (Burr, 2015). Experience therefore is not singular, with a singular truth not possible due to the complexity within individual experiences as experience itself is discursively constructed and then interpreted within a particular time, location and context, for a specific audience (Chase, 2005; Miller, 2005).

By adopting a poststructuralist lens to explore experiences of high dietary and exercise engagement, this framework therefore enables health beliefs, practices and understandings to be considered and interpreted beyond biomedical notions of the individual. It enables the wider social, cultural and political milieu, within which health beliefs and behaviours are constructed, affirmed and taken up to be considered and for alternative interpretations and understandings to be uncovered. Rather than constructing orthorexia as an individualised pathological problem, by providing situating highly significant health practices within the wider sociocultural context where healthism discourses shape understandings of health, this theoretical approach therefore enables alternative explanations and understandings as to why people engage with health practices to levels which have the potential to become problematic, and how such practices may come to be justified, normalised and socially supported.

### **3.8.2 Discourses**

Discourses are described as social 'practices which form the objects of which they speak' (Foucault, 1972, p49). Objects are therefore constructed by discourses and realised through an assemblage of discursive social practices which include ideas, objects, activities and events (Prior, 1989). More simply, a discourse describes 'a set of meanings, metaphors, representations, images, stories, statements and so on that in some way together produce a particular version of events. It refers to a particular picture that is painted of an event, person or class of persons, a particular way of representing it in a certain light' (Burr, 2015, p. 74-75). Meanings are also dependent upon the discursive context, or reference frame within which language is embedded and from which meanings can be interpreted (Burr, 2015). Of primary interest to the study of dietary and exercise behaviours characteristic of orthorexia, are healthism discourses which position the individual as responsible for their own health (Crawford, 2006), as such discourses shape how people understand health and the health practices they engage in.

Discourses are productive and construct certain realities in specific ways (Wetherell & White, 1992). Poststructuralism considers how available discourses influence what we can say, think or do. Discourses incorporate both language and social practices and for any object, there may be a variety of different discourses, each emphasizing different aspects and resulting in different issues and implications. Each discourse, therefore, constructs and represents the world in a different way, and makes different truth claims (Burr, 2015). Some prevailing discourses come to be considered more 'truthful' than others, depending upon their historical and cultural situatedness. Such prevailing 'knowledges' are tied up with power which has the potential to influence social practices, endorsing certain ways of acting and marginalising alternatives. For example, weight is currently constructed as a fundamental measure of health. Weight has also become the lens through which people understand themselves with BMI measurements working to create categories which assign value as to who is considered to be healthy (normal) and who is not (overweight/obese) (Riley et al., 2018). Alternative discourses, however, offer different possibilities so that dominant or prevailing discourses are always subject to resistance and contest (Burr, 2015). For example, Health at Every Size (HAES) provides an alternative paradigm whereby health is conceptualised in other ways which promote body positivity, exercise for enjoyment and intuitive eating (Riley et al., 2018).

Foucault considered power to be productive rather than repressive, with institutional and cultural practices enabling certain discourses to become more prominent. It is such discourses which are considered to produce and control the individual through their 'disciplinary power' (Foucault, 1976). Foucault (1979) provides the example of Bentham's Panopticon to explain how surveillance as a form of social control has been internalised whereby people come to monitor and control their own behaviours in line with what is considered to be 'normal'. Foucault (1976) notes the transition away from 'sovereign power' to 'disciplinary power' in western societies as a means of populace control and management which he considers to be more effective and efficient. Disciplinary power describes how people are disciplined and managed through wilfully subjecting themselves to the scrutiny of experts, themselves, and others (Burr, 2015).

However, individuals do not recognise this as a visible form of social control, and 'power is tolerable only on condition that it mask a substantial part of itself. Its success is proportional to its ability to hide its own mechanisms' (Foucault, 1976, p.86). Transitions away from sovereign power to 'disciplinary power' has seen a move to population control through self-monitoring processes. People engage in this process willingly and consider their self-monitoring and surveillance to be by choice and for personal benefit. Recent technological advances such as mobile phones and social media platforms further support

concerns that we reside within a surveillance society (Kingsley, 2008). By positioning individuals as responsible for their own health, healthist discourses therefore work to produce good moral citizens who engage in self-discipline, self-surveillance and actively work to identify and manage potential risks to health (Crawford, 2006). Within this context, high dietary and exercise engagement can be understood, as can the desire to maintain a 'healthy weight'. However, such discourses may also have implications for those who take public health messaging too far, and for whom highly significant dietary and exercise engagement may become problematic.

Discourses are also tied to institutions and social practices, which shape and structure daily lives. In Western cultures, currently prevailing discourses represent the person as being individually motivated within a capitalist market economy. Discourses structure society through engagement with everyday social practices. Social structures and practices are further supported and encouraged through state level control and legislation and other powerful groups who may influence which discourse become more truthful than others (Burr, 2015). As such, discourses constitute certain power relations, which also work to normalise certain kinds of social regulation (Foucault, 1979). In this sense, discourses provide a framework from which people can understand their beliefs, behaviours, experiences, and those of others, all of which are connected to social structures and the practices supported and influenced by dominant power relations at any given time (Burr, 2015).

### **3.8.3 Subject Positions**

Within discourses, are implicit subject positions which an individual may accept or resist, and which afford certain rights and obligations. 'Individuals are constrained by available discourses because discursive positions pre-exist the individual whose sense of 'self' (subjectivity) and range of experience are circumscribed by available discourses' (Willig, 1999, p. 114). Therefore, rather than just describing people, discourses produce a range of 'subject positions', 'identities' and 'institutional sites' which inform who can speak or be addressed (Foucault, 1972, p.51). Subjectivity, therefore, is not something from within the individual, but something which is constituted and reconstituted through talk and text (Wetherell & White, 1992). When a position is taken up within a discourse, we come to know and experience ourselves and the world from this perspective. A subject position provides specific and limited ways of being, talking, feelings, thinking etc. which we adopt as our own. What is therefore possible or appropriate for us to do, or not do, or say or not say, are derived from the subject positions we have taken up within the discourse. Subject positions may be long term or fleeting, and always subject to negotiation and change as we interact

within the social context. Our subjective experience of ourselves, therefore, is reflective of the variety of subject positions we take up (Burr, 2015).

Subject positions are also taken up as part of ourselves and our identity. They become part of our sense of self, how we think and influence how we use language to talk and see ourselves. As a result, we may feel an emotional attachment or commitment to the subject positions we take up, and thus invest in them further than the framework they provide (Burr, 2015). As a result, identity is not considered to be stable or fixed. Rather, people may adopt multiple and differing subject positions which can change over time, and may also be contradictory (Walkerdine, 1993).

Discourses therefore have 'real' effects (Walkerdine, 1986), which work to legitimise particular ways of thinking, behaving, forms authority and which construct certain truths about reality which position people in certain ways, for example, what may be considered to be normal healthy as opposed to more disordered unhealthful eating. Such truths however are not absolute, but rather 'historically produced within specific conditions of possibility' (Walkerdine, 1986, p64). Foucault (1972) believed that power and knowledge were inextricably linked, with power producing knowledge. According to Foucault, power functions through discourses, whereby the elevation of particular discourses to truth status works to produce and normalise certain ways of social regulation, whilst at the same time ruling out other 'truths' in terms of what is not said (Foucault, 1977; 1979). Foucault also contended that discourses 'discipline' the body through 'a multiplicity of minor processes of domination' (Foucault, 1977).

### **3.8.4 Identity**

According to poststructural perspectives, identities are governed by the subject positions made available to them. These various 'ways of being' are subject to the discourses available at any given time. Identities are further socially constructed through the combination of alternative discourses, some of which may be combined together without difficulty however, other combinations may result in struggle or conflict (Burr, 2015). As identities are never considered to be unitary or stable, different identities may be adopted depending upon the discursive space. Not conforming to discourses may result in stigma, however one may also move from a damaging to a more favourable identity, by taking up alternative subject positions (Burr, 2015).

According to Foucault (1984), language and the subject positions it affords, reside within discourses, rather than language being representative of human experience. Discourses are often competing, with different versions of reality serving various power interests. In particular, institutional discourses construct the networks through which

dominant social truths are produced, reinforces, contested or resisted (Baxter, 2016). Identity is constructed through the agency of the person who is subjectively motivated to take up certain subject positions from the discourses available, and ways in which they are subsequently positioned as subjects, through the normalising power of the discourse (Baxter, 2016). Social media platforms have also been highly implicated in the construction of identities and the critique or challenging of alternative identities. The use of language such as labelling and membership categorisation, works to influence users to conform to socially acceptable ways of talking and behaving. However competing and resistant discourses will also be present and available.

The ways in which any interaction may be differently constructed, offers a range of different positions, which create the rights and obligations for participants. Whilst some positions may be intentional, others may not be and as a result, people may become entwined with certain positions without being aware. By becoming aware of the potential implications within certain discourses, people may adjust their interactions with others (Burr, 2015).

Exploring experiences of those who self-identify as a healthy or health-conscious, therefore enables certain subject positions and health identities to be explored from the perspectives of those engage in high dietary and exercise practices. How health is subjectively understood, how health identities are taken up and negotiated, and the resulting food choices and exercise practice which are adopted, are therefore of particular interest to the study of 'orthorexia'. This theoretical framework further enables contradictions to 'healthful' practices to be explored and to increasing understanding of how dietary or exercise transgressions are managed and negotiated in relation to health identities. It is also important to understand how subject positions such as healthful versus disordered may be taken-up, resisted or rejected and how these transitions are understood.

### **3.8.5 Summary**

As discourses are considered to be constructive of the person and experience, they are considered to be temporal and contextual, but also in-process within the current wider socio-cultural, historical context from which they arise (Jabal & Riviere, 2007). Experiences themselves are therefore considered to be discursively constructed through sociocultural, political, and economic influences (Moon, 2016). This theoretical framework therefore enables the discursive context within which people make sense of their dietary and exercise practices to be explored (Lyons & Chamberlain, 2006). By adopting a post structural lens, I am therefore able to explore individual experiences of 'orthorexic' beliefs and behaviours from a socio-cultural level, whereby high engagement with dietary and exercise behaviours



can be understood in relation to healthism discourses which shape, regulate and constrain daily health practices.

## Chapter 4 - Analysis

Three key themes were developed from the data set: (1) feeling good and looking good; (2) relationality; (3) how influenced are you? Each theme highlights how sociocultural influences impacted upon participants daily dietary and exercise practices. Participants drew heavily on healthism (Crawford, 2006) discourses of individual responsibility to describe their motivations for engaging in preferred ways of eating and exercise. Healthful food choices, although subjectively determined, were morally dichotomised as superior to unhealthy food choices and were used to construct participants as healthful individuals. Post-feminist discourses of choice and empowerment (Gill, 2007) were widely adopted to support and justify not only food and exercise practices, but also highly significant levels of engagement. Health and socioculturally valued appearance ideals were additionally strong motivators for diet and exercise engagement, with health and weight perceived by participants as inextricably linked. Social media, although discredited by participants as unrealistic and unreliable, was still highly influential in promoting high dietary and exercise engagement and unattainable appearance ideals to which participants continued to work towards. The findings for each theme are presented below and a thematic outline of each theme and subtheme is provided in Table 3.

### 4.1 Theme 1 – Feeling Good and Looking Good

Feeling and looking good were two highly prevalent motivations participants articulated for engaging in their chosen dietary and exercise practices. Participants characterised health as both a 'feeling' and a 'look'. The nexus of 'feeling and looking good' or 'feeling and looking healthy' were discussed as significant benefits of healthy eating and regular exercise and indeed reflective of a healthy lifestyle. Feeling good encompassed a range of positively embodied physical feelings and sensations which participants attributed to healthy food choices and regular exercise. Similarly, the avoidance of unpleasant physical sensations and future health concerns also guided food choices and provided a strong motivation for the elimination or avoidance of certain foods. Feeling good, however, was also inextricably linked with looking good.

Physical appearance was extremely important to participants, with food and exercise choices structured around attaining or maintaining an appearance ideal which was considered to be reflective of a healthy body and personhood. For the women in this study, healthy appearance ideals were reflected by low body weight and were described as thin, slim or lean, but also toned (Boepple & Thompson, 2016; Lupton 2018). For men, a low body

fat percentage and muscular appearance was described as the idealised body shape (Carrotte et al., 2017). Feeling and looking good were unquestionably entwined with lower body weight was representative of a healthy body. High engagement with dietary and exercise practices although highly individualised, were perceived as empowering acts of self-care which were positively embodied, and willingly incorporated into participants daily lives.

#### **4.1.1 Sub Theme: The Idiosyncratic Nature of Healthy Eating**

Participants described many different ways of eating 'healthfully', some of which were tied to specific diets (e.g., keto, vegan, vegetarian, SIBO) and some of which were described as "eating healthy" more broadly. Healthy eating was most typically characterised by eating unprocessed or whole foods, wholegrains, fruits, vegetables and limiting sugar and red meat. Participants adopted dietary information in an idiosyncratic manner, with nutritional information often 'cherry picked' from a proliferation of often contradictory information sources, with the uptake of newly discovered health information commonly reported as motivating dietary changes:

*"I pick and choose aspects from like each different account of whatever that I find I'll be able to assimilate in my own day to day life, it's all about the small things that kind of get added together" (Jenn)*

However, some participants also discussed how problematic eating behaviours had resulted from cherry picking dietary information. In the past, Emma had selected pieces of information from a range of social media accounts which had supported and justified her unhealthy eating behaviours, whilst ignoring the wider nutritional messages. The selective uptake of information had influenced the elimination of food groups, calorie restriction and served to dichotomise foods as either healthy or unhealthy and had resulted in extreme physical burnout, amenorrhea, emotional and psychological distress:

*"Like going back over a lot of their content, I'm like, no they have really good points, but I chose to ignore 80% of what they were saying and just cherry pick some bits and pieces and kind of justify my behaviours and say it was supported by all of these professionals over here and I completely missed the point of what they were saying [...] I chose to pick out the one sentence that justified what I was already doing and allowed me to think it would be a good idea to take it further" (Emma)*

When describing dietary preferences, participants positioned themselves as experts, with healthful food choices seen as empowering (Gill, 2007) and reflective of their responsible and well considered health choices. Healthist (Crawford, 1980) discourses of individual responsibility were evident throughout participants descriptions of their preferred ways of eating, with high moral value placed upon making the ‘right’ food choices to ensure beneficial health outcomes. In a similar manner to Musolino et al.’s (2015a) participants, participants in this study practiced self-discipline by positioning themselves as healthful people who actively sought and researched dietary and exercise information in order to self-regulate their diet, exercise engagement and weight (Blackman, 2008).

The sheer abundance of nutritional, exercise and wellness information, however, made it difficult to establish which health advice was safe to adopt, with participants talk echoing Nicolosi’s (2006) statement that we live in an ‘orthorexic society’:

*“I think maybe there’s almost too much information and conflicting information out there that it makes you paranoid about it and maybe that’s, that can lead down an unhealthy track” (Brad)*

Exposure to discourses surrounding food risks (Rangel et al., 2012) had also resulted in subjective beliefs and understandings about which foods or diets were considered ‘healthy’ and therefore, which foods could be incorporated into daily life.

#### **4.1.2 Sub Theme: What Works for Me**

Determining which dietary elements would be adopted on a day-to-day basis was often based upon an extensive process of trial and error which had included the restriction or elimination of various foods to establish ‘what works for me’:

*“I don’t think my body works very well on a vegetarian diet, my body seems to work well with high protein and lower carbs I’ve found out and that leads to the Keto diet that I tried, that was the last diet that I went on which was maybe two years ago, it was good, my body actually liked it [...] but um, it was pretty bad in terms of I was craving fruit and you can’t really have fruit, I like fresh fruit and just fresh things, um you can’t have too many carbs because even vegetables have carbs so it’s not great, you don’t get too much fibre and yeah [...] I think I figured out what my body likes, what works well with it, but now I still have carbs but not as much and make them wholegrains and that’s all the diets I’ve followed, that’s about it, now I just eat healthy and don’t really follow anything” (Natalie)*

Healthful eating was described by participants as being embodied in a number of ways. What “works” for my body, was often described by participants as physically experienced sensations of lightness, which resulted in higher energy levels. Emma describes how the “decision” about which foods to eat was strongly related to the feeling in her body, which for her included energy:

*“This is just how I noticed that I feel best in my body and I have the most energy, after trying a lot of different restrictive diets” (Emma).*

Red meat and carbohydrates were commonly avoided due to feelings of ‘heaviness’ after consumption, with participants describing feeling ‘lighter’ and more energetic as a result of omitting these foods:

*“I genuinely do feel like I have more energy sometimes on the days when I eat vegan, um I don’t feel tired, I have to be a bit more conscious about what I’m eating to make sure but I often don’t feel sort of sluggish” (Brad)*

The benefits of eating healthy food to ‘feel lighter’ is concept which features regularly in social media and health blog content. Feeling lighter is associated with healthy food (primarily green leafy vegetables, fruit, lean meat and low-calorie foods), health and feelings of energy and lightness. As health blogger Jana (2014) describes “when we feel light, we feel good”. Feeling lighter was not able to be explained specifically by participants, however it was described as a desirable feeling and a benefit of healthy eating. Feeling lighter, whilst not directly discussed by participants in relation to weight, was still associated by implication, through the consumption of low-calorie foods.

Sugar consumption was commonly perceived as the cause of negative body sensations, with its subsequent elimination attributed to symptoms alleviation:

*“It was kind of a process of elimination, I used to get really bad stomach aches [...] so I though I’m going to try, I’ll see if just cutting out sugar, I’d never cut out sugar, I’d tried cutting out gluten and dairy and all that kind of stuff and none of it made a difference um but I tried the sugar and it worked and yeah I didn’t get any stomach aches” (Brad)*

The anticipation of physical symptoms prior to consuming an identified ‘trigger food’ created a sense of anxiety for some participants. This made it difficult to establish whether

the food itself or the anticipation of eating the food caused the physical symptoms. For Angie, subjective, yet medically unsubstantiated beliefs regarding the benefits of removing certain foods were prioritised over medical recommendations:

*“So I really wanted to lose some weight. I’ve also got a little bit of pain, and I’ve heard that the keto diet was really good for inflammation and the doctor was like nah, I don’t really believe that, but I thought hey, it can’t hurt to give it a try, I think probably sugar is quite inflammatory so um it was more about cutting sugar for that one than the carbs, but of course it’s kind of the same thing, um, yeah so it was kind of those two sorts of factors really” (Angie)*

Angie positions herself as an expert, incorporating and rejecting elements of advice to assemble a style of eating that she believes might work for her. She adopts explanations that support the maintenance of her diet and weight loss goals and ignores the medical advice that runs contradictory to her beliefs and goals. Despite implementing dietary changes, Angie describes how she was unable to tell whether her keto diet was effective in reducing inflammation. The reduction of physical symptoms was attributed to weight loss, even though she acknowledges this relationship might just be wishful thinking:

*“I think it has, and I think losing a big of weight has helped as well, yeah I think it has helped, like I don’t have any sort of, I used to get a few spasms and stuff, I feel like I get less spasms, but yeah, I mean maybe I’m just trying to convince myself to stick to my diet (laughs)” (Angie)*

Jenn similarly attributes the physical sensation of feeling energetic and lighter as a possible indication of low cholesterol. Although this had not been established via biomedical markers, the health benefits of her diet are attributed to such perceived positive health outcomes:

*“Probably feeling more energetic, feeling a bit like lighter, not like in the weight sense, but just like, I’m not sure how to explain that, um probably like lowered cholesterol, I mean I wouldn’t say that was ever like a problem for me, but I can just imagine you know, I’m not really getting it from anywhere so, um, yeah I think that probably the main benefits for me” (Jenn)*

Just as dietary modifications were perceived by participants as *leading to* embodied changes, dietary modifications were also *motivated by* changes in embodiment for some participants. Gastrointestinal and digestive concerns in particular often led to the elimination of certain food groups in the search to discover the cause of health concerns (Greville-Harris et. al., 2019). Chronic disease diagnosis (e.g. irritable bowel syndrome (IBS)) or unwanted physical symptom alleviation followed a process of identifying and eliminating trigger foods. In the case of IBS management, dietary restrictions were perceived both positively and negatively. Where participants were able to maintain their diets for long enough to enable symptom alleviation, dietary interventions were welcomed and positively identified with. Carey describes her body functioning in a mechanical or engine like manner and talks of how fuelling her body 'correctly', enables it to run like a dream:

*"It's a process of elimination and just basically not eating any foods that I shouldn't eat and if I do that, my body runs like an absolute bloody dream and I never have any issues and I think I did it for, I think it was like three months, to test, you know, to test it when I was going through this process, and my god I felt fucking amazing, like every single day, never had an issue" (Carey).*

However, having to eliminate certain foods was also perceived as limiting in terms of variety and restrictive in unwanted ways which could sometimes led to feelings of frustration, particularly when having to adhere to a specific diet made it difficult to maintain a social life. On occasions where the diet was choicefully put aside, consuming normally 'forbidden foods' was seen as a welcome extension to dietary limitations. Such consumption, however, also came at a cost, resulting in unwanted physical sensations such as bloating, pain and constipation, bringing the un-functioning body into focus and negatively disrupted body image and appearance ideals:

*"I think unfortunately, I am just going to be limited forever in order to, like live a remotely enjoyable existence you know, ideally, I would love to go to a pub and just smash a burger when you're drinking, like everyone else does, but I can only do it rarely because I know then that my whole of next week is, I'm screwed [...] it's actually not worth it for me, it's so annoying." (Carey)*

Social contexts such as eating at friends' houses also meant that unless participants brought their own food, trigger foods would inevitably be consumed. Carey talks of

structuring most of her life around her normally strict diet, but having to 'suck it up' in social situations to avoid being seen as difficult by others:

*"I have to structure everything around that (the diet), expect for if you go somewhere, you just can't sometimes, like if you're at someone else's house or whatever, you can't go in and say I can't eat that and that and that. You just suck it up and do it" (Carey)*

Despite her diagnosed gastrointestinal condition, individual responsibility and self-blame were subsequently attributed to the appearance of symptoms following food indiscretions. Prevention was considered to be within one's own control and therefore a personal failing of not having managed their body appropriately by making poor food choices.

#### **4.1.3 Sub Theme: It's a Form of Self Care to Me**

All participants perceived healthy eating and high exercise engagement as an overwhelming positive and enjoyable aspect of their lives. Exercise in particular, resulted in feelings of positive embodiment:

*"Oh I love it! (laughs) but I do, there's nothing better! There's nothing that makes you feel better than doing exercise afterwards [...] even if I did six classes a day, I loved every second of all of them, I just love it, it makes me happy (laughs) [...] but also body functionally wise, you get far more energy after doing it, and then you eat better and then you feel better" (Carey)*

Exercise was also positioned by participants as something that positively influenced wellbeing and improved mental health. This was similarly noted by Braun & Carruthers, (2020) whereby participants in their study meshed together the physical, affective and psychological for the achievement of wellbeing. Participants described mental health as a key component of overall health and something which was enhanced or stabilised through regular physical exercise:

*"I definitely um just have kind of generally better mental health when I'm exercising consistently then compared to weeks where something comes up every evening and I don't end up exercising [...] so yeah, exercise definitely does a lot for me on a positive sense" (Julianne)*



*“Like you need it to clear your mind, I think it’s really more of a mental wellness thing, I mean if you do not do exercise, how do you feel OK? I don’t understand people that don’t (laughs)” (Carey)*

Carey positions exercise as an essential component of her life, an imperative she would not be able to live without and still feel good. Her inability to comprehend how other people choose not to exercise indicates just how embodied her exercise beliefs and behaviours have become for her. By describing the achievement of wellbeing as a motivating factor for high exercise engagement, participants were able to support and justify their ongoing bodywork. However, whilst exercise was positively attributed to internally motivated endeavours of wellbeing, it also served to achieve socioculturally valued healthy appearance ideals (Liimakka, 2014). As Gerard and Chris describe below, looking good and feeling good are also associated with improved mental health:

*“Well yeah to be honest I think feeling and looking good is a big part of it, you know I like to feel and look good I guess about myself, and that helps my mental health” (Gerard)*

*“I think it’s really good for mental health. Just having long periods not to think about very much, um I find like yeah, I generally my mood’s much better when I do a lot of exercise, and feeling healthy as well and looking healthy I guess are nice benefits that help out” (Chris)*

Dietary and exercise practices were also considered a form of self-care and used as a method of stress relief. High exercise engagement was therefore able to be rationalised and justified as an important and almost essential component of daily life:

*“It’s like a nice feeling to be able to go to the gym after a long day of Uni um and you just go there to destress and it’s like a time to work on yourself I guess, just like physically and mentally, it’s just like a “me time” kind of thing, and it’s quite nice [...] It definitely makes me feel as though I have my life together in some ways [...] like I think you know when you’re having an off week because you’re not doing all these things for yourself and it’s a form of self-care to me” (Gal)*

Gal describes her gym sessions as “me-time” and a “time to work on yourself”. She positions her health practices as enjoyable, choiceful and empowering with the freedom to

'choose' what she what she works on (Gill, 2007). As Winch (2015) describes "in the hyper visible landscape of popular culture the body is recognised as the object of a women's labour: it is her asset, her product, her brand and her gateway to freedom and empowerment in a neoliberal market economy" (p.21). The transformation imperative (Riley & Evans, 2018; Evans et al., 2020) was similarly evident throughout the data set with both men and women conveying the notion that to be healthy and achieve the idealised physical appearance, one must engage in an ongoing process of discipline, self-surveillance and self-transformation through making the right choices.

Musolino et al. (2015a) found that women with disordered eating rationalised their behaviours as important components of their day-to-day lives, with this approach working to justify such choices as "normative practices of healthism and care" (p. 18). They observed that the women in their research were extremely aware that the current sociocultural context celebrated good health, as equated with thinness and restriction. Their findings indicated that health practices such as dieting, yoga, and detoxification, had all been incorporated into their participants health habitus and disordered eating practices. This had enabled them to engage with ideologies and discourses surrounding healthy lifestyles and self-care, rather than positioning their behaviours as unhealthy or requiring therapeutic care. Participants in this study similarly described and understood their diet and exercise practices as both productive and positive self-care behaviours. Adams (2019) found that productive self-care was privileged and understood as 'healthy' and morally superior to unhealthy self-care, which included eating unhealthy food and not exercising. Participants in this study also prioritised and rationalised their daily health practices by drawing on healthism discourses of personal responsibility for health, and that notion that high levels of healthful lifestyle engagement were virtuous and reflective of moral personhood and citizenship. Adhering to dietary and exercise practices also provided a positive sense of order and control. Participants constructed themselves as autonomous and agentic choice makers where through the adoption of their chosen diet and exercise practices, control could be established over their bodies and lives:

*"I feel when that's all taken care of the rest of my life kind of falls together once yeah, while I'm exercising everything just seems better" (Natalie)*

*"It's something that you have control over, you go there, and you can decide what you want to work on" (Gal)*

*“It kind of feels like there’s a bit of order, yeah I guess order is the best way to put it, it just order” (Ryan)*

Self-control is often a word used to describe what is required to achieve health. Crawford (2006) suggests that health has also become a way to convey self-control. Self-control, willpower and discipline are similarly represented in media depictions of health achievement. Self-control is also contrasted against a lack of control, which is undesirable, and can be used to negatively evaluate others. Health as self-control, evidenced through working on the self, is therefore a way to indicate that one has their life in order (Crawford, 2006). Conversely, participants also associated having to eat food they considered to be unhealthy or not being able to exercise to their preferred levels with more negative emotional states. Ryan indicates that despite exercise providing an outlet for de-stressing which he perceives as positive, perhaps there are some problematic aspects to the role that exercise plays in his life:

*“It’s kind of for me de-stressing going to the gym, and not going I guess is the opposite sometimes, if I miss one day it’s not a huge issue, but if start missing two in a row yep, it definitely goes the opposite way, I start to get a little on edge” (Ryan)*

Julianne, in comparison, was very aware of how in the past she had used exercise in a more compensatory and punishing capacity:

*“I definitely still struggle with feeling like I have to exercise, so I think there’s aspects of the role that exercise plays in my life which are not healthy” (Julianne)*

Despite positioning themselves as empowered choice makers whose dietary and exercise practices provided a positive sense of control and order in daily lives, participants also reported feelings of anxiety, guilt, and negative affect when there were unable to exercise to preferred levels or eat healthfully. The tension between control vs indulgence is evident in health discourses surrounding diet and exercise (Fries, 2013). Cairns & Johnston, (2015) found that people who practice self-care through diet and exercise are required to recalibrate the extremes of self-control and indulgence. These tensions are also gendered, with post-feminist notions of choice and empowerment (Gill, 2007) intertwined with neoliberal values of agency and autonomy where women must not be seen as lacking control or overindulgent but must also avoid being pathologized by being obsessive.

Discourses of self-care have also transitioned from the biomedical domain into popular discourse to now encompass a range of body practices aimed towards the pursuit of balance, wholeness and well-being (Adams, 2019). Everyday self-care now entails balancing tensions between discipline, self-control and indulgence in addition to the pursuit of long-term health and wellbeing and immediate gratification. Self-care, however, also encompasses the ongoing production of moral, social and economic meaning (Adams, 2019). For participants in this study, 'taking care of oneself' also included a focus on weight and appearance. This was similarly observed by (Fullagar, 2002). Low weight associated with health was a desirable outcome of eating well and exercising regularly, with health behaviours resultingly having become intertwined with societal pressures to achieve or maintain certain appearance outcomes. Choice within the current neoliberal sociocultural context also provides narrow parameters for health performance, whereby one is either healthy or unhealthy. The value ascribed to individuals' bodies as indicated by 'fit' or 'fat' appearance indicating failure or success (Adams, 2019).

#### **4.1.4 Sub Theme: A Sense of Achievement**

The importance of physical fitness was notably gendered and more highly prioritised for male participants. Gerard describes how feeling physically fit and strong were important motivators for eating well and exercising:

*"Physically speaking, I like the feeling of feeling strong, you know, I like um, I like feeling I get after the gym where I can sort of you know [...] like I like feeling agile and strong, and that I can hold myself and like run around and it's a nice feeling and I feel useful you know, and not weak I guess or vulnerable" (Gerard)*

Exercise also provided a challenge and sense of achievement, something which participants felt proud of. What was being 'achieved' was also described in different ways. Gerard describes his sense of achievement as feelings of reward, challenge, and that he is living within a functional, productive body which is well taken care of:

*"The feelings that I get, I feel very rewarded, I feel like I've overcome a bit of a challenge, I feel useful, um, I feel practical, you know um, I feel productive and um, I think, ah there's some, yeah in terms of eating, there's just some sort of natural feeling that I'm doing my body a service, you know, I feel happy knowing I'm inside a body that's been taken care of" (Gerard)*

Gal also describes feelings of achievement resulting from her diet and exercise practices:

*“It makes me feel good, like yay on track I’m achieving what I want to achieve” (Gal)*

Whilst Gal doesn’t initially specify what in particular she is trying to achieve, she later speaks of how her dietary and exercise choices are primarily based upon how they impact her physical appearance:

*“I think about the calories of what I’m eating, am I going to be over my calorie intake for the day, or um how’s this going to make me look kind of thing, and exercise yeah as well, just kind of, as well as everything else and as I said it’s hard not to focus on appearance and think like ‘am I going to have abs when I wake up or whatever you know?” (Gal)*

Musolino et al. (2015b) also observed a sense of achievement associated with self-discipline and weight loss. Through maintaining a low body weight, participants in their study achieved goals through self-discipline and self-surveillance which facilitated feelings of success and control.

Although male participants primarily talked about prioritising physical feelings of fitness and strength, culturally associated with masculinity, physical appearance was still a motivating factor. Having a strong, muscular body with low body fat was also an important aesthetic goal. Ryan describes the continual body work and dedication that would be required to achieve the ideal body he is currently working towards as *“a lot of work, like years of work”*. For other male participants, appearance was more subtly described as *“a nice side effect”* of being fit and healthy, rather than the primary goal.

#### **4.1.5 Sub Theme: It’s Hard not to Focus on Appearance**

While participants spoke about the physical and sensed body, as well as emotional and psychological reasons for engaging in their practices, physical appearance and weight loss motivations were not absent from their talk. Physical appearance and weight loss were highly prioritised by participants and influential motivators for maintaining a healthy diet and exercising. As Gal indicates:

*“It’s hard not to focus on appearance (laughs)” (Gal)*

Julianne describes that staying slim is a primary motivation for her exercise engagement, however she is also careful to add that this is not the only benefit that she derives from the high levels of exercise she undertakes:

*“I would say that staying slim is probably, I mean I get, exercise enriches my life in lots of ways, but when it comes down to it, um, staying slim is probably in the top one or two considerations” (Julianne)*

However, appearance remains a primary concern for her and she later describes how her long-distance running and current diet are not delivering the results she desires, which are largely appearance related:

*“I am feeling like I am not feeling the effects of running long distance every day because I feel like I’ve slipping into a place where my diet isn’t giving me the best results, I could get from the exercise I’m doing. I would say that fitness and weight would definitely motivate me to um maybe start eating more um, putting more thought into what I what I’m eating”.*

Other participants spoke of how following a healthy diet and exercising regularly meant that weight gain was not something they personally needed to worry about, as their individual dietary choices consequently deliver their preferred body shape:

*“I’ve always eaten um, very healthy, like I don’t want to be fat (laughs), I don’t, I don’t! I don’t have to be worried about it all that much if you know that I mean, because generally I eat well, and I exercise, so it’s not forced thing, I don’t need to think about it that much” (Carey)*

*“OK definably weight loss is up there, I think it’s hard to follow like a plant-based diet and gain a lot of weight” (Jenn)*

The desire to avoid becoming fat, which Carey perceives as highly undesirable, is a strong motivator for her healthful eating and exercising. Similarly, by eating the right healthy foods, Jenn talks of how it would be difficult for her to put on weight whilst following a plant-based diet. Participants healthy food choices, therefore, protecting them from having to worry about the ‘obesity epidemic’. Healthful eating also served to alleviate appearance

related anxiety, with participants able to be observed as healthful citizens, making good choices as evidenced by their physical appearance.

Participants' food and exercise choices often centred around weight loss, with current and historical dietary changes pre-empted by weight loss stagnation. This stagnation had prompted participants to eliminate certain foods such as sugar, carbohydrates or began intermittent fasting (IF):

*"I try and weight myself mostly every day, so yeah I definitely, if I can see that I haven't really made any progress I'll adjust my diet and exercise based on that" (Ryan)*

*'I don't actually know why I do it, I guess in the back of my mind it's because, that like, they said at the seminar it was good for cognition and all that, I also think it's because like if I have a smaller period of time to eat I'm probably going to eat less consequently' (Gal)*

Dietary practices such as IF raised tensions between "health benefits" and dieting. IF was described as "healthy" but also as enabling calorie reduction through reduced eating windows, resulting in weight loss or weight maintenance, which was highly desirable. Musolino et al., (2015b) found that women frequently took up discourses of empowerment and choice when describing their daily diet and exercise practices, despite engaging in behaviours which included restricted eating, excessive exercise and body surveillance which could result in problematic or unhealthy outcomes. Such diet and exercise behaviours were then culturally endorsed and legitimised as lifestyle choices with productive power (Musolino et al. (2015b). These findings were similarly echoed by participants in this study. High engagement with dietary practices such as fasting was perceived as choiceful and empowering and was not understood as disordered or potentially problematic due to the healthful framing which legitimised such behaviours.

Some participants pursued specific body appearance goals through transformation techniques such as bulking and cutting, where low body fat percentage and building lean muscle mass required ongoing dedication and surveillance. Interestingly, Ryan talks of his body as an object he is currently attempting to transform. He notes how his body is not used to having a low body fat percentage, but at the same time indicates that it will have to adapt to achieve his body fat percentage goal. In this sense, his social body is being prioritized over his subjectivity:

*“At the moment while I’m cutting down, the goal is, at the moment I’m trying to get to around 85kg but then once I get 85, I’ll probably try to keep doing down until I’m happy, it’s probably more of a body fat percentage goal but I have never been able to really get below, I’ve gotten to 12, or 12-13% ish, but its I don’t think my body is kind of used to that low percentage so it got quite hard and I’m trying to, I’m basically trying to replicate that and go a bit further this year” (Ryan)*

Resisting the thin ideal in preference for a more muscular ‘fit ideal’ body shape was also discussed. Being complimented for weight loss, where the desired body goal required weight and muscle gain was considered to be an affront to one’s body progress and health identity:

*“it’s funny because they think they’re like giving you a compliment when they’re ‘oh you’ve lost weight’, but in my mind my goal is to put on weight and put muscle on so they think they’re doing a good thing but it’s really like a disservice to me on my like healthy living path, you now, they kind of just assume everyone has the same goals but you don’t” (Scarlett)*

Natalie’s dietary and exercise engagement was highly motivated by the attainment of appearance ideals. She describes how she has become more confident and likes her body more since incorporating gym work into her daily exercise practices. This has enabled her to transform her body from being just skinny, which she did not like, to becoming more toned and defined:

*“I’d be lying to say my appearance isn’t a factor [...] even though my body shape was kind of like skinny, but it wasn’t toned and I didn’t like it so, going to the gym just make me like my body more, I was getting more definition, um so that was probably my influence to start” (Natalie)*

Natalie’s appearance ideals are highly reflective of the strong, active and fit bodies depicted in ‘fitspo’ social media content (Boepple, et al., 2016; Boepple & Thompson, 2014). Although Natalie also feels good, her increase in confidence is primarily attributed to her successful body transformation, which has brought her body shape in alignment with current sociocultural representations of health:



*“I like how I look when I’m exercising and eating right [...] that makes me feel good as well, just, it gives you more confidence I guess, if you feel good about how you look you kind of go out there and you know, feel more confident and that’s something that’s changed as well since I started gym-ing, I just feel like I’m a more confident person”  
(Natalie)*

As Gill and Orgad (2015) observe, to be self-confident is the new imperative, with ‘confidence cult(ure)’ having become a new technology of the self, enticing women to self-regulate and work on themselves.

#### **4.1.6 Sub Theme: The Aesthetic of Health**

Participants described health as related to a look and a feeling rather than biomedical markers. Health and appearance ideals were typically conflated, with participants drawing on discourses of body weight and size as reflective of health status (Lupton, 2013). Health was significantly associated with a smaller body size, with talk of losing weight to become healthier or engaging in day-to-day health practices to maintain a healthy weight common:

*“I feel like losing weight is health as well, yes so it would be weight first, and I guess the health benefit is secondary, but a close second and if I was not getting both, I don’t think I would be sticking to it” (Angie)*

Angie identifies weight as a current health risk for her, with losing weight her primary motivation for adopting the keto diet. This was similarly observed by Kristensen et al. (2013) whereby being overweight was conceived as the health risk and the motivation behind healthful eating. Successful weight loss resulting from personalised dietary choices provided further proof that food choices were correct and trustworthy.

As similarly indicated by Clark (2019), conceptualisations of health were commonly interchangeable with body size in participants’ accounts. As Brad indicates below, whilst he did not consider himself to be particularly big, losing weight has enabled him to now maintain a healthier weight, which is low. Being thin, discursively equated to being healthy and fit (Clark, 2019).

*“I think aside from feeling better, I think it has, not that I was particularly big, I think it’s kept me at a healthier weight” (Brad)*

In contrast, participants with histories of disordered eating, recognizing that body size was not necessarily reflective on internal physical or psychological health, had enabled less rigid and more balanced dietary and exercise practices to be adopted:

*“Maybe at the end of the last year I was able to just put my foot down and say that I prioritised feeling healthy over trying to be skinnier” (Emma)*

The entanglement between positively embodied feelings and sensations resulting from healthful eating and exercise practices, and outward body appearance were highly prevalent motivations participants described for engaging in health practices. As Liimakka (2014) observes, the ‘cult of thinness’ (Hesse-Biber, 2007) and the ‘imperative of health’ (Lupton, 1995), intersect with media to construct this ubiquitous ideal. Neoliberalism, healthism and post-feminism together produce an intense focus on the body and weight. Healthist discourses of individual responsibility, choice and risk position individuals as responsible for their health. This can be particularly impactful on health behaviours when being overweight is considered a threat to health.

Riley et al., (2018) explain how health indicators, such as the BMI, have made the body visible in specific ways. When people measure themselves, it renders them knowable (Miller & Rose, 1997). BMI measurements construct categories which structure how people view themselves and others. Understandings of health become known through a measure which conveys a level of objectivity, supported by medical discourses (Riley et al., 2018). This has resulted in health becoming intertwined with weight, and construction of categories which define who is healthy (and normal) and who is not. Jutel (2005; 2006) further contends that weight has now become a disease entity, due to health being understood as an appearance norm, resulting in what they described as the ‘aesthetic of health’ (2005, p. 113). It is through these understandings and the process of internalisation, people come to understand themselves through such discourses and discipline themselves accordingly (Riley et al., 2018).

Health and appearance have therefore become conflated within contemporary culturally available discourses and consequently inform body project motivations (Bordo, 1993; Burns & Gavey, 2004; Gonzalez et al., 2012). For participants in this study, looking good and feeling good were so unquestionably intertwined they were difficult to separate.

#### **4.2 Theme 2 - Relationality**

Participants spoke of their experiences of healthful eating in relation to a wide range of social contexts. Diet and exercise practices both influenced and impacted upon social

relationships. Social benefits were derived by some participants who connected with likeminded health-conscious others; however, high engagement had also impacted negatively on personal relationships and had resulted in social impairment. High diet and exercise engagement was also described in relation to past, present and future experiences. Historical experiences of disordered eating informed how some participants related to food and exercise choices in the present, with other participants modifying their current diet and exercise practices to accommodate further health concerns. Whilst many participants describe lacking insight during past periods of 'orthorexic' eating and exercise, reflecting on past behaviours enabled new perspectives and understandings between the difference between healthy and unhealthy to be established.

#### **4.2.1 Sub Theme: Healthful Eating and Social Relationships**

For many participants, diet and exercise engagement enabled connections to be made between likeminded others. Fitness communities provided platforms for both maintaining current practices or pushing things further, offering inspiration through friendly competition, comparisons between training techniques and outcomes, or the sharing of dietary and training information:

*"I feel like really to be part of a community when I go and train and it's nice to just interact with other people on similar journeys and um yeah, I guess just be around like-minded people and take inspirations or ideas from them as well, um so I do enjoy that"* (Scarlett)

Personal relationships were also described as having been strengthened through the sharing of time whilst exercising:

*"Yeah, definitely a strong social element and actually thinking about it my relationship with my boyfriend has been strengthened by running together and it's kind of something to do where I don't know your just spending that time together, you're not talking your just doing your thing"* (Julianne)

However, other relationships had also influenced dietary practices in more problematic ways. Emma describes how she had modelled her older sisters dieting behaviours when she was a teenager, with her family encouraging weight loss behaviours, body surveillance and the pursuit of a thin body aesthetic:

*“It was my main goal for quite a long time, like I essentially wanted to lose weight for my whole life, like ever since I was very young, and then once I was a teenager, I started modelling the dieting that I saw in my older sisters and um, other people around me um, so yeah, and the goal was definitely to lose weight and to be smaller [...] My family were like positive about me eating less processed foods [...] I used to love to bake cookies and then once or twice you know my Dad would say that’s not very good for your waistline or something and my older sister and my Mum, you know would want to encourage me to eat healthier so that I wouldn’t um gain too much weight and they would encourage me to weight myself every day and stuff so when I started cutting out a lot of the foods, they were like good on you that’s great, so disciplined, and like oh wow you’ve lost weight that’s really exciting, yeah” (Emma)*

Emma describes the validation she received from her family and wider social networks following her initial weight loss motivated her to continue along a problematic path of dietary restriction and excessive exercise:

*“I lost so much weight so fast, and I got so much validation for it, that I had always dreamed of you know, I wanted the validation, so then when I got it from everyone, from people that I didn’t know, from people I looked up to, that um, you know where authority figures in my life, I just thought right I’m going to keep going” (Emma)*

Musolino et al. (2015b) similarly found that for participants in their study, the validation and praise received from others reinforced health behaviours and the desire for thinness. Restrictive food practices and bodywork resulting in weight loss was further socially encouraged and reinforced as an achievement. Validation for bringing one’s body closer in alignment with sociocultural valued appearance ideas was considered a success and celebrated.

#### **4.2.2 Sub Theme: Future Health Concerns**

Fear of future disease development was also talked about as an instigator of new and different ways of constructing beliefs about the role of diet and exercise and its management or preventative capacity. The reduction of future health risk and disease susceptibility, particularly in the presence of family history of illness were described as important motivators for maintaining a healthful diet. Being proactive and taking a preventative approach to future health concerns was associated positively with health identities. Keeping

oneself youthful and being able to preserve the body were also highlighted as motivations for eating well and exercising:

*“You do get into your thirties and think I’m not invincible anymore and you want to be able to make sure the next of your years are going to be good and I don’t want to be in the position of having a heart attack in my 50’s” (Brad)*

*“I’m doing a good thing like that’s going to help keep me youthful along the way and less susceptible to sort of all sorts of diseases and what not, so yeah, good for the immunity as well, so yeah those would be the main things for me” (Scarlett)*

*“Well after 40 with bones, I feel I should engage in weight training because in my family my mother has arthritis and bones issues which I don’t want so yeah, that’s one of the reasons why I started training doing weight training” (Halle)*

Rose (1999) contends that “individuals are addressed on the assumption that they want to be healthy and enjoined to freely to seek out the ways of living most likely to promote their own health” (p. 86-87). At the same time however, to be health conscious, is also to be danger conscious (Crawford, 2006). Participants who consider themselves at risk for future disease development become objects of self-surveillance, and this makes them a site for intervention (Crawford, 2004).

Risk management discourses were evident in how participants described future health concerns as motivating their current diet and exercise decisions. Participants used their diets as a means of mitigating health risks, which enabled them to feel a sense of control over future health outcomes and provided a sense of enhanced security (Crawford, 2004). The ‘technology of risk’ exerts a means of control whereby individuals become self-governing, self-monitoring and risk conscious which then shapes their embodied experience (Foucault, 1997). Continual self-surveillance and body work was undertaken by participants to ensure that all identifiable potential threats were mitigated through daily health practices to ensure long term health.

Food and risk also closely intersect in contemporary society (Kristensen et al., 2013). Health promotional messages also reinforce healthism, with individual lifestyle factors strongly implicated in the avoidance of illness development and progression. As a result, such messaging highlights perceived risk and generates anxiety as health is no longer deemed to be the absence of illness, but also the inclusion of future illness risk (Brown, 2018; Crawshaw, 2013). However, as Thompson (2005) points out, it is also exceedingly

difficult to establish health risk in relation to food choices, due to the complex direct and indirect causal mechanisms. As was also the case with participants in this study, Kristensen et al., (2013) found that people construct their own understandings of health and health risk, which results in different ways people enact daily health practices. Notions of future risk and trust also intertwined within 'structures of feeling' which were important in shaping meanings and practices of healthful eating. However, despite the highly individualised health practices participants adopted, they all established on a common notion of governmentality, with self-discipline and autonomy associated with feelings of control.

Distinct from the avoidance of physical symptoms related to IBS or unwanted physical sensations previously outlined, current risks to health were primarily associated with weight, and less focused on illness or disease development. This was similarly observed by Kristensen et al., (2013) whereby being overweight was conceived as a primary health risk, and the motivation behind healthful eating. To be healthier, required weight loss with excess weight considered to be representative of an unhealthy body. Successful weight loss resulting from personalised dietary choices, further provided proof that food choices were correct and trustworthy.

#### **4.2.3 Sub Theme: Social Implications – How Strict Do You Want to be?**

Adhering to ones chosen or preferred diet was considered to be a high ongoing priority, with participants willing to go to great lengths to ensure they could maintain their preferred ways of healthful eating across a range of social situations and contexts. Ongoing dietary dedication was talked about as resulting in range of implications for daily life such as the high costs associated with purchasing healthy and specialised foods, the time associated with weekly or bi-weekly food preparation and planning, tracking, and the need to check menus before eating out to ensure suitable choices were available.

Nearly all participants spoke to the negative impact of rigid dietary adherence on social relationships. Intermittent fasting windows made socialising difficult, with participants opting to avoid socialising to maintain their fasting periods. Having to eat outside of their usual window induced feelings of guilt and frustration about not be able to 'do it properly'. Participants spoke of feeling uncomfortable about having to consume foods they did not consider to be healthful in social contexts. Brad describes always being conscious of the food he consumes:

*"I think on a psychological or mood level you do have to, it is an extra thing to have to think about, like you do think about it more um and it does limit you a little bit [...] you know if your mates all go and get a Big Mac and you're like yeah I'd prefer not to, but*

*you don't want to be all awkward about it, and it is sort of thinking, it's kind of like, I don't know, it's not really anxiety, but you're always, I'm always kind of conscious of what I'm eating and then I will, if I have eaten something unhealthy I will almost make a conscious effort to be healthier the next day" (Brad)*

Interestingly, Brad does not perceive his own healthful eating to be problematic or extreme, however, in relation to his social networks it would appear that his food choices might be described differently by others. He provides anecdotes from work colleagues who have commented about his evangelistic sugar avoidance, perhaps indicating a lack of awareness as to how normalised his dietary restrictions have become for him, in contrast to how his food choices are perceived by others.

Emily describes how her dietary restriction had prevented her from being able to fully engage in the same way as others. Whilst these limitations were retrospectively acknowledged, at the time of her disordered eating, such restrictions had just accepted as part of maintaining a healthy lifestyle:

*"I mean there's probably been a million times when I've been out to dinner or been at a function and not eat, I'd definitely been at a birthday celebration for me, where a cakes been made and I got given a slice of the cake and I wasn't eating sugar at the time and so I just hid the slice under my chair and then threw it away, I don't think I was missing events, but you know, I might have been going to dinner, but I wasn't really participating, and I wasn't connecting in the same way, because I was so strict, so fearful I guess of moving away from this eating, of what I perceived to be healthy or not" (Emily)*

Contradictions between 'healthful' dietary or exercise practices which had paradoxically resulted in problematic outcomes were reported by the majority of participants. Participants talked about feeling out of control, anxious, guilty and fearful when required to divert from rigid food practices:

*"Um, I felt out of control before, honestly it felt like there was something else in my head that was dictating my decisions and that essentially it controlled by whole life because when I was really struggling with orthorexia and trying to eat clean, um it made me very anxious, and yeah I did like decline a lot of social things [...] a couple of people expressed concern to me and I knew that they were right, but I also felt like I*

*could not stop, um, like the momentum was too strong, and this pattern now was just me, and I definitely felt out of control” (Emma)*

Feeling like one’s body transformation progress would be undone, or that weight or appearance would be immediately impacted after eating unhealthy foods were also key concerns:

*“I don’t know if I would call it guilt, the predominant feeling I can identify looking back was anxiety of is this going to undo my progress, am I going to gain the weight back, um, yeah so if there was guilt it was probably clogged under the anxiety and like the vanity of is my stomach going to look big now” (Emma)*

Similarly, not being able to exercise for preferred durations or as frequently as desired resulted in negative emotional states. Feeling like one *had* to exercise even when they didn’t feel like it, or prioritising exercise over socialising was also commonly discussed:

*“I feel a little bit guilty and it kind of um effects my mental health, you know, I feel like I’m not being the best version of myself physically and nutritionally” (Gerard)*

Gerard’s best version of himself strongly aligns with healthiest notions of good health citizenship and morality. When making the right lifestyles choices, he is free to be the best version of himself, nutritionally and physically. In contrast, poor choices will not deliver his best self.

#### **4.2.4 Sub Theme: Compensatory Behaviours**

The use of compensatory behaviours following unhealthy food indiscretions was common for participants. Eating less or being more conscious about making ‘clean’ food choices following unhealthy eating was reported by all participants. Similarly engaging in higher levels of exercise was also used to mitigate or equalise unhealthy food consumption through self-discipline:

*“Basically I just do a double day at the gym and I’ll probably not eat as much as I should the follow days, so if I, I kind of just make up for whatever it is that I’ve been bad on, so if I eat too much then I’ll just eat less the next day, if I miss a day at the gym I’ll just do a double day at the gym” (Ryan)*



Scarlett reframes her compensatory behaviours through an empowerment lens whereby she is able to exercise more productively following a food indiscretion. However, she also recognises that if she were not able to exercise after having eaten unhealthy food, this would result in negative feelings about herself, indicating a level of anxiety surrounding unhealthy food consumption:

*“Um I would definitely feel bad about myself if I had like an ice cream or something and then I wasn’t able to go to the gym the next day, like because if I have like a carbohydrate rich meal one night and I’m happy to do that occasionally, I would really want to put it to good use the next day, like try and use the energy that its given me for something productive, but if I was to have that and not able to train the next day or anything I’d feel pretty not so good about myself” (Scarlett)*

In a similar manner, Kent (2020) observed that ‘cheat meals’ were legitimised by talking about the body as an energy consuming ‘machine’, whereby extra calories consumed could simply be burnt off. This enabled the negative effects of eating unhealthy foods to be rectified through acts of self-discipline, with exercise perceived as a healthy ‘intervention’. Compensatory exercise was therefore used as method of re-balancing health.

For other participants, identifying strongly as a health-conscious person placed restrictions on what kind of foods they felt they could eat. Gal feels that her health identity might be questioned or challenged if she were to eat pizza. She is aware of the tension she feels between the desire of maintaining a healthful identity and appearance, but also recognising she might like to be more flexible and less concerned about her eating:

*“As a person who’s kind of health conscious, sometimes I find it like hard, because I live in a flat with other people who might not be as health conscious [...] I feel like I can be kind of like influenced by what they’re doing, like oh I don’t know, like if they’re having a pizza tonight, why don’t I get pizza, but then I’m like oh but it’s not good for me, like the mental dilemma I guess [...] oh they’re having pizza for dinner why can’t I have that you know, but I know that’s what I’m putting on myself you know” (Gal)*

Gal describes her inability to deviate from healthy eating a limitation she places on herself, however her ‘choices’ appears constrained by her rigid embodiment of healthist discourses. By engaging in self-discipline and making the proper food choices she can continue to identify as a moral healthy citizen (Crawford, 1980). Kristensen et al., (2016) found that performative food choices enabled insight into moral character and citizenship to

be observed by others which enabled the façade of the healthy moral self to be maintained. Meeting the healthful expectation from observing others was a concern for their participants, as was the case for Gal.

#### **4.2.5 Sub Theme: Being Called Out, Insight and Labelling**

Although many participants did not perceive their own diet and exercise practices to be problematic or extreme, extreme health practices were commonly observed by others and “called out” as such. Participants recounted concerns that had been raised from friends and family regarding their dietary behaviours or high levels of exercise:

*“I definitely remember my boss at my previous job um said to me you’re getting too skinny, um, he was like you actually look unhealthy, like it’s going beyond, um but I just couldn’t see it in that way, because I was eating, it wasn’t about not eating, um, and I was exercising regularly, but I wasn’t exercising for hours a day, but I had my very strict exercise routine, which included a lot of hot yoga, um because that was very, very popular, and um so I saw myself, and again like that boyfriend who was like what the hell do you eat, um yeah, so I can see that, and it was just trying to be, when you say that, this idea or ideal of what health was, which was very kind of, it excluded whole food groups you know, all meats, all dairy, all wheat, all excluded, it was like ah, ok well what’s left?” (Emily)*

Participants however positioned themselves as being empowered through their individual lifestyle choices, which they perceived as positive and important aspects of their lives and identities. When health beliefs and behaviours were contested, participants strongly resisted such challenges:

*“I mean some people are just fucked and they’re very judgemental, um, like I mean I’ve had loads of people always who are judgemental on the way I eat, like I have heaps of them” (Carey)*

*“Um, my friends, they do comment, like you eat so healthy, it’s annoying, no, I don’t like, I wish they’d stop commenting to be honest, it’s kind of annoying, it’s like, “oh you eat so healthy”, like shouldn’t everyone? (Natalie)*

When his high levels of dietary and exercise engagement had been called out in the past, Ryan describes how he felt that others didn't understand his lifestyle choices and were trying to stop his progress:

*"When I got called out for that kind of stuff, sometimes it would get annoying because it felt like people were trying to stop my progress I guess or trying to guilt me into stopping my progress, but I would say that was probably back a couple of years ago, I was really strict on everything and now it's a little but more, I can kind of see where people are coming from when they make those kind of comments" (Ryan)*

Ryan mentions that he could 'kind of see' where concerned others had been coming from, and upon reflection is able to identify that some of his past health behaviours had been more rigid and extreme. However, he still struggles with feeling like some of his lifestyle choices, in particular the intensity of his engagement, are not understood by others:

*"Mostly because of the chicken and rice thing, they don't understand how I can eat that as the same meal for months without getting sick of it [...] It's the food and the exercise, people, I think it's just because I like, I think the difference is I just like going to the gym and it's kind of my distress that people don't really get, I can go every day pretty much or want to go every day, but yeah, its, I can see why they don't like it, but yeah that's another observation people just get how you can go to the gym six times a week and not get sick of it" (Ryan)*

Like many participants in this study, Gerard positions his health behaviours as choiceful and empowering (Gill, 2007). However, the diet he describes is restrictive and undertaken in conjunction with high exercise engagement to pursue a muscular appearance ideal, requiring an extremely low body fat percentage and high muscle mass. Interestingly, he is acutely aware of the difference between healthy eating and how he needs to eat to achieve his appearance goals, which are prioritized over health:

*"I know there's a big difference between healthy food and food that I'm using to achieve calorie goals, um if I were to be choose a healthy food it would most be do with micronutrients [...] I get the difference between what healthy and what's just low calories sort of thing, chicken I'd say is relatively healthy, but the way I was only eating chicken and broccoli and rice for a long time, there was definitely a lot of micronutrients I was missing out on" (Ryan)*

Ten out of 15 participants self-identified as having varying degrees of disordered eating histories. For these participants, identifying with the label of 'orthorexia' would have previously been contested, resisted, and strongly rejected. In particular, the labelling of more extreme behaviours as problematic had been difficult to conceive at the time when caught up in the momentum. Diet and exercise behaviours were also so engrained with daily life and self-identity and reinforced through public health messaging and social media, that it was difficult to perceive or accept them as unhealthy:

*"Like now I can very clearly see that my first year or so at university was definitely, I was definitely showing orthorexic behaviour, well this one friend kind of called it out as such, and I'm sure other people in my life kind of observed that, yeah, I would have just kind of adamantly rejected any kind of labels" (Julianne)*

Emily similarly describes how in the past she had been unable to understand her eating and exercise practices as problematic:

*"I just couldn't see it in that way, because I was eating, it wasn't about not eating, um, and I was exercising regularly, but I wasn't exercising for hours a day [...] this idea or ideal of what health was, which was very kind of, it excluded whole food groups you know, all meats, all dairy, all wheat, all excluded, it was like ah, ok well what's left?" (Emily)*

In retrospect however, extreme eating and exercising was recognised as such, with participants accepting 'orthorexic' labelling as an accurate reflection of their previous behaviours.

*"What changed it was I got a boyfriend and um, he was like, what can you eat, and I couldn't really answer, I couldn't like, he wanted to go out for dinner, and I was like oh I can't eat anything here and I'd sit there with like a miso soup, it was stupid (laughs) but you know I can laugh about it today, but at the time it was so serious, and he'd be like should we get a pizza and I'd be are you kidding? (Emily)*

High dietary engagement and food choices were talked about in ways which positioned healthy eating as safe intermediary between previously disordered eating and 'normal' eating:

*“You start to realise there is so much more about food, like there is healthy food, and we eat it and its good, but there’s also all the unhealthy food, and if you choose healthier food it can lead to weight loss and stuff like that, in like a nicer way than having to starve yourself” (Gal)*

By following a vegetarian diet, Gal has found that she is still able to maintain a low body weight without having to severely restrict her food intake. In the past Gal’s diet had been ‘really restricted’ and she recounts embodying the catch phrase ‘nothing tastes as good as skinny feels’. However, by choosing to eat only healthy foods, she is now able to position herself as less restricted and take-up a more healthful identity, whilst still achieving socially valued appearance ideals.

Musolino et al. (2013) found that young women adopted normative discourses of ‘healthy eating’ and engaged in self-discipline and body surveillance to maintain their disordered eating practices. This was similarly the case for some participants in this study. Musolino et al. (2013) suggests that culturally sanctioned health discourses are available for people with disordered eating to adopt and position themselves within. With healthy diet and exercise behaviours culturally valued and celebrated, a normative space is afforded for people to engage in body surveillance, whilst simultaneously enabling moral positioning of more extreme health behaviours as claims of personal self-care, regardless of their level of adoption. Clark (2019) further notes that whilst short-term dieting and exercise practices are able to be called out as superficial, health has now acquired such an elevated moral value, it has become almost impossible to question or criticise. The motivations behind ‘health’ practices therefore may be difficult to understand or call out as problematic, excessive or damaging.

#### **4.2.6 Sub Theme: You Can’t Be Perfect All the Time**

Despite talk of strict and sometimes rigid adherence to healthy diets and exercise routines, participants spoke of balance as the signifier of a healthy or idealised lifestyle. Participants identified a clear distinction between healthy eating, which was described as balanced and flexible, and ‘orthorexic’ eating, which was characterised as rigid, inflexible and obsessive. Exercising for enjoyment was similarly contrast against ‘orthorexic’ exercise, which was described as compulsive, excessive, undertaken as punishment or something associated with feelings of guilt.

The same behaviours, however, could be healthy or orthorexic, depending upon the motivations behind such behaviours and how balanced they were perceived to be:

*"I think for me, um lots of the behaviours are actually the same, like I still exercise one to two times a day for a couple of hours now where I feel like I'm in a pretty healthy place, um kind of when I was kind of at my most unhealthy, I would say it's the kind of compulsion and feeling like that is something that you have to do, um and the guilt if you don't do it, is what makes the difference [...] I'm probably not going to run tomorrow because we are going to the pub quiz, and I'll probably have a pizza and a beer, and then I just won't think about that again, well I mean I probably will to be honest still (laughs), I'm not going to kind of come home and run for two hours afterwards or feel like I have to make up for it um, so I think for me, um, like a normal day could still look like exercising in the morning and the evening and eating relatively healthy low calorie foods throughout the day, um, but it's just that if I did deviate from that I wouldn't feel, that kind of overwhelming guilt and kind of can just kind of get on with other things in my life without thinking about it" (Julianne)*

Julianne identifies that for her, the distinction between whether the same behaviour is problematic or not depends upon her ability to deviate from her diet and exercise routine without experiencing feelings of guilt. Julianne observes that from her more balanced perspective today, a dietary deviation would no longer impact her as it would have in the past. However, upon further reflection, she recognises that perhaps a level of pre-occupation still exists and that some of her health practices might not be as balanced as she would like.

Scarlett describes perspective as important when determining whether healthy eating was just healthy or problematic:

*"It's really hard as an outsider to be able to judge this kind of thing, because you'd really have to be in someone's head to know if its extreme or like causing some sort of negativity, like I guess it really just comes down to your overall sort of happiness [...] if you have a really strong and a positive why behind your training and your goals and your diet, then you'll be more likely to sort of work towards a happier outcome, so yeah, it's kind of like saying how do you judge someone's frame of mind, as to whether it's just general or extreme, but yeah if you feel happy and you feel good about what you're doing and yeah, not thinking negatively towards your body then yeah, you're doing a good thing" (Scarlett)*

Scarlett describes how her vegan diet and high exercise engagement do not create feelings of negatively for her and are therefore perceived to be positive and balanced.

However, she also outlines a range of social implications which result from her daily health practices and describes how she would not feel good if she were unable to exercise or equalise unhealthy food consumption. The notion of balance versus imperative comes into question again here.

Balanced eating was typically described by participants as giving oneself 'permission' to set the healthy diet ideal aside on occasion for the allowance of treat foods:

*"Not all healthy eating is orthorexic, I feel like if you don't allow yourself any treat foods, or if you beat yourself up over having something you enjoy that's not healthy, that's orthorexic. But if you just generally follow a healthy diet day to day, but occasionally you'll have some treat food you don't consider healthy and you're ok with that, that's not orthorexic, that's just healthy eating in my opinion" (Natalie)*

However, participants also described having to balance the tensions between their health ideals and dietary deviations. Self-compassion discourses were used to describe how participants managed occasions where they had given themselves 'permission' to deviate away from the usual diets and consume 'treat' or unhealthy foods. Self-compassion talk included describing oneself as human and imperfect, or by acknowledging that we all make mistakes, one could do better tomorrow and the need to be kind to oneself:

*"I would probably think on the reasons why I made that discrepancy, and um obviously um, think about the nature of it and make an action from that [...] like I try to be as kind to myself as possible, because no one's perfect and we all make mistakes so yeah" (Jenn)*

*"I guess I give myself permission is probably the word, which um sounds very strict doesn't it, just to be kinder to myself" (Emily)*

Gal describes below how her body might 'talk to her' when she misses an exercise session or consumes food she considers to be unhealthy. Whilst she does not describe her body physically speaking in terms of perceived sensations, Gal does recognise it may be feelings of pressure and guilt which are the real voice. Gal is able to position herself as more balanced by taking up self-compassion discourses and acknowledging that rather than feeling guilt or anxiety, she should instead be kind to herself:

*“Sometimes I don’t feel like going to the gym, but mainly because I am just so exhausted, um, but there’s also like that feeling of guilt lingering there, oh like you missed the gym tonight and then you’re eating like nachos for dinner, you know and your body will just like talk to you about that, but then there’s also like, oh you know, be kind to yourself, it OK to just miss one day, like the gym is still going to be there tomorrow, you just I don’t know catch up, do more sets of exercise tomorrow to make up for it so, so yeah it does impact you” (Gal)*

The use of self-compassion discourses was interesting in that participants recognised that consuming foods they considered to be treat or unhealthy foods, was not necessarily something they *should* feel guilty about, if they had a balanced healthy lifestyle. Furthermore, being kind to oneself, or knowing that one *should* be kind to themselves, did not necessarily alleviate feelings of guilt or anxiety, nor did it negate the need to engage in compensatory exercise behaviours. Instead, self-compassion was used in a way which acknowledged that rigid or inflexible eating was not balanced but by being kind to oneself by allowing some dietary and exercise flexibility, they were able to reinstate themselves as a more balanced and healthful individuals. The same behaviours could then be justified as healthy, rather than obsessive or extreme and therefore less characteristic of ‘orthorexic’ behaviours as defined by them.

### **4.3 Theme 3 – How Influenced Are You?**

Social media content highly influenced participants diet and exercise behaviours. Despite describing themselves as critical consumers of health information, participants were still influenced by health and appearance related content even though it was considered to be untrustworthy, unrealistic and unattainable. Social media engagement facilitated both conscious and unconscious comparison between self, others and culturally valued appearance ideals and representations of health. Such comparisons could be motivational and inspirational or result in negative emotional states and body dissatisfaction. The commercial nature of social media infrastructure and financially motivated health and appearance content also resulted in feeling like one always had to do more to feel, look and be healthy. Despite acknowledging how influenced participants were by social media content it was difficult to disengage, even when content consumption resulted in negative outcomes.

#### **4.3.1 Sub Theme: Keeping it Real - Substance Over ‘Skinny’**

Overwhelmingly, participants did not consider social media platforms to be credible sources of health information. Participants talked about making a conscious move away from



“the skinny pages” which they described as health influencer or beauty style pages. This style of content was characterised by staged body photographs, manipulated images, the use of camera angles, unrealistic weight loss promises and pages which displayed unrealistic, unattainable or unsustainable body shapes. The ‘skinny pages’ were also criticised as sources of health misinformation dispensed by unqualified influencers. Much of the content was considered to be extreme, ‘highlights’ only versions of life and constructed purely for social media rather than depicting real or genuine representations of bodies or daily health practices. Influencers who had commercial interest in sharing information were also considered to be untrustworthy.

Credible content, in comparison, was considered to be evidence-based, from government websites such as the Ministry of Health or World Health Organisation. Content was also considered to be credible when it came from a reputable source (health professional or other qualified person), from someone participants knew so that content authenticity could be established, or where no commercial interest was evident from the poster. For male participants, professional athletes with proven success in their field were also considered credible sources of diet or exercise information. Credible content was described as information participants would consider suitable for incorporating into one’s daily health practices. The kinds of content participants adopted most typically consisted of exercise techniques, recovery information, work outs, nutritional information, healthy recipes and weight loss specific information, all primarily targeted towards producing a healthy body as signified via a lean and toned appearance.

Participants expressed strong preferences for authentic, relatable content which was realistic (depicted life’s ups and downs) and did not focus entirely on perfect bodies and lifestyles which were perceived as unrealistic, staged, unattainable and unsustainable for most:

*“There’s just people who keep it real I guess, and that’s why I love Sarah’s Day so much because like she’s a mum, and she like being a Mum’s so hard, but she’s still keeps on top of her goals and stuff, but what she shares in an accurate, well it seems to be an accurate, representation of what her actual life would be like and she shares like the struggles that she has as well” (Gal)*

Accounts that shared lived experiences of disordered eating and dietary and exercise journeys, both historical and continued day-to-day experiences were viewed favourably. Over time, and through content consistency, values and motivations behind accounts were able to be established which further increased credibility. This style of content was contrast

against influencer content, which was described as following the latest diet fads, obvious commercialisation of products or services and appearance only based content.

#### **4.3.2 Sub Theme: Attainability of Body Ideals**

Participants explicitly acknowledged how the presentation of idealised and perfect body shapes on social media was not necessarily achievable or sustainable for most people and spoke of the extreme dieting and body work that would be required to achieve such a look:

*“It’s like moderately muscly, but also this impossible idea that you should be curvy, and skinny (laughs) which you know, it’s almost impossible to attain, but I see that a lot, sort of like hourglass type of figure, like a slim waist, with a big but and a big chest like that’s, that’s portrayed a lot on social media I think, that’s very uncommon in real life” (Scarlett)*

Whilst the Western thin ideal was problematised by participants, it was still the appearance goal they worked towards and assessed themselves against. Interestingly, despite engaging in high levels of body work themselves, participants still considered the idealised bodies presented on social media to be unattainable.

As a result, some participants spoke of consciously moving towards accounts which promoted body positivity, female empowerment and wider environmental, social and health focuses. These accounts were less focused on physical appearance and were considered to be more reflective of real people with ‘normal’ sized bodies. However, participants still consumed appearance-based content with aspirational body images:

*“I definitely still follow um, women on my Instagram that, like I follow them purely because um, like they have nice kind of figures that I aspire to, so it’s not that I necessarily that I stopped consuming unhealthy social media like bodies, I still definitely have lots of unrealistic body shapes on my Instagram feed” (Julianne)*

Julianne indicates that despite being aware of alternatives to the ‘weight equals health’ approach and that social media privileged only one body shape (Riley et al., 2018), stepping away from culturally valued thin ideal was difficult to do. Some participants recognised the problematic nature of appearance content and spoke of disengaging from social media through reducing their content consumption, unfollowing unhelpful accounts or expressed a desire to disengage completely:

*“Because of the path that I’ve had over the five years [...] always like thinking about how I could get skinny or whatever and seeing people dieting and seeing my sisters dieting, um and like trying a couple of diets myself when I was younger, I just feel like I’ve seen enough (laughs) you know, I don’t want to be obsessed with that anymore (laughs)” (Emma)*

*“I definitely I think I didn’t consume any social media at all, if I just logged off and just deleted my social media I think I would definitely feel far less kind of guilty emotions in terms of oh I should go to spin three times this week, or I should run and I should post the Strava of my run so that everyone knows that I ran (laughs)” (Julianne)*

However, knowing that disengaging from unhelpful content may be beneficial or helpful did not necessarily mean that participants consumed less content or logged off. Ceasing to strive towards such body ideals was even more difficult. As Liimakka (2011) observed, despite being educated critical thinkers, young women in particular still encounter and experience sociocultural pressure to comply with appearance ideals.

#### **4.3.3 Sub Theme: Orthorexia as a Privilege**

Whilst some participants recognised the privileged space within which their own health practices took place, many described the cost and time required to maintain healthy lifestyles as unrealistic and a privilege not currently available to them. Financial and time constraints created barriers for many who could not afford expensive classes, gym memberships, speciality foods, supplements, or time to engage in hours of exercise. Angie, a busy working Mum of three, considers the ability to adopt an orthorexic lifestyle a luxury:

*“It seems to me like that’s a complete luxury, I think that, that disorder [...] I like just don’t have time to obsess about it, like 3 kids, 40 hours a week, um you know, I don’t have time [...].so it seems to be like a first world problem, too much time. Is that a bit mean?” (Angie)*

Easton et al., (2018) similarly observed how participants in their study considered social media health content to be unrealistic, largely due to the luxurious lifestyles depicted in content. The advantages afforded to content posters in comparison to content consumers, made such lifestyles feel less attainable. The notion of unattainable beauty ideals was also reinforced through appearance enhancements, such as plastic surgery or breast implants,

which were observed to have been undertaken by influencers. However, despite acknowledging the unrealistic and unattainable nature of social media content, it still impacted upon the kinds of goals participants were setting. These goals were largely appearance based and motivated by peer approval rather than health.

Participants recognised that for influencers, undertaking such high levels of body work was their income source and the primary focus of their lives. They rationalised that for regular people with jobs and families, the amount of time and effort required to achieve the idealised body shape, was not feasible or realistically able to be achieved with their currently available resources. Comparing oneself to such ideals was therefore unhelpful when not feasibly able to be achieved within one's own life context:

*"You know with some of the fitness guys they go real hard core on it, I don't have the time, I don't know how they manage to do that, maybe for some of them it's their whole life though, so I'm maybe not too harsh on myself about that" (Brad)*

*"I'm not a body sculptor, I'm not a top athlete, there's absolutely no reason for someone like me to be doing that." (Emily)*

However, despite currently engaging in highly significant diet and exercise practices, many participants indicated they would still choose to incorporate more organic and speciality foods into their diets and extend the types and durations of exercise they engaged with, if they were able to do so. Identifying as a healthful, or health-conscious person was important for some participants in this study, with diet and exercise practices providing a basis for pursuing social distinction. As Crawford (2006) contends, health has become a matter for identity, a strategy for distinction and a provider of symbolic capital. "Health is conceived as the condition of possibility for the good life, or even the good life itself" (Crawford, 2006, p.404).

Self-care has been described as 'a process by which the layperson functions on her own behalf to promote health, to prevent illness, and to detect and treat disease when it occurs' (Segall & Fries, 2011, p. 254). In this regard, individuals are the primary provider of care, and therefore the producers of health (Segall & Fries, 2011). Whilst this term has been historically used in more biomedical spheres, it is extending into personal daily health practices. Fries (2013) suggests that in Western postmodern society, the deployment of health-related products and services as self-care now serve as markers of identity. Self-care choices which are associated with the body, identity and social context serve as 'exclusionary resources' (Holt, 1997, p.95) generating symbolic 'distinction' (Bourdieu, 1984).

The commercial health industry also produces a seemingly endless array of products, services and knowledge to assist individuals to enhance their health and appearance (Crawford, 2006; Hesse-Biber et al., 2006). Marketed as self-care, health and appearance related body projects become elevated to a morally virtuous status (Crawford, 2006; Fullagar, 2002; Lupton, 1995), whereby one is able to show how much one cares for oneself (Bordo, 1993). A healthy and attractive appearance provides culturally valued capital for the individual, where in comparison, deviations from the cultural ideal result in discrimination and prejudice (Puhl & Brownell, 2001). Specific lifestyle and body representations therefore become privileged over others, despite the fact they remain largely unachievable for most.

Some influencers were noted as promoting perfect lives and bodies achievable through the consumption of “health” products, such as teas, shakes and fizzy sticks. Despite recognising such products were often sold by unqualified influencers and the products themselves lacked nutritional or scientific support, they had still purchased them anyway. Societal pressures to have a healthy, fit body aesthetic meant that some participants were willing to consume ‘health’ products in the hope that this would deliver the idealised body:

*“I think like fitspo or just seeing someone that looks good, I even bought into the skinny tea at one point, like many years ago, so just things like that, seeing the picture, someone’s promoting this thing, I don’t really know what it is, but you know, they look good so, if I buy it, I’m going to look good” (Natalie)*

*“I never used to have protein powder and I think the reason that I have it now is probably because I see everyone else has protein powder, you know, which I know sounds really stupid, like I know that it’s, you know, protein’s good for you, I’m not like mindlessly buying protein powder because everyone else has it, but that’s probably one of the reasons that I got it, or I see it and yeah the people that I follow are having it” (Gal)*

Other participants described how health and fitness businesses induced feelings of anxiety and guilt in more covert ways, whilst generating income for their businesses. Julianne’s spin studio runs competitions where members are required to post each time they attend a spin class to gain entry to a prize draw. During the competition process, observers can see how many sessions other members are attending. After viewing how frequently other members had attended, Julianne describes how she feels guilty for not having attended more sessions, recognising she has attended fewer sessions than other members. However, when she does post her attendance, her already level of exercise is then

questioned by others as excessive. She is attending both too frequently and not frequently enough. The spin studio also has a commercial interest to ensure revenue generation through increased attendance, however in their drive to increase attendance, they are also potentially inducing negative emotional states for some of their more vulnerable members:

*“I remember when I was at a stage where one of the instructors at my spin studio was running a giveaway where if you posted and tagged her every single time you worked out um she’s enter you in a give away from one of her sponsors, several people messaged and said on my god you’re doing so much exercise, and I like I wasn’t doing any more than what I was normally doing um but I guess posting it on Instagram every day had made people in my life feel like there was um like I was doing a lot” (Julianne)*

Algorithms inherent in social media platforms themselves were also identified as promoting unhelpful content, particularly for those with histories of disordered eating. Participants found the relentless promotion of diet and exercise pages frustrating and talked of avoiding the search functions which recommended only the skinny pages:

*“I mean I get frustrated if I’m looking at um Facebook, I don’t really go there much and they keep suggesting like ads, like suggesting um a work out, what’s her name, there’s one particular women... Kayla, yeah, so for whatever reason, she keeps getting served up for me, my demographic, psychographic must be like ‘you’re easy prey’ that’s literally how I see it, I’m like they’re really trying hard to get me, they’re really not matching their data, their algorithms, their AI is confused by me, I’m like not relevant content, and their like what do you mean not relevant content? I’m like no, so that makes me mad, that there is, I guess there is an algorithm somewhere that’s making assumptions that promote unhealthy kind of, you know, like on a day or a week or something if I’m not travelling well, I’d be more susceptible to seeing that and not feeling great about myself or, maybe signing up, or you know” (Emily)*

Influencer style content recommendations further worked to impede more healthful and balanced content engagement, by obscuring alternative understandings of healthy which were not associated with weight, restricted eating or ongoing body work. Repetitive content also worked to reinforce the one socioculturally valued thin body shape which was depicted as acceptable.

#### **4.3.4 Sub Theme: Making (Un)healthy Comparisons**

Viewing healthy eating and appearance related content made it difficult not to compare oneself to online representations of healthy eating and bodies, even when much of content was considered to lack credibility and presented unrealistic and unattainable body shapes. Comparisons were taken up as assimilated as positive sources of inspiration or motivation to increase or change one's own health behaviours, however, they also had the capacity to induce feelings of guilt, anxiety, jealousy, inadequacy and make participants reflect poorly on themselves. The "skinny pages" could therefore be problematic with some participants explaining they needed to be cautious when consuming content they considered to be unhelpful:

*"I would say most of the more classic fitness-based content that I follow, whether it be some kind influencer or from people I know who just post regularly, definitely makes me feel more guilty, or just makes me feel like I should be working towards um, a kind of body goal, that's not necessarily attainable or desirable" (Julianne)*

Despite knowing content had been constructed specifically for social media and was not realistic or portrayed attainable goals, participants still remained susceptible to viewing unrealistic body representations. Easton et al., (2018) observed similar findings, with 'fitspo' style content providing a source of inspiration and motivation, despite consisting of content which was considered to be unrealistic and untrustworthy. Other studies have also found that despite the fact that people considered content to lack credibility, they still continued to engage and did not consider the lack of credibility a deterrent for ongoing content consumption (Khamis et al., 2018; Marwick, 2015).

Despite being aware of the negative impact social media can have on her, Gal describes how she continues to consume content anyway:

*"Some people that I follow, and I know that I do it, I follow purely because of how they look I don't even read their captions or what they have to say, they just have photos of their body and I'm like wow, oh look how ripped they are, look how good they look sort of thing, so um I guess, yeah following those kind of accounts, yeah like I said, it depends on the day, it will make me go yeah I want to go to the gym that's really inspired me, um, or it will be like oh my god I'm never going to look like that, um why can't I have her muscles or whatever, um yeah but I do try to stay away from that kind of stuff because I know that it's not good, I'm very aware of the way that it makes we*

*feel, so I try and stick to people that are like very um just real with what they post yeah I try to stay away from it in short, but it's yeah, I know that I do, do it still (laughs)" (Gal)*

The extent to which Influencer style accounts were perceived positively as motivational or inspirational or negatively internalised (see Festinger, 1954) depended 'on the day' and how participants were feeling when they consumed content:

*"I definitely go on it every day so I'm like being made aware of it every day, I think the extent of the influence depends on how I feel that day, like if I'm willing to like take on what their saying I guess" (Jenn)*

*"It depends on the day, sometimes it would (be inspirational), and sometimes it would make me just feel a bit shit about myself (laughs) you know" (Gal)*

Angie provides as example below of how the content she consumes can be perceived as motivational, but at the same time it may also elicit more negative emotions such as jealousy, anger and failure:

*"It motivates me to keep going, like sometimes I feel a little bit jealous, because you know I've been following them and this is probably my second time on keto, like seriously on keto, but um, you know there were people who joined with me last time that are actually like doing really, really well and have lost a lot of weight, and sometimes I see that and I feel a little bit jealous and a little bit angry with myself that I haven't, but generally it just motivates me and I'm like well she did it and she was like worse off than me, and I know I don't compare, but kilo wise she was heavier and she's the same height as me and now she's done this and why can't I do it, I've just got to be patient and persevere" (Angie)*

Social media representations of weight loss are often depicted as a triumph of self-control and willpower, with body transformations represented as ongoing, never ending and requiring continuous work to achieve the end point of perfection (Riley & Evans, 2018). As Angie describes above, she blames herself for not being able to lose the weight she desires and feels angry at herself for not having succeeded. However, the way she describes her failed past attempts, also allows her to open up the potential for a successful future self, where weight loss can still be achieved through her patience and persistence.



Angie describes the woman she is comparing herself to as 'worse off than her' due to her heavier starting weight. Depictions of weight loss success work to enforce the self-discipline and personal control Angie feels she requires to achieve weight loss. This focus on Individual responsibility also negates any other factors which may prevent Angie losing weight and placed success is in her own hands. It is apparent to Angie that her current body shape does not confirm to the culturally valued thin ideal and she has incorporated obesity discourses into her understandings of health, such that she understands her own higher body weight to be reflective of poorer health. Despite stating that she does not compare herself to others, Angie describes comparisons which influence her health behaviours in both positive and negative ways and how she perceives herself in relation to others weight loss journeys.

#### **4.3.5 Sub Theme: Doing the Diet Differently**

Diets were taken up by participants at differing levels of intensity. Comparing one's own diet with online others, enabled identities to be navigated and renegotiated. For some participants doing the diet right or well, instilled a sense of achievement and pride for the dedication, commitment and high level of knowledge required to maintain such dietary practices. Perceiving others as doing the diet wrong, or in ways which contradicted personal understandings of health, sometimes resulting in judgement or criticism of others:

*"It's just, I just think it's really unhealthy and I guess I sort of judge them a little bit and I go ohh that's so unhealthy, yeah you're losing weight but what are you doing to your arteries and what are you doing to your liver and you know like yep, and that's what I kind of think about" (Angie)*

*"I'm currently following a vegan diet, um, that has a lot of like plant diversity, so you know sometimes you have people that are vegan, but they still have quite like a lot of refined foods, so yeah, I'm kind of on the opposite end of the spectrum where I'm having, I'm trying to have 30 or 40 different plants per week" (Jenn).*

In contrast, observing others engaging differently, or at a 'higher level' than themselves, enabled participants to position themselves as more moderate and less obsessive:

*"Some of the people who post in the keto groups like I said before are like really meat and like cream all the time and you know they're really against the carbs that are in*

*veggies and stuff, but I think I follow a more sort of moderate view [...] I think the people who eat loads of meat, the people that use loads of fake artificial products like shakes, I mean I have protein powder, but I mean it's when I want it sort of thing, not obsessively [...] the people who do really artificial keto, yeah like same sort of thing, they buy everything, like it's the bread that you buy, yeah they live like a fast food lifestyle just within keto basically and I don't subscribe to that" (Angie)*

Angie's comments echo a moral sentiment, whereby she considers artificial or fake keto akin to adopting a fast-food lifestyle, which she considers to be unhealthy. Angie's comments are similar to Riley & Evans (2018)'s observations, whereby discourses were taken up to imply that shortcuts, such as teas and shakes were associated with laziness, and were not sufficient to secure weight loss success. Angie perceives that it is only through hard work and discipline, that results can be achieved.

Upward social media comparisons, where the individual compares their own diet, lifestyle and appearance to those considered to have a 'healthier' lifestyle to their own have been found to influence health behaviours for individuals who self-identify as orthorexic (Greville-Harris et. al., 2019). Such upward comparisons working to make the individuals current health efforts appear sub-standard and motivating or inspiring the adoption of further food rules to achieve a higher level of 'healthy'. Such that, if you eat what they eat, you will eventually look like them. In comparison, downward comparisons with individuals comparing their own health behaviours with those perceived to be less healthy than themselves, resulted in judgment and feelings of superiority (Greville-Harris et. al., 2019).

Emily describes becoming aware of how influenced her food choices had been, after comparing her own diet, which was at the time extremely restricted, with that of an unrestricted diet:

*"I said, oh do you drink milk, and she said yeah, my body doesn't have any problem processing milk and so for me it's just a really good source of calcium, which for me was right at the height of "milk is the like worst, dairy is terrible for your body for everyone collectively"...as is gluten, terrible, no one eat any bread, no one eat any dairy [...] it really stuck me how influenced I have been, can be, how susceptible to social media, to the media, to whatever trends and someone goes, you know, this, this and this, and I'm like yes! (laughs)" (Emily)*

Cinquegrani & Brown, (2018) found participants in their study adopted seduction narratives to describe how they had been allured into 'clean eating' through the

internalisation of culturally dominant messaging, whereby a 'one size fits all healthy lifestyle' is promoted as a solution for a disease-free world (Gavroglu, 2012). Participants in this study had similarly been seduced by social media content which had promoted clean eating and other fad dietary trends. This had resulted in the elimination of entire food groups such as wheat, dairy and meat, with Emily having omitted so many food groups, she was left thinking "well what's left?".

## **Chapter 5 - Discussion / Conclusion**

This research explored experiences of highly significant dietary and exercise practices, which whilst considered to be healthful may paradoxically become problematic or result in dysfunction for the person instead. Participant experiences were analysed through a post-structuralist lens to explore the motivations behind high levels of engagement and the meanings such practices held for participants in their daily lives. The role of social media platforms in encouraging and perpetuating 'orthorexic' beliefs and behaviours were also explored. Findings indicate that whilst eating and exercise practices were motivated by a range of embodied experiences, they were also significantly subject to sociocultural influences which impacted how food choices were made, how health practices were perceived, understood and engaged with, as well as the appearance goals participants worked towards. Social media content also magnified socioculturally valued health and appearance ideals, significantly influencing food choices and exercise practices. Three key findings from this research and their implications are discussed below.

### **5.1 The Complexities of Distinguishing Between Healthy and Unhealthy**

For participants in this study, distinguishing between healthful and problematic dietary and exercise practices was considered to be straightforward, however in practice this differentiation was often complex and difficult to delineate. Participants clearly defined what orthorexic eating and exercise looked like for others, however characterising and assessing one's own health behaviours sometimes led to different perceptions of what was considered healthful.

Despite describing 'orthorexic' behaviours as unbalanced and extreme, a clear demarcation was not always easily established, with healthful, balanced practices subjectively defined, perceived and experienced. Idiosyncratic understandings, therefore, made it possible for participants to position their own behaviours as balanced and healthful regardless of their level of intensity. However, the same behaviours might be perceived or labelled as problematic for others. This enabled the label of orthorexia to be personally avoided, with one's own health practices able to be maintained and justified as healthful. These findings are consistent with Liimakka (2014) who found that maintaining the delineation between healthy and unhealthy was both ongoing and important for their participants, as was positioning oneself as healthful and apart from the unhealthy other (Crawford, 1994; Willig, 2009).

Perspective was also considered an important differentiator between healthful and problematic behaviours. Where no impairment was perceived or experienced, or where

dietary implications or social limitations had been normalised and accepted as part of being a healthful person, high engagement was positively embodied and enjoyed. Although such behaviours might be characteristic of the proposed diagnostic criteria for orthorexia, in this sense they were not considered 'pathological' by those engaging in them. This was especially the case where high engagement with diet and exercise was framed as a productive and positive self-care technology associated with improved wellbeing.

These findings are consistent with Musolino et al. (2015a) who found that disordered eating practices were rationalised and incorporated into daily lives as important components of their participants health habitus. Such practices were rationalised as lifestyle choices of self-care, which were not regarded or understood as unhealthy or requiring care. Similar findings have also been reported by Fixsen et al. (2020) who observed that their participants lives had been established around healthy eating practices such as food selection, procurement, and preparation. Whilst these practices required significant time and created a range of implications for their daily lives, they were similarly framed as a positive self-care technologies. Fixsen et al. (2020) further notes that the 21<sup>st</sup> century has been characterised by unparalleled efforts to market self-care which take the form of an aesthetic achieved through dietary and exercise regimes. This observation was highly applicable for participants in this study, who understood that self-care encompassed a focus on physical appearance.

Interestingly, participants in this study did not characterise feelings of anxiety or guilt associated with unhealthy food consumption or not exercising, or the use of exercise for compensatory reasons as 'orthorexic' or problematic. Rather, feelings of guilt, anxiety and compensatory behaviours were all accepted as a part of health practices and had been normalised as a means of restoring their bodies back to health equilibrium following an unhealthy food discretion. Adverse physical symptoms were described as important delineators of problematic health practices, however few participants reported experiencing physical symptoms. It is possible that the lack of adverse physical symptoms worked to support perceptions of health practices as healthful rather than extreme.

Feelings of guilt and anxiety following unhealthy food consumption can also be understood through healthist discourses which position the individual as responsible for making the right, healthful food choices (Crawford, 2006). Eating foods subjectively considered to be unhealthy or not exercising may therefore feel like one has lost control, failed or made incorrect, bad or immoral choices resulting in feelings of guilt and remorse (Hanganu-Bresh, 2019).

Where impairment or dietary implications were perceived or experienced negatively, high dietary and exercise engagement was considered problematic and characterised as disordered by participants. Interestingly, participants described being unable to recognise

their own eating and exercise practices which they would later identify as problematic, while they were caught up in the momentum of what they considered to be healthy lifestyles. Participants in this study described how they would have adamantly contested and rejected the label of orthorexia during periods they later self-identified times during which they were engaging in orthorexic behaviours. Understandings of what disordered eating looked like was also tied to stereotypical notions of anorexia (not eating and extreme thinness) which had limited understandings of what was understood as problematic or disordered. As participants had not stopped eating, restricted eating based upon subjective healthy food choices was not perceived as eating disordered. It was only retrospectively that participants were able to perceive their previously restricted food choices, elimination of food groups and compulsive exercise practices as extreme and problematic.

It is also worth noting that at the time of participants' previous disordered eating, orthorexia was not a construct or label which was socioculturally available to characterise certain ways of eating or exercising. It was only retrospectively that the term orthorexia had been adopted to describe previously disordered eating, and the concept of an unhealthy obsession with healthy eating self-identified with.

The perception of balance was important for differentiating healthy versus problematic eating and exercise. Interestingly, participants described engaging in the same health behaviours currently and historically; however, what was previously considered to be disordered was now perceived as healthy. Even though many of the behaviours remained the same, it was the orientation towards such behaviours which had changed. Less rigidity and guilt were now attributed to dietary deviations and the requirement to engage in compensatory behaviours significantly lessened. Compensatory behaviours had not been eliminated completely; however, they had instead been reframed as acts of re-balancing health, which was perceived positively.

Problematic 'healthful' behaviours may therefore be difficult to delineate for those who engage with health practices to a high level due to the current sociocultural context which celebrates the individual pursuit of health, applies moralistic values for making the right healthy food choices and rewards a healthy body aesthetic (Crawford, 2006). In contemporary society, the moral virtue assigned to healthful lifestyles enables high dietary and exercise engagement to be maintained under the socially acceptable appearance of health. Cheshire et al. (2020) similarly found notions of healthist morality underpinning orthorexic behaviours, with healthy foods positioned by their participants as the correct foods to be eating.

Behaviours perceived as healthful are further socially supported, reinforced and validated through public health messaging and social media content, making it difficult to

perceive extreme healthy eating as problematic or unhealthy. Highly significant health practices are also perceived as choiceful and empowering (Gill, 2007) which may further make them difficult to understand as excessive or problematic for those engaging in them. Cinquegrani & Brown (2018) suggest that clean eating has also become a means of obtaining cultural capital (Bourdieu 1986) which has resulted in the moralisation of food choice and ingestion practices. They found that narratives of pursuit provided a framework for meaningful engagement in technologies of the self with body work that produced feelings of pride, virtuousness, and superiority.

Fixsen et al. (2020) describe how practitioners considered orthorexia as 'murder to treat' due to the social validation received from engaging in health behaviours such as healthy eating and weight loss, in conjunction with orthorexia's multifactorial nature which often encompassed health and body anxiety, rigid exercise practices and social media influences. Morality discourses associated with healthy eating also made changes to ways of eating difficult, with healthful eating considered to be virtuous and ethically motivated lifestyle choices (Crawford, 2006; Fixsen et al., 2020). Indeed, orthorexia has been described as a "disease disguised as a virtue" (Bratman & Knight, 2000).

Orthorexia may therefore be difficult to self-identify, as people do not feel there is an issue as they do not experience impairment from their perspective. Further, it is difficult to argue against healthful practices when neoliberal and healthist values of individual responsibility for health support and encourage healthy eating and exercise engagement (Crawford, 2006). Other studies have found that many do not recognise or believe their health practices are problematic and as result may be resistant or reluctant to seek treatment (Greville-Harris et al., 2019; Musolino et al. 2015a). Such practices may further go unnoticed by others, due to their social acceptability and the fact that extreme weight loss may not be observed to indicate a problem (Greville-Harris et al., 2019).

These findings contribute to the literature by highlighting some of the intricacies associated with pathologizing health behaviours which are not only extremely subjective, complex and subject to change, but which also make sense when considered in relation to neoliberal healthism discourse and post-feminist frameworks. Further, such behaviours are not necessarily understood as problematic or extreme by those engaging in them due to the fact that healthful lifestyle choices are often socially accepted, rewarded and validated. This has implications for those who may require support, but who may be unable to identify problematic beliefs or behaviours in themselves, or who may deny the need for care when problematic behaviours are observed by others.

## 5.2 The Conflation and Weight and Health

According to proposed diagnostic criteria, orthorexic practices are said to be characterised by the pursuit of optimal health, rather than the pursuit of weight loss or thinness (Valente et al., 2020). However, for participants in this study, physical appearance and weight loss were highly prioritised and strong motivators of dietary and exercise practices. Physical appearance goals, although gendered, were extremely important to participants, with food and exercise choices largely determined by the attainment and maintenance of appearance ideals. Although health and weight were notably conflated, with body weight and size understood as reflective of physical health (Lupton, 2013), these findings highlight that a range of further complexities appear to exist within this relationship.

Health and weight were described as being linked in two slightly different ways for participants in this study. For some participants, physical appearance, weight loss, and the pursuit of socioculturally valued appearance ideals were highly salient motivators for engaging in high levels of healthful behaviours. Participants described being actively engaged in healthful practices which shaped their physical appearances in ways which aligned with current Western sociocultural appearance ideals, with such body work was considered to be choiceful and empowering (Gill, 2007). Desired appearance ideals were highly reflective of fitspo style social media content which represents healthy bodies as fit, lean, toned and active (Boepple et al., 2016; Boepple & Thompson, 2014). For this group, food choices were highly motivated by achieving a healthful appearance and weight loss goals. Although physical health remained an important priority, achieving the current sociocultural valued appearance of health was of primary importance.

However, for other participants, the desire to maintain a lower weight was less related to the achievement of specific physical appearance goals for aesthetic reasons, and more related to the perceived association of maintaining a lower body weight to be healthier. These findings are consistent with Valente et al., (2020) who found their participants expressed a desire for weight loss, with the understanding that being overweight was unhealthy as it could lead to cardiovascular disease and chronic illness. Weight concern in this instance was therefore considered to be more related to health motivations, and less related to aesthetic appearance ideals, even though a fear of gaining weight was still described.

The desire to avoid becoming fat, was strongly linked to obesity and BMI discourses with participants highly motivated to eat healthfully and exercise to avoid weight gain, due to health being associated with smaller body size (Lupton, 2013). This study also found that for this group of people, current risks to health were primarily perceived as being associated with weight. Roncero and Barrada's (2018) findings support suggestions that weight control



may stem from concerns about obesity related health conditions. This was similarly the case for Kristensen et al., (2013) who found that being overweight was also considered to be a primary risk to current health.

Other studies have similarly found that appearance concerns, and concerns related to appearing healthy were strong motivators of dietary choices (Cheshire et al., 2020; Cinquegrani & Brown, 2018; Syurina et al., 2018). Weight and appearance as a central concern for orthorexic health behaviour engagement have similarly been found in a number of recent studies (DeBois & Chatfield, 2020; Fixsen et al., 2020; McGovern et al., 2020).

Valente et al., (2020) note that sociocultural health and appearance ideals are magnified on social media, with content overvaluing the importance of physical appearance and actively promote the unhealthful behaviours such as restrained eating (Beoapple et al., 2016). In this study, social media content was regarded as highly influential in encouraging appearance ideals whereby healthful bodies were represented by one body shape, which was thin/lean, toned but not too muscular. Although such appearance ideals were considered to be unrealistic, unattainable and unsustainable for normal people, for women in particular, such content still influenced diet and exercise practices which were undertaken in the pursuit of this healthy appearance ideal.

The desire to maintain a 'healthy weight', is not surprising given public health messaging which associates higher body weight with disease development and ill health. Thinness is also often associated with optimal health (Riley et al., 2008). Overweight bodies therefore come to signify a personal and moral failure to achieve the requirements of good neoliberal citizenship, with fatness considered to be representative of moral failure, laziness a lack of self-control. As a result, body hierarchies related to weight, shape and size, may result in stigma, shame and feelings of guilt for those who do not, or cannot conform (Crawford, 2006). Individual responsibility to eat healthfully and exercise therefore become a moral obligation under the new health imperative (Liimakka, 2014; Peterson & Lupton, 2000).

Perceiving weight as a normative measure of health however also has implications for those who are unable to lose weight. As Riley et al. (2018) argue, the conflation of weight and health enables the possibility of unhealthy weight management practices and through the association of weight, health and morality. Discourses which equate weight with health are also often used without question, with the inability to achieve, or conform to desired healthy appearance, producing feelings of shame and blame for women in particular.

Participants in this study also talked about high dietary engagement and food choices in ways which positioned healthy eating as safe intermediary between previously disordered eating and 'normal' eating. Self-identifying as health-conscious and enacting healthy food

choices enabled disordered eating labels to be avoided and left in the past, with a more socially acceptable healthful identity adopted in the present. Other studies have suggested that dietary restrictions and excessive exercise may be reported as being motivated by health reasons rather than thinness, as this is a more socially acceptable motivation (Hanganu-Bresh, 2019). Along similar lines, Clark (2019) propose that whilst dieting and weight loss are often undertaken in private, the pursuit of health and fitness in comparison are socially acceptable and desirable outcomes which remove the prospect of criticism. One wants to be seen to be losing weight for the right reasons, with healthful practices enabling a morally defensible and justifiable methods of maintaining a slim appearance, which rather than restricted and excessive, appears effortless.

Health practices, weight and appearance therefore appear to be entangled in complex and sometimes contradictory ways (Clark, 2019). This research contributes to understandings of how weight and health may be conflated in differing ways, however the outcome may similarly result in a preoccupation with diet, exercise and health attainment. Further research investigating the relationship between sociocultural influences on understandings of health and weight and the resulting impact on highly significant dietary and exercise practices would therefore be advantageous to increase understandings of the complexities inherent in this relationship.

### **5.3 Navigating Health Information**

The proliferation of nutrition, exercise, health and wellness information available on social media platforms made it challenging for participants in this study to know which health advice was safe to adopt. Despite positioning themselves as educated critical consumers of health information, constant exposure to risk discourses surrounding food choices had resulted in subjective beliefs and understandings about which foods or diets were considered 'healthy' or safe to eat. These findings are consistent with Sikka (2019) who similarly found that people who self-identified as orthorexic, felt confused about which foods they should be eating after exposure to conflicting messaging about what was healthy. Feelings of anxiety and confusion following attempts to navigate dietary and nutritional information and recommendations have also been described in other studies (Greville-Harris et al., 2019; Rangel et al., 2012; Valente et al., 2020).

Interestingly, despite the strong influence of social media content on dietary and exercise practices, such platforms were not considered to be credible sources of health information for participants in this study. DeBois & Chatfield (2020) similarly found that their participants were aware of the inconsistencies of online information and considered credentials important when assessing information credibility. Their findings indicated that the

more health information one acquired the more restricted food choices became. Two qualitative studies have also indicated that misinformation can influence the adoption of new dietary practices (Greville-Harris et al. 2019; McGovern et al., (2020). Social media platforms were largely considered to be sources of misinformation which contributed to the confusion, with participants motivated to take back control and make their own choices (Cheshire et al., 2020).

Findings in this study indicate that risk and trust surrounding food choices were connected with subjective embodied sensations and feelings, shaping both meanings and health practices, and resulting in self-surveillance and self-monitoring. These findings were similarly the case for (Kristensen et al., 2013) who suggests that the proliferation of health and risk information combine to create 'structures of feeling' that make it both logical and possible to relocate feelings of control to individual embodied experiences. As was the case for participants in this study, body sensations and feelings had become a way of assessing what foods were considered to be healthy and safe to eat.

Responsibility for health was therefore highly individualised and associated with feelings of agency and empowerment with participants investing large amounts of time researching health information. Indeed, healthist and moralistic values associated with healthy eating make sense within the current neoliberal context where people struggle to navigate the modern food systems and the proliferation of often contradictory information (Nicolosi 2006; Rangel et al. 2012). Taken together, these findings align with Nicolosi's (2006) orthorexic society, with trust in expert food systems challenged through competing information sources.

Interesting findings highlight that despite considering social media content to lack credibility, participants were still highly influenced the content they consumed and found disengaging difficult, even when content was identified as unhelpful or resulted in negative outcomes. In line with Liimakka's (2011) findings, it would appear that pressure to comply with, and to continue to strive towards socioculturally valued appearance ideals remained, and continued to influence health behaviours, particularly those which were based upon the attainment of a healthy outward appearance.

Perceptions of content credibility is an interesting area which requires further exploration. A small body of research has so far indicated that despite the fact that content may be considered to lack credibility, this does not inhibit engagement, nor act as a deterrent for ongoing content consumption (Khamis et al., 2018; Marwick, 2015). The relationship between the credibility of social media health content and high dietary and exercise engagement is therefore a pertinent topic which warrants further investigation, particularly in the context of problematic eating and exercise practices.

## **5.4 Study Limitations**

Participants in this research were people who self-identified as engaging in highly significantly dietary and exercise practices. No measurement or formal assessments were undertaken with participant experiences of high dietary and exercise engagement subjectively perceived and experienced. As a result, it was not possible to determine whether participants would have met the clinical threshold for what may be characterised as orthorexia nervosa. However, this may also be considered a study strength as it enabled broader participation and avoided pre-determining what may be considered to be highly significant dietary and exercise practices from the perspectives of participants.

The majority of participants were current university students or academic staff, with high levels of educational attainment and health/nutrition literacy. Participants were also recruited from social media platforms and gym/fitness locations which have been indicated as populations more likely to experience higher level of orthorexia. Findings may therefore not be reflective of those with lower levels of educational attainment or health literacy or more general populations.

Future research would benefit from studies which include more perspectives from men, non-binary and transgender people due to the gendered nature of dietary and exercise motivations and appearance ideals. Greater disclosure in regard to social media usage and influences on health behaviours for men, may also be achieved from the inclusion of a male researcher, with some participants somewhat hesitant to share and discuss appearance ideals with a woman researcher.

Whilst a number of ethnicities were represented by participants in this study, future research would benefit from the inclusion of Māori participants to increase understandings of highly significant health engagement from Māori perspectives. The impact of sociocultural influences on health beliefs and behaviours for Māori would further be beneficial to increasing understandings within the New Zealand content.

## **5.5 Summary**

In summary, the motivations and meanings behind highly significant dietary and exercise practices are multiple, idiosyncratic and embodied, with the pursuit of optimal health a complex endeavour. Experiences of health are constructed in relation to sociocultural structures and this research explored how high engagement with dietary and exercise practices, sometimes described as orthorexia nervosa, may be understood as more than individual pathology, when contextualised within neoliberal, healthist and post-feminist

discourses of personal responsibility and in response to an orthorexic society (Nicolosi, 2006).

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**Table 1***Summary of Proposed Diagnostic Criteria for Orthorexia Nervosa*

Author, Year	Proposed Diagnostic Criteria Verbatim from Author
Moroze et al. (2014)	<p>Criterion A. Obsessional preoccupation with eating “healthy foods,” focusing on concerns regarding the quality and composition of meals. (Two or more of the following.) Consuming a nutritionally unbalanced diet owing to preoccupying beliefs about food “purity.” Preoccupation and worries about eating impure or unhealthy foods and of the effect of food quality and composition on physical or emotional health or both. Rigid avoidance of foods believed by the patient to be “unhealthy,” which may include foods containing any fat, preservatives, food additives, animal products, or other ingredients considered by the subject to be unhealthy. For individuals who are not food professionals, excessive amounts of time (e.g., 3 or more hours per day) spent reading about, acquiring, and preparing specific types of foods based on their perceived quality and composition. Guilty feelings and worries after transgressions in which “unhealthy” or “impure” foods are consumed. Intolerance to other’s food beliefs. Spending excessive amounts of money relative to one’s income on foods because of their perceived quality and composition.</p> <p>Criterion B. The obsessional preoccupation becomes impairing by either of the following: Impairment of physical health owing to nutritional imbalances, e.g., developing malnutrition because of an unbalanced diet. Severe distress or impairment of social, academic, or vocational functioning owing to obsessional thoughts and behaviors focusing on patient’s beliefs about “healthy” eating.</p> <p>Criterion C. The disturbance is not merely an exacerbation of the symptoms of another disorder such as obsessive-compulsive disorder or of schizophrenia or another psychotic disorder.</p> <p>Criterion D. The behaviour is not better accounted for by the exclusive observation of organized orthodox religious food observance or when concerns with specialized food requirements are in relation to professionally diagnosed food allergies or medical conditions requiring a specific diet.</p>
Barthels et al., (2015)	<p>A Enduring and intensive preoccupation with healthy nutrition, healthy foods and healthy eating</p> <p>B Pronounced anxieties for as well as extensive avoidance of foods considered unhealthy according to subjective beliefs</p> <p>C(1) At least two overvalued ideas concerning the effectiveness and potential health benefits of foods AND/OR</p> <p>C(2) Ritualized preoccupation with buying, preparing and consuming foods, which is not due to culinary reasons but stems from overvalued ideas. Deviation or impossibility to adhere to nutrition rules causes intensive fears, which can be avoided by a rigid adherence to the rules.</p> <p>D(1) The fixation on healthy eating causes suffering or impairments of clinical relevance in social, occupational or other important areas of life and/or negatively affects children (e. g. feeding children in an age-inappropriate way) AND/OR</p> <p>D(2) Deficiency syndrome due to disordered eating behaviour. Insight into the illness is not necessary, in some cases the lack of insight might be an indicator for the severity of the disorder.</p> <p>E Intended weight loss and underweight may be present, but worries about weight and shape should not dominate the syndrome.</p>

**Table 1** (Continued)

*Summary of Proposed Diagnostic Criteria for Orthorexia Nervosa*

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Author, Year	Proposed Diagnostic Criteria
Dunn and Bratman, (2016)	<p>Criterion A Obsessive focus on “healthy” eating, as defined by a dietary theory or set of beliefs whose specific details may vary; marked by exaggerated emotional distress in relationship to food choices perceived as unhealthy; weight loss may ensue as a result of dietary choices, but this is not the primary goal. As evidenced by the following:</p> <ol style="list-style-type: none"><li data-bbox="552 645 1441 734">1. Compulsive behaviour and/or mental preoccupation regarding affirmative and restrictive dietary practices believed by the individual to promote optimum health.</li><li data-bbox="552 768 1414 857">2. Violation of self-imposed dietary rules causes exaggerated fear of disease, sense of personal impurity and/or negative physical sensations, accompanied by anxiety and shame.</li><li data-bbox="552 857 1449 1010">3. Dietary restrictions escalate over time and may come to include elimination of entire food groups and involve progressively more frequent and/or severe “cleanses” (partial fasts) regarded as purifying or detoxifying. This escalation commonly leads to weight loss, but the desire to lose weight is absent, hidden or subordinated to ideation about healthy eating.</li></ol> <p>Criterion B The compulsive behaviour and mental preoccupation becomes clinically impairing by any of the following:</p> <ol style="list-style-type: none"><li data-bbox="552 1099 1390 1160">1. Malnutrition, severe weight loss or other medical complications from restricted diet.</li><li data-bbox="552 1178 1406 1238">2. Intrapersonal distress or impairment of social, academic or vocational functioning secondary to beliefs or behaviours about healthy diet.</li><li data-bbox="552 1256 1425 1308">3. Positive body image, self-worth, identity and/or satisfaction excessively dependent on compliance with self-defined “healthy” eating behaviour.</li></ol>

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**Table 2***Participant Demographic Summary*

Pseudonym	Age	Gender	Ethnicity	Occupation
Carey	43	Female	Australian	Sales Rep / Pilates Instructor
Julianne	24	Female	English	Academic Admin, Student
Chris	28	Male	English	Researcher
Angie	40	Female	NZ European	Finance (Risk Man)
Natalie	25	Female	Middle Eastern	Nutrition / Dietetics Student
Gerard	25	Male	NZ European	Psychology Student
Scarlet	21	Female	NZ European	Gym Worker / Student
Gal	23	Female	Malaysian	Nutrition / Dietetics Student
Emily	39	Female	NZ European	Psychology Student
Ryan	26	Male	NZ European	Office Worker
Gal	20	Female	NZ European	Nutrition / Dietetics Student
Brad	Mid 30's	Male	British	Testing Co-ord
Halle	34	Female	Bangladesh	PhD Student / lecturer
Emma	23	Female	NZ European	Student / Barista
Jenn	23	Female	NZ European	Chef / Student





**Table 3***Thematic Theme Summary*

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Theme	Sub Themes
Looking good and feeling good	The idiosyncratic nature of healthy eating What works for me Future health concerns It's a form of self-care to me A sense of achievement It's hard not to focus on appearance The aesthetic of health
Relationality	Healthful eating and social relationships Social Implications – how strict do you want to be? Compensatory behaviours Being called out, insight and labelling You can't be perfect all the time
How influenced are you?	Keeping it real – substance over skinny Attainability of body shapes Orthorexia as a privilege Making (un)healthy comparisons Doing the diet differently

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**MASSEY UNIVERSITY**  
**TE KUNENGA KI PŪREHUROA**  
**UNIVERSITY OF NEW ZEALAND**

**Do you engage in 'healthful' dietary and exercise practices which have become highly significant in your day-to-day life?**

You are invited to participate in a research project aiming to investigate experiences of 'healthful' eating and exercise practices which have become highly significant and/or problematic for the people engaging in them. Sometimes such health practices are labelled 'orthorexia'.

We are looking to interview 7-10 people who are over 18 years of age, not following a medically prescribed diet for a diagnosed health condition (e.g. coeliac disease) and currently residing in Auckland.

Your participation would involve attending two online (Zoom) interviews of approximately one hour each.

Your time and contribution would be recognised with a \$20 Countdown voucher for each of the 2 interviews attended.

If you are interested in participating or would like to receive more information about taking part in this study, we would love to hear from you.

Research contact: Melinda Lewthwaite  
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Appendix C



20<sup>th</sup> July, 2020

Massey University  
Albany Campus / Oteha Rhoe Campus

To Whom It May Concern

My name is Melinda Lewthwaite and I am a Master of Science (Health Psychology) student at Massey University. I am currently conducting a research project in partial fulfilment of the Master of Science (Health Psychology) degree, under the supervision of Dr. Andrea LaMarre.

Our research aims to investigate experiences of engagement in diet and exercise practices, which whilst considered to be 'healthful', come to take on such a high level of significance for the person, they may instead become problematic or result in dysfunction. Sometimes, these practices come to be labelled "orthorexia" or "orthorexia nervosa."

We are currently recruiting for participants to take part in this research project and would like to ask your permission to place an A4 poster in your premises (notice board, window, or other suitable location) between the months of June to August 2020.

Whilst there is no obligation for you to agree, your permission to do so would be greatly appreciated. If you do provide permission and would later like the poster/flyers to be removed at any time, please contact me and I will remove all materials immediately.

If you have any questions or would like any further information, please feel free to contact myself or my supervisor on the details provided below.

Thank you for your time and consideration.

Yours sincerely

Melinda Lewthwaite



**Motivations for Healthfulness - Exploring Experiences of “Orthorexia”**

**PERSONAL DETAILS FORM**

So that we may learn about the range of people who are participating in this research, it would be greatly appreciated if you could answer the following questions in the spaces provided below.

Any information you choose to provide will not be individually identifiable and will only be used to describe everyone who is taking part in this research as a group.

1.	How old are you?	
2.	What is your gender identity?	
3.	What is your current occupation?	
4.	What ethnicity(s) do you identify with?	
5.	Are there any other demographic details you would like to provide about yourself?	

If you have elected to receive a copy of the research findings, please provide an email address for this document to be sent to: \_\_\_\_\_

**INTERVIEW 1**  
**QUESTION SCHEDULE**

**DIET**

1.	Do you follow a specific diet (e.g. vegetarian, vegan, paleo, keto)?  ▪ If NO, where do you get your dietary information from?
3.	What does your current diet look like (e.g. what foods do you consume regularly, any specific combinations you prefer, cooking styles, or any foods or food groups which have been omitted from your diet?).
2.	Was there anything in particular that motivated you to adopt this diet?
4.	Have you followed other diets before?  ▪ If YES - Which ones? / What factors motivated or influences a change from one diet to another for you? ▪ If NO – is there anything in particular that would motivate you to change the way you eat?
5.	What do you perceive as the main benefits of your current diet?
6.	How does adhering to your diet make you feel about yourself?
7.	Do you make dietary choices based upon how what you consume might impact your body?
8.	Do you personally observe any limitations of following your diet?

**EXERCISE**

1A	Do you currently engage in regular physical activity?
3A	What does this look like for you? So, what kind of physical activity do you engage in, how regularly do you participate and for what durations?
2A.	Is there anything in particular that motivated you to exercise the way that you do?

**INTERVIEW 1**

**QUESTION SCHEDULE CONTINUED**

**AVOIDANCE OF UNHEALTHY / IMPURE FOODS**

1.	What determines whether a certain food is considered to be good/bad, pure/impure, healthy/unhealthy for you?
2.	What would make a certain food more healthful (pure or superior?) in comparison to other food options, in your opinion?
3.	If you were to consume a food you considered to be unhealthy (or impure) and / or if you were unable to exercise, or follow your regular scheduled exercise plan, how would this impact you?
4.	If the impact on you was negative (you felt bad, unhealthy, worried, guilty, impure etc.) after eating something you considered unhealthy, would you do anything differently for the rest of that day / the next day / rest of the week?
5.	How do you cope when you experience such feelings?

**ORTHOREXIA**

1.	Have you ever heard of the term 'orthorexia'? If NO, researcher to describe to participant.
2.	Have you ever considered any of your own dietary or exercise practices to be 'orthorexic'?
3.	Have others ever commented on your dietary or exercise practices? <ul style="list-style-type: none"> <li>▪ If YES - What were their observations?</li> </ul> Has anyone else ever referred to your dietary or health practices as orthorexic? <ul style="list-style-type: none"> <li>▪ How did this make you feel?</li> </ul>
4.	How do you feel about 'healthful' eating sometimes being labelled as 'orthorexic' or described as problematic?
5.	How would you differentiate (or what would you see as the difference) between 'healthy eating and exercise' and more extreme ('orthorexic') eating patterns?

**INTERVIEW 2 – SOCIAL MEDIA-GO-ALONG  
QUESTION SCHEDULE**

1.	How does the content you engage with reflect what you currently do in term of your personal day-to-day health practices?
2.	Is there specific content / topics or viewpoints that you follow that differ from or challenge your health beliefs and behaviours?
4.	What would motivate you to replicate what you see in social or popular media in your own life?
5.	How does the content you follow or engage in make you feel?
3.	Do you consider some content to be more credible than other content?





## ***Motivations for Healthfulness: Exploring Experiences of ‘Orthorexia’***

### **INFORMATION SHEET**

#### **Researcher(s) Introduction**

My name is Melinda Lewthwaite and I am a Master of Science (Health Psychology) student at Massey University. This research project is being conducted in partial fulfillment of the Master of Science (Health Psychology) degree, under the supervision of Dr. Andrea LaMarre.

#### **Project Description and Invitation**

You are invited to participate in this research which aims to investigate experiences of engagement in diet and exercise practices, which whilst considered to be ‘healthful’, come to take on such a high level of significance for the person, they may instead become problematic or result in dysfunction. Sometimes, these practices come to be labelled “orthorexia” or “orthorexia nervosa.”

#### **Participant Identification and Recruitment**

I am aiming to speak with 7-10 individuals who self-identify as engaging in ‘healthful’ eating and exercise practices that have become highly significant and potentially problematic to them in their day to day lives. To take part, you must be 18 years or older and not currently following a medically prescribed diet (e.g. coeliac disease). Interviews will be conducted in English, so proficiency in English is also required.

Participants will be recruited via social media platforms, flyers, and list serv/ mailing list postings. Digital flyers will also be distributed to a number of gyms, fitness centres, yoga studios and health food stores across the Auckland region. Students and staff from the Massey School of Sport, Exercise and Nutrition and AUT Health Sciences will also be invited to participate.

#### **Possible Benefits and Incentives**

There are no direct benefits to participating in this research. The research may contribute to expanding the field of knowledge around eating practices and eating distress.

If you choose to participate, we will provide a \$20 Countdown voucher for each of the two interviews you attend as a token of appreciation.

#### **Possible Risks and Discomfort**

During the interview process, it is possible you may experience feelings of distress or discomfort due to the nature of the questions being asked and the topics discussed.

## Appendix F (Continued)

This study does not provide or replace any treatment and/or counselling. Should you experience distress at any time during or after the interview process and would like to seek further support, a list of support services is provided on the last page of this document.

### **Project Procedures**

If you choose to take part in this study, your participation would involve completing a short demographic questionnaire and participating in two online (Zoom) interview sessions of approximately one hour each.

During the first interview, you will be asked questions about your motivations for eating and exercising the way you do and what your 'day-to-day' health practices mean to you, as well as the impact that engaging in these practices has on your life. At the end of this interview, you will then be asked to select a range of material from social media accounts you regularly follow to discuss during your second interview. The content you choose could include a range of posts which relate to dietary advice, exercise, opinions, recipes or images and can be anything you find important, inspirational, influential or confrontational in terms of your own health practices.

During the second interview, the content you have chosen will be viewed online together with the researcher (via desktop sharing) and you will be asked some questions about your chosen content. Both interviews will be audio recorded and will take place online via Zoom.

### **Data Management**

The audio recording from your interviews will be transcribed into a typed document which will be used for analysis. Your audio file, transcript and demographic details will be securely stored and anonymized under a pseudonym so that you cannot be identified. Only the researchers named below will have access to your data.

If you would like to receive a copy of your transcripts to review, please select this option on your consent form. If you elect to receive a copy of your transcripts, both interview transcripts will be emailed to you together, upon completion of the transcription of the second interview. You will then have two weeks to provide feedback and/or amendments. If you do not respond by the specified return date, your transcripts will be considered final. Any amendments or revisions made by participants will be incorporated into the transcripts.

If you would like to receive a copy of the research findings upon completion of this research, please select this option on your consent form and a summary of the findings will be emailed to you on the address you have provided at the bottom of your consent form.

### **Participant's Rights**

There is no obligation to accept this invitation to participate. If you do choose to participate, you have the right to:

- Decline to answer any particular questions you are not comfortable with, and/or ask for the audio recording to be stopped at any time during the interview process.
- Withdraw from the study at any stage until such time of two weeks (14 days) following completion of the second scheduled interview or two weeks after you have received your transcript to review (if you select this option)

## Appendix F (continued)

- If, after participating in the first interview, you would like to withdraw from the study and not take part in the second interview, you will be contacted by the researcher to ask if you still consent to having the information you provided in the first interview being used in the research. If you do not consent to your interview content being used, it will be deleted. If we do not hear back from you, it will be assumed you have consented to your interview responses being included in the study.
- You may ask any questions about the study at any time.

Thank you for your time and interest.

### Project Contacts

If you have any questions or concerns, or would like any further information, please contact myself or my Supervisor:

**Researcher:**

Melinda Lewthwaite  
School of Psychology  
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Albany, Auckland  
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**Supervisor**

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Albany, Auckland  
Email: A.LaMarre@massey.ac.nz

No conflicts of interest are identified with this research.

*This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 20/09. If you have any concerns about the conduct of this research, please contact Dr Fiona Te Momo, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800 x 43347, email [humanethicsnorth@massey.ac.nz](mailto:humanethicsnorth@massey.ac.nz).*

### SUPPORT SERVICES

**EDANZ**

Phone: 0800 2 EDANZ or (09) 5222679  
Email: [info@ed.org.nz](mailto:info@ed.org.nz)  
<https://www.ed.org.nz/>

**Lifeline**

0800 543 354 (0800 LIFELINE)  
or free text 4357 (HELP) 24/7

**1737 Need to Talk?**

Free call or text 1737 for support from a trained counsellor

**Depression Helpline**

0800 111 757 or text 4202

**Anxiety Helpline**

0800 269 4389 (0800 Anxiety)

**Healthline**

0800 611 166

**Centre for Psychology**

Level 3, North Shore Library Building  
229 Dairy Flat Highway  
Albany Village, Auckland  
Tel: (09) 213 6095  
Fax: (09) 414 7328  
Email:  
[Centreforpsychology@massey.ac.nz](mailto:Centreforpsychology@massey.ac.nz)

**Massey Health and Counselling Centre**

(For Massey Students)  
09 213 6700  
[Studenthealth@massey.ac.nz](mailto:Studenthealth@massey.ac.nz)  
[https://www.massey.ac.nz/massey/student-life/services-and-resources/health-counselling-services/counselling/counselling\\_home.cfm](https://www.massey.ac.nz/massey/student-life/services-and-resources/health-counselling-services/counselling/counselling_home.cfm)

## Appendix G



Date: 05 May 2020

Dear Melinda Lewthwaite

Re: Ethics Notification - **NOR 20/09 - Motivations for Healthfulness: Exploring Experiences of 'Orthorexia'**

Thank you for the above application that was considered by the Massey University Human Ethics Committee: **Human Ethics Northern Committee** at their meeting held on **Tuesday, 5 May, 2020**.

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

Professor Craig Johnson  
Chair, Human Ethics Chairs' Committee and Director (Research Ethics)