Collateral Damage of the 'War on Obesity'

The Australian Anti-Obesity Campaign: From Fat Stigma to Eating Disorders

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Abstract

Because comprehensive eating disorder statistics are not collected in Australia, the precise number of Australians suffering from an eating disorder or some form of disordered eating is unknown. However, it is estimated that 20% of Australian females of all ages may have an undiagnosed eating disorder with 9% of the overall population predicted to be affected. Males are estimated to account for 25% of this overall total. In addition, eating disorders and disordered eating together are thought to affect over 16% of the Australian population.

Although an extremely complex issue, the literature suggests a link between fat stigma and eating disorders with poor body image acting as a catalyst to trigger disordered eating. It also suggests that obesity campaigns might exacerbate this relationship. It is therefore suggested that the Australian government's anti-obesity campaign's current use of fat stigma to prompt weight-loss might also promote eating disorders by triggering unhealthy behaviour around food. If this is true, the consequences for obesity health policy may be significant. The aim of this research was to demonstrate the different ways by which the Australian anti-obesity campaign with its promotion of weight-loss might be inadvertently promoting fat stigma and eating disorders.

To achieve this, firstly, a systematic review of the literature was conducted to assess the relevant intellectual territory in order to establish a knowledge base. Informed by this, three different locations in Australian society (the Internet, social media and the eating disorder clinical field) were selected to investigate how fat stigma and disordered eating activities are shared and disseminated and whether the Australian anti-obesity campaign is unintentionally supporting this behaviour. A mixed methods approach was used to conduct five separate studies exploring: fat stigma in online responses to a television program; the activities of Pro-Ana (Pro-Anorexia) websites in sharing advice to restrict eating; the YouTube social media platform for its role in promoting a vegan diet to hide disordered eating, and two small studies of clinical and academic eating disorder experts' opinions about the Australian anti-obesity campaign and its use of stigma to drive weight-loss. The data were triangulated to provide a set of results that informed

the response to the overall research question of whether the Australian anti-obesity campaign is contributing to fat stigma and promoting eating disorders. The results demonstrate that: fat stigma exists openly in publically visible places; Pro-Ana websites are spaces where desperation and rebellion fuel disordered eating; the YouTube social media platform is a powerful medium for sharing information on hiding an eating disorder using a vegan diet and the participating eating disorder experts report that fear of fat, specifically relating to the anti-obesity campaign, is fuelling disordered eating. Sufficient information was collected to suggest a coherent and logical argument can be constructed to indicate that the Australian government's anti-obesity campaign is contributing to negative body image and possibly triggering disordered eating in susceptible individuals, including many who are obese. Because of this, there are implications for Australian government health policy and consequences for the mental health of Australians, particularly women.

Declaration

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma. No other person's work has been used without due acknowledgment in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

All research procedures reported in the thesis were approved by the La Trobe University Research Ethics Committee.

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Preface

I have been a physiotherapist for many years, and, in this role, I have treated patients and clients of all shapes and sizes in acute and community settings. I cannot recall witnessing any instances of fat stigma; body size was only an issue for practical, clinical reasons. However, this seems to have changed and the practice of health professionals stigmatising those who are fat has been reported by several researchers over the last decade.

I have also worked in a government policy development environment in a health role and while not working in the area that managed the anti-obesity strategy, I was exposed to the strategic discussions held as part of departmental information-sharing. In hindsight I believe that because of this exposure, my thought processes about obesity underwent a subtle change as I started to notice fat people everywhere, and not just notice, but to automatically judge them for their size. Around about this time I also began to change the way I ate. Always a healthy eater, I began to question and compare the value and nutritional status of all food (including individual vegetables) and to count calories which eventually became an automatic process whenever I was confronted with food.

It still astounds me that, in spite of being a fit and healthy older woman with a normal BMI, I was still susceptible to the media's promise of a perfect body. In retrospect, there is no doubt in my mind that my closeness to the development of the anti-obesity message compounded and validated the desire to be slim. With the knowledge that I have today, I am also aware that disordered eating, in the form of restriction and unusual eating patterns, was a feature of my workplace. Because of my own, albeit brief, encounter with disordered eating, it is difficult not to see how many women of all ages have a problematic relationship with food. Like me, did they become this way because of the relentless focus on the thin ideal in our society, coupled with the government's call for weight-loss? Quite possibly as recent research continues to demonstrate that anti-obesity campaigns create fat-stigma which often leads to dieting, the most potent trigger of all for disordered eating.

When I began my PhD studies at La Trobe University, I planned to research the effect of obesity stigma on obese individuals. However, as I progressed with my reading on the subject, my focus widened to encompass the possible damage of the anti-obesity campaign on a larger scale. Partly because of my own experience, but also because of the relentless promotion of the thin ideal, I changed my focus to investigate why many individuals, including those who are obese, are becoming eating-disordered, and whether the Australian anti-obesity policy is contributing to this.

In light of my experience, and that of others, it might be timely to challenge the Australian government's continued reliance on weight-loss as an indicator of health rather than adopting a more holistic view that includes mental health. I would suggest that it is now time for the government to protect the vast numbers of people who are susceptible to disordered eating by focusing on self-resilience, and other interventions, that may offer protection against the incessant focus on the thin, and for men, muscular, ideal that so often leads to negative body image and problems with food.

Acknowledgements

This has been a very long journey for me with many personal challenges along the way including the loss of close relatives. Throughout the trying times, I can honestly say that my PhD provided a grounding focus for me that remained constant in what was, at times, an overwhelming stream of life experiences.

This research is about subjects very close to my heart and would not have been possible without support, and I would like to thank those who provided this without hesitation. Firstly, my supervisors Drs. Priscilla Robinson, Simon Barraclough and Bruce Rumbold of La Trobe University, School of Public Health, for safely guiding me to shore. Special and sincere thanks to Dr. Priscilla Robinson who was always there to keep me going and talk me down from ledges. I absolutely could not have achieved this without your steady support.

I am grateful to Dr. Bruce Rumbold for agreeing to be Chair of my research panel, and for taking over as principal supervisor, towards the end of my candidature when my other supervisors were unable to continue to fulfil this role. Thank you so much.

I would also like to acknowledge and thank the academics and health professionals who were part of my research and willingly gave their time to respond to my questions, providing a wealth of information. Your assistance is greatly appreciated.

Thanks must also go to my fellow PhD students at La Trobe University for their encouragement and advice, especially Dr. Rachel Thorpe and Emerich Daroya. I would also like to thank my work colleagues at Remedy Healthcare, Melbourne who took such an interest in my research. Your obvious enthusiasm and encouragement strengthened my resolve to finish it.

Lastly, I would like to thank my partner for entering into the spirit of the moment regarding the topic of the day. He acted as a sounding board when I was confused, a counsellor when I was stressed, and a provider of interesting, if not always relevant, information. He believed in me – so, I did too. Thank you.

Definition of Terms

1. Anorexia Nervosa

Anorexia (also known as Anorexia Nervosa) is, 'An emotional disorder characterised by a distorted body image and an obsessive desire to lose weight, in which bouts of extreme overeating are followed by fasting or self-induced vomiting or purging,' with an estimated 3% of the estimated number of Australians with an eating disorder (2012) suffering from this disorder (Butterfly Foundation, 2012).

2. Australian anti-obesity campaign

The term 'Australian anti-obesity campaign' is used throughout this document. However, there may be many smaller campaigns at local levels that work to support the larger Australian campaign. The use of the term in this instance is for convenience when discussing the government's overall action on obesity. Although the national overarching policy is no longer current, all funding for anti-obesity interventions and programs remain funded by the Australian Government, and in line with the original aims of the initial policy. The continuation of actions that support the policy message and intent have been devolved to state government agencies, however, they are still disseminated nation-wide and continue to be known as the Australian anti-obesity campaign in the health and policy fields.

3. Bulimia Nervosa

Bulimia (also known as Bulimia Nervosa) is, 'An emotional disorder characterised by a distorted body image and an obsessive desire to lose weight, in which bouts of extreme overeating are followed by fasting or self-induced vomiting or purging,' with an estimated 12% of the estimated number of Australians with an eating disorder (2012) suffering from this disorder (Butterfly Foundation, 2012).

4. Disordered eating

Disordered eating is described as disturbed and unhealthy eating pattern that can include restrictive dieting, compulsive eating or skipping meals (National Eating Disorders Collaboration, 2017c).

5. 'Fitspiration' or 'fitspo'

'Fitspiration' or 'fitspo': A person or thing that serves as motivation for someone to sustain or improve health and fitness (Oxford University Press, 2014).

6. Naming convention for obesity

In terms of naming, 'fat', overweight, and obese will be used as descriptors depending on the context of the discussion. This is in keeping with current discourse about the reclamation of the word 'fat' by fat activists (Lupton, 2013b, Lupton, 2013a, Rothblum and Solovay, 2009) and with respect to overweight and obese individuals themselves who often prefer this (Thomas et al., 2008a).

7. Orthorexia

Orthorexia Nervosa is a medical condition in which the sufferer systematically avoids specific foods that they believe to be harmful (Bratman, 1997).

8. Pro-Ana and Pro-Mia

Pro-Ana is described as, 'of or relating to the belief that Anorexia is a viable lifestyle choice rather than an illness' (adjective), and, 'an internet-based community advocating this view' (noun). Pro-Mia is described identically to Pro-Ana as, 'of or relating to the belief that Bulimia is a viable lifestyle choice rather than an illness' (adjective), and, 'an internet-based community advocating this view' (noun) (Collins Dictionary.com).

9. ‘Thinspiration’ or ‘thinspo’

‘Thinspiration’ or ‘thinspo’ (especially in the context of Anorexia Nervosa) is used in reference to something or someone that serves as motivation for a person seeking to maintain a very low body weight (Oxford University Press, 2014).

10. ‘Wannarexic’

‘Wannarexic’ is a portmanteau word (wannabe and Anorexic) used in the Pro-Ana online community to denote someone who does not suffer from an eating disorder in real life but wishes to become Anorexic. First coined by Hardin in 2003 (Hardin, 2003).

List of abbreviations

ABHI	Australian Better Health Initiative
ABS	Australian Bureau of Statistics
AN	Anorexia Nervosa
ANGI	Anorexia Nervosa Genetics Initiative
ANZAED	Australian and New Zealand Academy for Eating Disorders
APS	Australian Public Services
BDD	Body Dysmorphic Disorder
BED	Binge Eating Disorder
BMI	Body Mass Index
BN	Bulimia Nervosa
COAG	Council of Australian Governments
DE	Disordered Eating
DSM	Diagnostic and Statistical Manual of Mental Disorders
ED	Eating Disorder
EDNOS	Eating Disorder Not Otherwise Specified
HAES	Health At Every Size
HRQL	Health Related Quality of Life
NEDA	National Eating Disorders Association
NEDC	National Eating Disorders Collaboration
NHMRC	National Health and Medical Research Council

NPAPH	National Partnership Agreement on Preventive Health
OCD	Obsessive Compulsive Disorder
OSFED	Other Specified Feeding or Eating Disorder
PSA	Public Service Announcements
SNS	Social Networking Sites
UN	United Nations
WHO	World Health Organization

Chapter 1: Introduction

Since the release of the technical report, 'Obesity: Preventing and managing the global epidemic' by the World Health Organization (WHO) in 2000 (World Health Organization, 2000a), the increased focus on chronic disease prevention globally, and in Australia, has raised public awareness about health issues, especially obesity. A culmination of the collective views of an international group of experts on obesity and related concerns, the WHO report assembles in one place, evidence (available at the time) of links between obesity, its economic burden and chronic disease. Thus, by its focus on prevention and management of obesity via governmental bodies, this report was possibly the most influential factor that prompted the development of anti-obesity campaigns around the world (World Health Organization, 2000a).

However, there is evidence to suggest that this has had unforeseen consequences including increased weight bias, discrimination and prejudice causing obesity-related stigma (Evans, 2006, Hilbert et al., 2008, Lewis et al., 2010, Sikorski et al., 2011, Teachman and Brownell, 2001, Thomas et al., 2008a).

Considering the concerns of these writers, it is of interest to note that, in the aforementioned WHO report, the authors recognise the vulnerability and suffering of obese people, expressing concern that health care workers might display stigmatising attitudes towards those who are obese. As a result, the report recommends that, 'The training of all health care workers involved in the management of obese patients should urgently be improved' (World Health Organization, 2000a, p.250). Likewise, the report discusses the limitations of the BMI in determining fat from muscle, although still recommends the use of the BMI as a means of classifying body weight (World Health Organization, 2000a).

There is growing unease by eating disorder specialists that focusing solely on weight-loss has had a negative effect on eating disorders (Catling and Malson, 2012, O'Dea, 2005, Salas, 2015, O'Brien et al., 2016), in particular the potential for interpreting the weight-loss message incorrectly. Others argue that an increasing number of individuals are succumbing to eating disorders because of the weight-loss focus of the obesity prevention campaign (Eating Disorders Coalition, 2013,

Schwartz and Henderson, 2009, Burns and Gavey, 2004, Pinhas et al., 2013). Although, there is increasing interest and research about the anti-obesity message and its possible role in triggering eating disorders, especially in the US, there is very little that specifically investigates this alleged link as opposed to a theoretical discussion of the issue.

In response to these concerns, many health researchers and clinicians propose a paradigm shift to move the focus from weight-loss to health improvement, regardless of the individual's weight (Bacon and Aphramor, 2011, Bacon, 2008, Smith and Hawks, 2006, Bacon et al., 2005, Dickins et al., 2011, Provencher et al., 2009), with many citing the Health at Every Size (HAES) model as a useful approach (Bacon, 2008). However, although there is evidence to demonstrate some success with the HAES model (Bacon et al., 2005, Humphrey et al., 2015, Leblanc et al., 2012), there are many who, while acknowledging the value of this approach, express concern about the loss of focus on weight-loss as the ultimate health goal, and the applicability of the approach to all cultures (Miller and Jacob, 2001, Anglin, 2012).

The National Eating Disorders Collaboration (NEDC, 2017) states that, 'The mortality rate for people with eating disorders is the highest of all psychiatric illnesses and over 12 times that seen in people without eating disorders' (National Eating Disorders Collaboration, p.4) and one of the most common triggers for the development of an eating disorder (ED) is dieting (National Eating Disorders Collaboration, 2010a) and Eating Disorders Victoria (2017), recommend that, '… public health campaigns should consider the impact of messages on people who may be at risk of developing an eating disorder, or people who already have an eating disorder, in order to minimise the risk of harm to these groups' (Eating Disorders Victoria, 2017, para 17). As the NEDC point out, 'Disordered eating can have a destructive impact upon a person's life and has been linked to a reduced ability to cope with stressful situations. There is also increased incidence of suicidal thoughts and behaviours in adolescents with disordered eating' (National Eating Disorders Collaboration, 2017c).

The current research

There is a pressing need to collect mandatory, central, statistical information about eating disorders, including disordered eating, in order to more fully comprehend the scale and particularities of the problem in an Australian setting. Only in this way can the impact on the physical and mental health of Australians be determined and whether this differs from the overseas experience thus, requiring a locally-shaped response. Given the infiltration of both mass media and advertising into the lives of individuals, and the rapid increase in popularity of social media platforms promoting thinness, it is reasonable to suggest that negative body image and disordered eating, often triggered by fat stigma (Ashmore et al., 2007, Puhl et al., 2006), occur in Australia. However, precisely because of the lack of accurate information about eating disorders in the public domain, it is likely that the majority of Australians are unaware of the many guises disordered eating may take. The stereotypical image of an eating disorder sufferer as a young white woman who is stick-thin is not necessarily accurate (Darby et al., 2007, Sim et al., 2013). Hence, the reality of a greater problem affecting many and varied population groups in a myriad of ways is not widely known or understood, possibly attesting to the fact that many sufferers successfully hide their eating disorder (Musolino et al., 2015, Bardone-Cone et al., 2012, Sullivan and Damani, 2000).

To date, government policy-makers do not appear to have considered that a significant disordered eating problem may exist in Australia, probably because no comprehensive statistics are available. By identifying different spaces in normal Australian life and exploring the common activities that occur in these spaces for their links to disordered eating and body image problems, together with opinions gathered from experts from within the eating disorder field about the effect of the Australian anti-obesity campaign on these issues, this research may further the process of determining a more comprehensive view of local disordered eating. If this does assist in demonstrating that disordered eating behavior is neither isolated, nor rare, it calls into question the government's anti-obesity campaign with its singular drive for weight-loss, as being potentially damaging. By continuing to promote weight-loss rather than health-gain, the campaign may

appear to lend authority to, and ultimately condone, dysfunctional eating behaviour with all of its concomitant collateral damage.

The research question: Is the Australian anti-obesity campaign contributing to fat stigma and promoting eating disorders? was approached by defining an overall aim of the research and subsequent objectives and achieved by exploring spaces in Australian society where fat stigma, disordered eating and restrictive eating practices can be found.

The research aim, to demonstrate the different ways by which the Australian anti-obesity campaign with its promotion of weight-loss, might be inadvertently promoting fat stigma and eating disorders, was achieved by defining a set of objectives, as follows:

1. Contribute to the knowledge base pertaining to the anti-obesity campaign and eating disorders and the various interlinking issues, such as body image, stigma and disordered eating in order to demonstrate how these can work together to trigger disordered eating.

2. Discover how the dynamics of these spaces enable eating disorders to grow and thrive in order to increase understanding about their importance in sharing information.

3. Explain how the Australian anti-obesity campaign might be inadvertently endorsing these restrictive eating practices, and encouraging disordered eating in order to highlight the inherent danger in pursuing a campaign to reduce obesity that focusses mainly on weight-loss.

4. Identify the potential consequences in order to signal the need for policy change relating to reducing obesity.

To accomplish this, firstly, a systematic literature review was conducted to find out the existing literature on the issues pertaining to the current research. This was considered critical to understanding where the present work fits and to ensure that it builds upon what is already known. Secondly, three locations were identified where preoccupation with weight, body image and appearance are not

unusual. The locations chosen were the clinical community, online spaces, and social media and five studies were conducted within these spaces.

Chapter 2: Background to the research

In this section, the relevant issues that form today's narrative about combatting obesity in the current climate of fat stigma will be examined, in particular, the unintended consequences of the anti-obesity policy. Eating disorders are explored and discussed with particular emphasis on the power of social media and what it is like to be fat in Australia today.

2.1. Unintended consequences of the Australian anti-obesity campaign

Prior to the examination of the possible unintended consequences of the anti-obesity campaign, the meaning of unintended consequences of purposive action, in particular, a government policy will be clarified. The power of unintended consequences to change the planned course of events, especially in relation to a policy that drives behaviour change, will be explored and considered in light of the current anti-obesity campaign with its very specific focus on weight-loss. A number of unintended negative consequences have been reported in association with the anti-obesity campaign and these will be examined later in this section.

Although there may be unintended consequences resulting from any action, those that result from government policy may warrant special attention because of the widespread affect such consequences may have on the public. In 2012, the Australian Public Services (APS) Commissioner wrote about the difficulties facing those tackling complex, intractable problems, often known as 'wicked' problems in government. The Commissioner highlighted the interconnecting complexity of many difficult issues, arguing that, 'Attempts to address wicked problems often lead to unforeseen consequences. Because wicked policy problems are multi-causal with many interconnections to other issues, it is often the case that measures introduced to address the problem lead to unforeseen consequences elsewhere. Some of these consequences may well be deleterious. It has been asserted, for example, that the success of policies designed to reduce atmospheric pollution in the US and Western Europe may be partly responsible for an apparent

increase in global warming due to the impact of a reduction in Sulphur particles' (Australian Public Services Commissioner, 2012, p.3).

In explaining wicked problems, Peryakoil (2007) states that, 'Wicked problems have incomplete, contradictory, and changing requirements and complex interdependencies that are often unique to the local setting of the problem' (Peryakoil, 2007, p. 658). Because of this, the author points out, any attempt to develop action intended to address large-scale complex problems becomes fraught with difficulties. Any investigation of these difficulties often uncovers yet more complex issues and unintended effects not able to be identified initially because only by implementing the policy are such complexities discovered (Peryakoil, 2007). The Australian anti-obesity campaign typifies this type of policy. The policy was developed from a seemingly simple objective – to encourage overweight and obese individuals to lose weight. The unintended effects that have unfolded over the ten or so years since the policy's inception indicate that the issue of reversing obesity is far from simple.

As Head and Alford (2008) explain, one of the problems faced when developing policy is that, 'Politicians generally like to be seen as "decisive", by taking action to address issues. This means that they may focus on tangible pieces of the puzzle rather than the holistic patterns of causality and inter-dependence of issues' (Head and Alford, 2008, p. 6). Thus, the issue of obesity is reduced a single-dimensional medical problem that causes disease and is an economic burden to society.

This worldwide public health focus on weight-loss has its critics. A Canadian researcher, Salas (2015), discussing the unintended effects of the anti-obesity campaign on individual health, argues that the World Health Organization's (WHO) Public Health anti-obesity policy, while having little effect on obesity prevalence, has resulted in many unintended consequences, such as stigma, bullying, disordered eating, body dissatisfaction and even death as a result of extreme dieting or suicide, following weight-based bullying. The writer suggests that future public health approaches focus on health, rather than weight, and address the complexity of obesity rather than producing simplistic messages (Salas, 2015).

For the last ten years, Swinburn (2008) has highlighted the lack of consideration accorded to environmental factors on obesity, often called the obesogenic environment, when developing an obesity policy. Although possibly unavoidable as the drivers of public policy are many, policy decisions usually involve economic rationalist thinking. Swinburn argues that, to be effective, factors such as poverty, food access, sociocultural beliefs and the obesogenic environment must always underpin government decisions when developing obesity health policy. Moreover, that by addressing these issues a shared commitment would be demonstrated thus reducing the possibility of health messages being misunderstood (or rejected) by individuals as being unrealistic (Swinburn, 2008). The obesogenic environment, first described by Swinburn in 1999, will be discussed in more detail in the systematic literature review in Chapter 4.

Similarly, Byrne and Niederdeppe (2011) highlight the need for public health campaign strategists and policy-makers to be aware of the many ways in which health messages may be misinterpreted and the consequences of such misinterpretation. They warn that health messages need many elements to capture attention and forge narrative structure and that an individual may not respond as expected if the unintended elements are more powerful than the intended ones (Byrne and Niederdeppe, 2012). Following this logic, it is possible that susceptible individuals may interpret the weight-loss message as a personal attack on their worth as a human being, rather than the intended message of weight-loss for health gain. In some people, this may be powerful enough to damage self-esteem and body image and trigger an unhealthy relationship with food.

Writing more broadly about the underlying principles of health promotion and the unintended effects of government health policy, Forde (1998) explains how all government-funded health-promoting actions are based on risk assessment and the need to avert a defined risk. For example, increased obesity is assessed not only as a risk to the health of the individual but also to the government in the form of increased funding for the management of chronic disease. However, this risk-assessment, conducted by the government, is interpreted in relation to its own exposure and tolerance to the identified risk which, as the author explains,

may not accord with an individual's own risk tolerance profile, for instance, the individual may not consider being obese a problem in terms of ill-health. As a result, this lack of congruence may result in the rejection of the health promotion message entirely as being irrelevant (Forde, 1998).

The consequences - shame, stigma and eating disorders

Several government health awareness programs, launched within the last five years, appear to be more general in nature with the aim of promoting a healthy lifestyle, rather than focusing on weight-loss. The adoption of the 'This Girl Can' campaign adapted from the highly successful UK model is a good example. This initiative focuses on empowering women and girls to engage in physical activity for pleasure rather than for appearance-driven motives (VicHealth, 2018).

However, others continue to focus only on weight-loss, for example, the LiveLighter Campaign (Government of Western Australia, 2015). This campaign addresses 'toxic fat' (the fat stored around the abdomen, reported to be the most dangerous to health) and uses graphic detail, presented in video format, with the intent to shock and elicit guilt and shame to encourage weight-loss. Sophie Scott (2012), an advisor to the NEDC, believes that although the Heart Foundation claims that the advertising messages had been, "... thoroughly tested to ensure they are effective and unlikely to generate unintended consequences" (Scott, 2012, para 15), they may still be damaging, especially to children. She argues that this particular campaign deals superficially with a very complex topic and presenting this message on family television, at a time when children are likely to be watching, is irresponsible. The writer comments that young children, who think in concrete terms of good and bad, do not have the ability, as adults do, to abstractly analyse content and may become distressed and frightened, possibly affecting behaviour around food (Scott, 2012).

Lupton (2014) in her book about the ethical, moral and political implications of using disgust in public health campaigns also criticises the graphic and demeaning nature of this particular campaign, warning that self-shame can be triggered easily and, just as easily, propagated into self-disgust and self-hate (Lupton, 2014b). Conversely, Callahan (2013), an academic in the UK, and Bayer (2008), a researcher

in the US, have no qualms about strongly supporting the use of shaming. Both suggest that harnessing and augmenting shame is a valid pathway to pursue in order to personalise the weight-loss message and achieve results (Callahan, 2013, Bayer, 2008). It is unclear whether the evocation of such damaging, personally negative feelings was the planned strategy of the anti-obesity campaign developers in Australia, however, this does appear to be the case. The idea that shaming changes behaviour does not stand up to scrutiny with research demonstrating that weight-stigmatising does not encourage weight-loss (Major et al., 2014, Mensinger et al., 2016).

With the aim of determining whether or not internalised weight stigma inhibits recovery from maladaptive and disordered eating, Mensinger et al. (2016) conducted a randomised, controlled trial of 80 women (age range: 30-45) to determine if internalised weight stigma is a moderator of the effectiveness of a weight-neutral program, and a conventional weight-management program, for women with a high BMI who are physically inactive. The participants were randomised to one of the two six-week treatment programs. The weight-neutral program was designed around the HAES concept that emphasises the appreciation of body size diversity and size acceptance. The conventional weight-management program utilised the LEARN (Lifestyle, Exercise, Attitudes, Relationships, and Nutrition) Program for Weight Management (Brownell, 2004). Assessments of internalised weight stigma occurred at baseline, post-intervention (six months) and 24 months post-randomisation. The researchers report that, 'Only weight-neutral program participants with low internalised weight stigma improved global disordered eating scores' (Mensinger et al., 2016, p. 32). Participants from both groups improved adaptive eating at six months but only the weight-neutral participants maintained the changes at the 24-month assessment. Participants with high internalised weight stigma, regardless of program, demonstrated no changes in disordered eating (Mensinger et al., 2016).

Major et al. (2014) explored the effect of weight-stigmatising news articles on self-control when presented with high-calorie food, to ascertain whether exposure to such articles exerted an effect on higher brain function governing choice. As part of a larger study, the participants were asked to rate themselves as overweight, or

not, and this information formed part of the analysis of the findings. Ninety-three university students (age range: 18-32) were randomised to two groups; participants in the first group were provided with a news article about weight-stigma in the job market, and the participants in the control group were provided with an article unrelated to weight-stigma. Following analysis of the data, the researchers reported that, 'Exposure to weight-stigmatising news articles caused self-perceived overweight women, but not women who did not perceive themselves as overweight, to consume more calories and feel less capable of controlling their eating than exposure to non-stigmatising articles' (Major et al., 2014, p. 74) The researchers warn that, '… public health campaigns aimed at reducing obesity but that stigmatise overweight and obese individuals may have negative psychological and behavioral consequences that ultimately can impair their efforts at weight control' (Major et al., 2014, p. 79). However, as the writers note, the cohort for this study comprised female university students so it is not possible to generalise these results to a broader female audience, or, to a male audience.

In her writings on disgust, Lupton (2014) states that, 'The developers of public health campaigns have often attempted to elicit disgust to persuade members of their target audiences to change their behaviour in the interests of their health…' (Lupton, 2014b, p.2) and cites this strategy as the approach used to change unwanted social behaviours such as cigarette smoking and illicit drug use. Arguing that strong emotional reactions are necessary for change to occur, Lupton suggests that from this point of view the LiveLighter Campaign has been very successful by eliciting a robust response, albeit disgust, from many who are exposed to it. Additionally, Lupton notes that many health researchers, who have traditionally used the elicitation of fear to calculate the success of health promotion campaigns, are now using the elicitation of disgust instead as a marker of success (Lupton, 2014b).

The stigma of obesity appears to have intensified over the last ten years possibly because of increased government health warnings about obesity and individual responsibility (Vartanian and Smyth, 2013, Brewis et al., 2011, Brown, 2010b). This sharp focus on weight-loss has prompted sociologists to question the motives of government messages that deliberately isolate often already-stigmatised sections

of the community, for example, those in low socio-economic groups who are also obese (Lupton, 2013b, Lupton, 2014a). Furthermore, research reveals that weight stigma exists strongly in the medical profession with the use of fat-based pejoratives common. For those who perceive themselves as obese, this may result in avoidance of medical professionals for any reason, not just in relation to weight issues, fearing that they will be rebuked, shamed and bullied because of their inability to lose weight or maintain an earlier weight-loss. (Brown, 2013) With the focus on losing weight and the glorification of the thin-ideal, fat prejudice may be perceived as an acceptable, culturally allowable behaviour. As an obese respondent in a survey by Lewis et al. (2011) states, 'You've got a culture that is so fat-phobic and so fat hating. It's really one of the last legitimate prejudices' (Lewis et al., 2011, p. 1353).

At this point, it may be useful to discuss what is meant by a 'legitimate prejudice', as prejudice is usually considered unacceptable within a compassionate society. Lyon (1998), in discussing the works of Hans Georg Gadamer, considers a legitimate prejudice to be one that is shaped by the particular society in which one lives; that prejudices are all judgments defined by acknowledged authority, determined by our history, and thus, embedded in our society's collective psyche (Lyon, 1998). This resonates with the work of French philosopher and social theorist, Michel Foucault whose work considered that structure dictated the accepted norms in a society. In this theoretical model, governments, or other governing bodies, assume power rather than accumulate power as a result of individual actions, then form norms and allocate power accordingly. Foucault (1975) wrote about this as the few watching the many and labelled it a panopticon process. In this process, acknowledged authorities dictate to society what prejudices are acceptable by demonstrating to society what is unacceptable and using stigma to alienate those who embody this rejected state (Foucault, 1975).

Foucauldian social theory and its importance in understanding obesity stigma, and the ethics associated with the use of stigma to enforce social change, will be explored later in this chapter and in Chapter 4.2.

Because of its precise focus on weight-loss, arguably the most damaging unintended consequence of all is the potential to increase the numbers and scope of those affected with an eating disorder. That Anorexia Nervosa has the highest death rate of any psychiatric disorder is a fact that appears to be little known or discussed (National Eating Disorders Collaboration). The NEDC believe that, although other factors are involved, such as the rise of the Internet, the immediacy of Facebook, and other forms of social media, anti-obesity campaigns and social marketing messages to lose weight, have played an important part in the increase in disordered eating (National Eating Disorders Collaboration, 2011). Dieting is acknowledged as the single most important risk factor for developing an eating disorder (Eating Disorders Victoria, 2015, Stice et al., 2011, Neumark-Sztainer et al., 2009, Evans et al., 2008), therefore the singular focus of the anti-obesity campaign on weight-loss may be damaging for those, of any age, who are at risk. Furthermore, many eating disorder experts warn about the unintended effects of the anti-obesity message in triggering negativity around body image and prompting recourse to disordered eating (O'Connell, 2012, Pinhas et al., 2013, Schwartz and Henderson, 2009, Burns and Gavey, 2004, Byrne and Niederdeppe, 2012, O'Dea, 2005, Eating Disorders Coalition, 2013, Salas, 2015). This risk is particularly relevant for children and adolescents who are vulnerable to media messages and suggestion and at an age where eating disorders often begin (O'Connell, 2012, Pinhas et al., 2013, Schwartz and Henderson, 2009, Burns and Gavey, 2004, Byrne and Niederdeppe, 2012, O'Dea, 2005, Eating Disorders Coalition, 2013, Salas, 2015). Although children and adolescents are traditionally considered most at risk of developing an eating disorder, recent research has discovered that older women, in particular, are engaging in disordered eating. Whether this is in response to the pursuance of the thin-ideal is a subject that will be explored and discussed later in this thesis.

2.2. Obesity and the anti-obesity campaign

In this section, the development of the current Australian anti-obesity policy, funding model and resultant campaign from its inception in 2008 to the present day, will be discussed. Additionally, the emergence of the fat acceptance

movement and fat activism will be examined highlighting the current conditions that are prompting the development of these groups.

The anti-obesity policy and campaign

For historical context, the main factors that contributed to the development of the Australian Government's anti-obesity weight-loss campaign are presented. This provides, not only information about how the formal campaign began, but also how the growing concern about the increasing weight of the Australian population and the need for urgent action prompted the development of the anti-obesity policy. In the second part of this section, the current status of the policy will be discussed including the drivers of the policy and how it was funded.

The funding model for the Australian anti-obesity campaign

In Australia, overweight and obesity rates increased steadily until 2011-12, and remained unchanged from 2011-12 to 2014-15 (Table 1, Figures 2, 3).

Table 1 Overweight and obesity rates in Australia 1995-2015[1]: (Australian Bureau of Statistics, 2015)

Gender	1995	2007-08	2011-12	2014-15
Male %	63.8	67.7	69.7	70.8
Female %	48.8	54.7	55.7	56.3

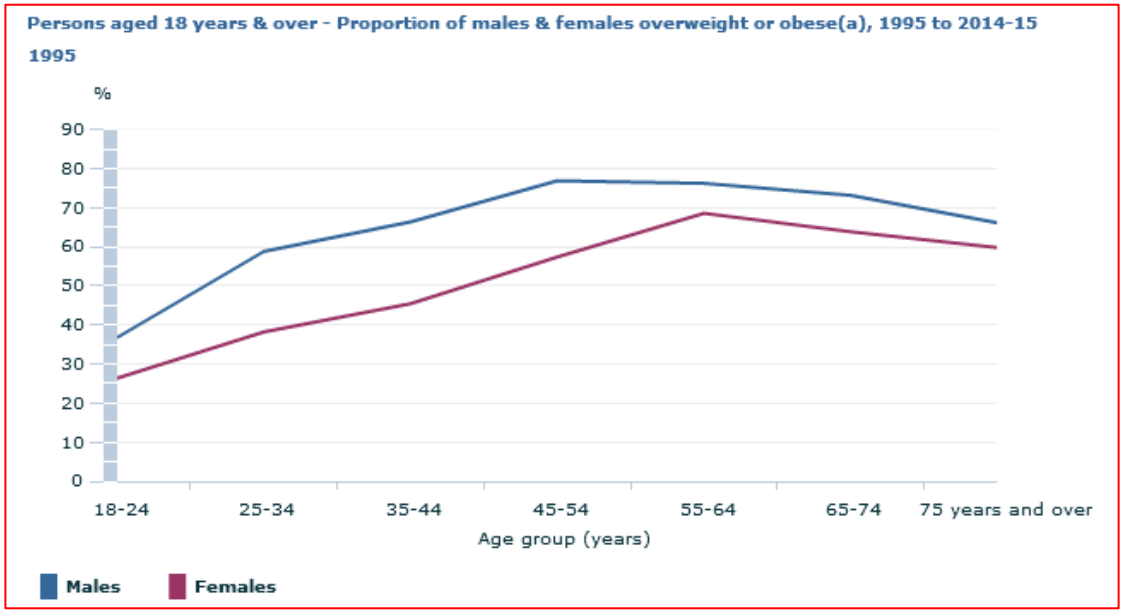
Source(s): National Health Survey: First Results, 2014-15 (Australian Bureau of Statistics, 2015)

The following two tables demonstrate the difference in overweight and obesity rates in Australia in 1995 and 2014/15. The increase in 2014/15 can be observed across all age-groups with the latter table also demonstrating a levelling of the rate difference between age-groups. This suggests that the Australian population in 2014/15 became larger earlier in life (the 18-24 rate is higher) and continued the rise across the recorded age-groups in a smooth upswing with no recorded plateaus. However, it should be noted that the BMI cut-off points for the categories used to indicate overweight and obesity changed in 1998 so that the

[1] Prior to 2011/12, the ABS had not established routine regularity in collecting data on obesity. Since 2011/12, the ABS collects overweight and obesity data every three years.

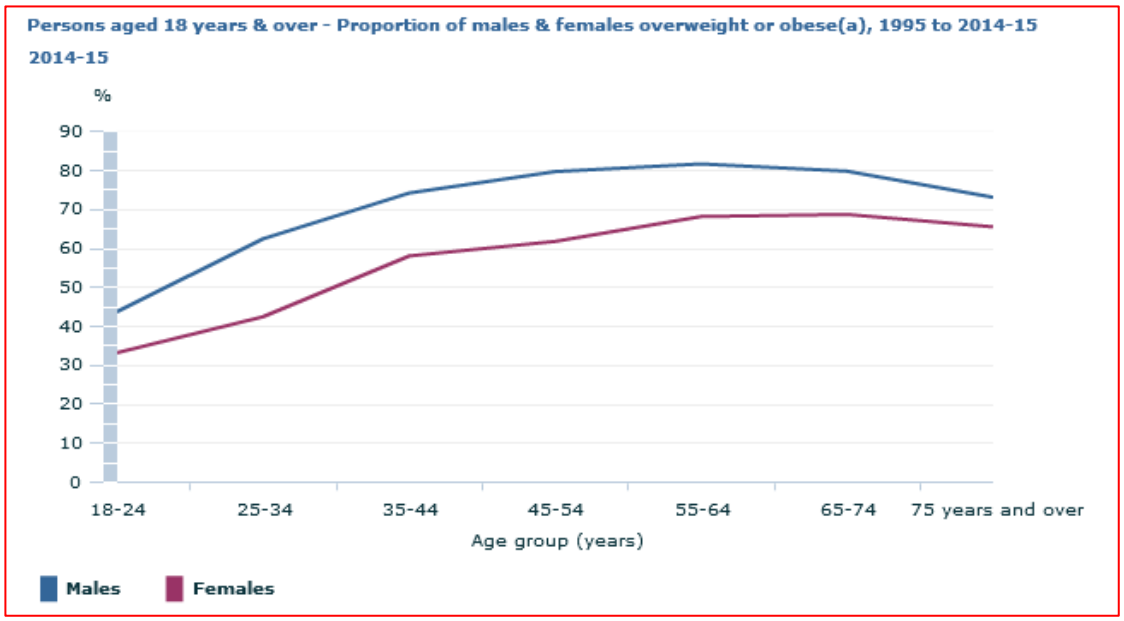
groupings are not directly comparable. Indeed, as the criteria have lowered the thresholds, overall size has probably reduced.

Figure 1 Overweight and obesity rates in Australia 1995 and 2014/15: (Australian Bureau of Statistics, 2015) Results for 1995



Source: National Health Survey: First Results, 2014-15 (Creative Commons Attribution 4.0 International licensing) (Australian Bureau of Statistics, 2015)

Figure 2 Overweight and obesity rates in Australia 1995 and 2014/15: (Australian Bureau of Statistics, 2015) Results for 2014/15



Source: National Health Survey: First Results, 2014-15 (Creative Commons Attribution 4.0 International licensing) (Australian Bureau of Statistics, 2015)

The 2014/15 survey was conducted in all states and territories and across urban, rural and remote areas of Australia (other than very remote areas) from July 2014 to June 2015, and included around 19,000 people. (Australian Bureau of Statistics, 2015)

On the 7th February 2019, the ABS released a preliminary report on the overweight and obesity first results statistics for the period ending 2017-18. The report states that, 'Since 2014-15, the proportion of adults aged 18 years and over who were overweight or obese increased from 63.4% to 67.0%' (Australian Bureau of Statistics, 2019). Furthermore, 'the proportion of adults who were overweight or obese has increased from 56.2% in 1995 to 67% in 2017-18, mainly driven by an increase in obesity which increased from 18.7% in 1995 to 31.3% in 2017-18' (Australian Bureau of Statistics, 2019). The full report will be published later in the year. As at October 2019, this report remains unpublished.

No information is available about the method used to collect data in 1995 and no data about BMI, overweight and obesity were collected by the ABS in Australia, prior to 1995. It is worth noting that the BMI used to categorise overweight and obesity changed in 1998 (Kuczmarski et al., 1997). It is therefore difficult to determine if the comparison between 1995 and the present-day is a valid

representation of the increase occurring during that time period. A comparison of the data from 2000 to the present-day might provide a more accurate result.

Although various ad hoc policies to reduce obesity had been developed earlier (National Obesity Taskforce, 2004), the Australian government's national anti-obesity government strategy did not commence until 2009.

Just prior to this in 2006, and driven by the publication in 2005 of the 'Productivity Commission's Research Report on the Economic Implications of an Ageing Australia' (Department of Health and Ageing, 2005), the Australian Better Health Initiative (ABHI) was launched (Department of Health and Ageing, 2007). In 2008, the Council of Australian Governments (COAG) under the national reform agenda on health, commenced development of the National Partnership Agreement on Preventive Health (NPAPH) with funding to states and territories specifically targeted to chronic disease prevention (National Partnership Agreement on Preventive Health Implementation Working Group, 2009).

In 2009, the Australian Government formalised and published the National Implementation Plan 2009-2015, to govern the application of the reform agenda (National Partnership Agreement on Preventive Health Implementation Working Group, 2009). Five hundred million dollars was spent over four years for this initiative and a range of interventions followed including a rolling program of social marketing campaigns (Australian Government, 2009). The NPAPH, initially developed for five years, was extended to 2015 with a total of $872.1 million invested across the six years (2009-2015). The COAG Reform Council monitored the reform agenda (COAG Reform Council, 2015) and, as part of the implementation, in 2010 the Australian Government pledged approximately $300 million for social marketing campaigns tackling tobacco, alcohol, obesity and illicit drugs (National Preventative Health Taskforce, 2010).

After a gap of nine years, in 2018 the Australian Government revisited the obesity prevention policy. The Select Committee into the obesity epidemic in Australia was established in May 2018 to inquire into, and report on, the ongoing issues of rising obesity and to research evidence-based prevention measures to inform a new national strategy on obesity. A strong focus on primary and secondary

prevention measures was planned and the final report was released in October 2018 (COAG Health Council, 2018). According to this report, since 2014-15 an estimated 900,000 Australians have become obese, with the result that almost one-third of adults are now obese, and one-quarter of children are obese or overweight. However, because the paediatric categories of overweight and obesity have been conflated, it is not possible to ascertain the precise percentage of obese children in Australia in 2018. Furthermore, although twenty-two measures are recommended (see Appendix 1), apart from introducing two welcome measures about stigma awareness, the focus appears unchanged from the NPAPH of 2009. This is surprising as, given the steady increase in obesity rates over the past ten years, the original NPAPH clearly did not achieve its goal of reducing obesity.

Notwithstanding, in a departure from the 2009 strategy, there is recognition that environmental factors, such as urban design, have an impact on an individual's weight-related eating behaviour. The committee of 2018 also states that it supports a move away from using the term, 'obesity' for preventive health, although it will still be used in medical settings. In addition, the committee recommends to, '... move the focus from weight to health'. (COAG Health Council, 2018, p. xv) The proposed measures revealed so far include food labelling, a tax on sugary drinks (as opposed to a general sugar tax) and the restriction of advertising of unhealthy food on television. At the present time, there does not appear to be any suggestions offered to effect change on society design, or to work within the Social Determinants of Health, despite this being mentioned as an aspiration within the report. The Ottawa Charter, developed by the WHO in 1986, provides guidelines for the practice of health promotion based on the Social Determinants of Health. The Charter states that health is not merely the absence of disease, but includes social markers of good health including safe shelter, employment, access to nutritious food supply and empowerment of the individual and communities to attain this (World Health Organization, 1986).

Additionally, despite the fact that the COAG committee report of 2018 found that there has been a steady, yearly increase in obesity, thus, clearly demonstrating the failure of the anti-obesity campaign of the last ten years, they state, 'The committee is of the view that public education campaigns are effective and play an

important role in improving attitudes and behaviours around diet and physical activity' (COAG Health Council, 2018, p. xvi).

2.3. The complex world of eating disorders

Eating disorders are defined by the NEDC as a range of psychological disorders, such as Anorexia Nervosa, characterised by abnormal or disturbed eating habits (National Eating Disorders Collaboration).

If the Australian anti-obesity campaign is contributing to an increase in disordered eating and diagnosable eating disorders, it is important to acknowledge the many ways in which these conditions impact, not only the sufferer, but also family and community.

Eating disorders are complex and intersect with many other related conditions such as BDD and negative body image. The DSM-5 (2013) determines clear, strict criteria for diagnosing eating disorders, one of which is weight-loss. Unfortunately, many individuals may become very unwell as a result of an eating disorder other than Anorexia and this may not be recognised as such until well advanced. Identifying a precise cause for the many different types of eating disorder is fraught with difficulty given the myriad of factors that may be involved. This is further complicated by the diversity of eating disorder presentations and the shortcomings of diagnostic criteria resulting in complex behaviours that defy categorisation.

Because comprehensive, population-based statistics on eating disorder patterns in Australia are not available at the time of writing, data and information from the NEDC and Eating Disorders Victoria will supplement population data where available. Much of the data and information in this section were collected and analysed by Deloitte Access Economics in 2012 for their report, 'Paying the Price. The Butterfly Report' (Butterfly Foundation, 2012) commissioned by The Butterfly Foundation. Deloitte Access Economics used data and information from Australian studies available in 2012 to inform their estimates of the prevalence of eating disorders. It should be noted that the NEDC is the agency for the prevention and management of eating disorders at a national level.

About eating disorders

According to the Butterfly Report (2012), it was estimated that, in 2011, one million Australians had an eating disorder and this was increasing (Butterfly Foundation, 2012). It was also estimated that 20% of females had an undiagnosed eating disorder and that eating disorders and disordered eating together were estimated to affect over 16% of the Australian population (National Eating Disorders Collaboration). Unfortunately, these numbers have not been updated since 2012; nevertheless, there is no evidence to suggest that these they decreased.

Table 3 Estimated prevalence of eating disorders Australia in 2012 (Butterfly Foundation, 2012)

	Anorexia	Bulimia	BED	EDNOS*	Total
Females	18,284	78,154	264,516	219,667	580,621
Males	7,469	29,761	164,317	131,818	333,365
Total	25,753	107,915	428,833	351,485	913,986

*Eating Disorders Not Otherwise Specified (EDNOS), is now called Other Specified Feeding and Eating Disorders (OSFED)

Source: The Butterfly Foundation (2012) (Butterfly Foundation, 2012)

It is important to note that these are the only statistics available for Australia at the time of writing.

Recently added to the list of eating disorders, although not to the DSM-5 (2013), are two lesser-known eating disorders that are attracting the attention of experts in the field. Orthorexia Nervosa, although identified in 1997 by psychologist Steven Bratman, is only now becoming recognised as a disorder that may have serious consequences on the health of the individual. Bratman (1997) explains that the disorder, '... refers to a fixation on eating proper food,' usually unprocessed, natural and organic food (Bratman, 1997, para 22). This fixation has the potential to cause serious illness if the compulsion to eat only pure food becomes obsessive.

There are currently no Australian data available for Orthorexia.

Finally, Diabulimia is an eating disorder usually unknown to those outside of the diabetic community. There is, to date, no research on this condition. Writing for Diabetes Health, American physician Huifeng Shih (2009) explains, 'Diabulimia is an eating disorder in which people with type 1 diabetes deliberately give themselves less insulin than they need for the purpose of weight loss' (Huifeng Shih, 2009, para 2). The only Australian reference to Diabulimia was found on the general Eating Disorders and Obesity Conference website dated 2nd March 2016. The website states that, although awareness of this condition is increasing, it is not recognised as either a medical or psychiatric disorder, however, 'Without insulin, people with Type 1 diabetes can face anything from exhaustion and nausea to diabetic ketoacidosis, coma, and even death' (Eating Disorders Australia, 2016, para 5).

The majority of research on eating disorders in Australia, and globally, is concerned with Anorexia Nervosa and eating disorders in general.

According to the NEDC, 'Eating disorders are estimated to affect approximately 9% of the Australian population' (National Eating Disorders Collaboration, para 1) and, 'The mortality rate for people with eating disorders is the highest of all psychiatric illnesses and over 12 times that seen in people without eating disorders' (National Eating Disorders Collaboration, para 9).

The most common reasons for hospitalisation for eating disorders are medical complications such as cardiac abnormalities, electrolyte disturbance, bradycardia, and hypotension and suicidal behaviour (National Eating Disorders Collaboration, 2010b). Furthermore, data from New South Wales suggest that 11% of all patients with an eating disorder and up to 61% of all children (under 18 years of age) with an eating disorder are admitted with a life-threatening complication (National Eating Disorders Collaboration, 2010b).

Apart from psychological issues, such as anxiety and depression that may persist for decades, if not for life, medical complications may also result in long-term problems. Disturbances of fertility, high blood pressure and kidney failure are just a few of the long-term effects of eating disorders (National Eating Disorders Collaboration, 2010b).

Eating disorders other than Anorexia Nervosa

In this section, eating disorders other than Anorexia Nervosa are described, in particular, Bulimia Nervosa (usually called Bulimia), and Binge Eating Disorder (BED). Bulimia has its own entry in DSM-5 (2013) while BED is included in the OSFED category. Orthorexia will also briefly be discussed.

Bulimia

Bulimia Nervosa, or Bulimia, is a complex disorder that often co-exists with Anorexia Nervosa. The Harvard Medical School reports that Bulimia can exert effects on both physical, and mental, health in the form of heart disorders, problems with blood chemistry, bone pain, gastro-abdominal disorders, low blood pressure and others. The majority of sufferers are women (85%-90%), and the disorder usually begins between the ages of 15-20 years of age. Individuals with Bulimia are able to consume extremely large quantities of food at one compulsive, uncontrollable, bingeing session (up to 20,000 calories). As Harvard Medical School explains, 'Although people with Bulimia fear becoming fat, and some are severely underweight, or overweight, most are of normal weight, or only slightly overweight' (Harvard Medical School, 2015, para 5).

According to Pellerano (2014), Bulimia Nervosa presents as a cycle of bingeing and purging, that is, to the sufferer, uncontrollable. Usually accompanied by other methods to avoid weight-gain, such as laxatives, diuretics and compulsive exercising, Bulimia is not usually detected until signs and symptoms of general illness become obvious. Pellerano states that those who engage in this behaviour seek control of their body weight and often feel a lack of self-worth. In addition, feelings of intense depression usually follow a binge-eating episode, further compounding feelings of negative self-worth (Pellerano, 2014).

The NEDC (2017) explain that a person with Bulimia, '… has not made a "lifestyle choice", they are actually very unwell and need help' (National Eating Disorders Collaboration, 2017b, p.1). The reasons why individuals develop Bulimia differ but include a combination of environmental, social and cultural factors plus a genetic predisposition to the illness. Similar to all eating disorders, people with Bulimia

place an excessive emphasis on body shape, or weight, that can lead to, '… the person's sense of self-esteem and self-worth being wholly defined by the way they look' (National Eating Disorders Collaboration, 2017b, p.1).

Binge Eating Disorder (BED

De Zwaan (2001) reports, in a literature review, that, although BED is most common in those who are obese, it may also occur in those who are of normal weight. It is characterised by recurrent episodes of binge eating but, unlike Bulimia, compensatory behaviour, such as vomiting or laxative abuse, does not usually occur. Unlike Anorexia Nervosa and Bulimia, which affect more women than men, BED is approximately equal in gender ratio (de Zwaan, 2001).

According to the NEDC, identifiable eating habits of BED may include, '… eating very quickly, eating when not physically hungry and continuing to eat even when they are full, to the point that they feel uncomfortable' (National Eating Disorders Collaboration, 2017a, p.1). Because of their abnormal feelings around food, BED sufferers often choose to eat alone (National Eating Disorders Collaboration, 2017a).

Orthorexia

Orthorexia Nervosa is a medical condition in which the sufferer systematically avoids specific foods that they believe to be harmful (Bratman, 1997). The disorder was first described by Steve Bratman, a self-described holistic physician and psychologist, in the mid-1990s who, after years of living in a commune and prescribing food as medicine, became concerned about the rise of what he terms, 'righteous eating' and 'kitchen spirituality'. In his seminal essay on Orthorexia (1997), he expresses dismay that, 'The act of eating pure food begins to carry pseudo-spiritual connotations. As Orthorexia progresses, a day filled with sprouts, umeboshi plums and amaranth biscuits comes to feel as holy as one spent serving the poor and homeless' (Bratman, 1997, p.45), and that, 'Orthorexia eventually reaches a point where the sufferer spends most of his time planning, purchasing and eating meals' (Bratman, 1997, p.45).

Writing in 2005 about Orthorexia as it began to emerge as a concern, Mathieu (2005) explains, 'The problem, like with other obsessions, is when the behaviour begins to hinder a person's ability to take part in everyday society' (Mathieu, 2005, p.1510).

Orthorexia Nervosa is generally not considered a condition that is linked to poor self-image, or a desire to lose weight; it is, as Bratman describes, a search for the purest food that becomes almost spiritual. This was borne out by Brytek-Matera et al. (2015) who studied 327 normal weight male and female students to determine the relationship between Orthorexia and body image. Their results demonstrated that a preoccupation with healthy eating was not associated with body image (Brytek-Matera et al., 2015). Nevertheless, in 2016, Bratman confessed that he had changed the way in which he viewed Orthorexia. Initially, insisting that, if Anorexia was about wanting to be thin, Orthorexia was about a quest to eat 'pure' food, he now acknowledges that, 'It appears that a high percentage of people with Orthorexia these days DO have a focus on weight loss, at least to some extent. Because it is no longer socially acceptable for a non-overweight person to count calories, many who would otherwise be Anorexic talk about "eating healthy" instead' (Bratman, 2016, para 11). Bratman's observations of the change in focus of Orthorexia sufferers to now include a weight-loss component, suggest that between 1997 and 2016, the focus on thinness and appearance became stronger.

The concern that health professionals may be negatively influencing their clients in terms of healthy eating prompted a study by Kinzl et al, (2006), of 23 Austrian female dietitians, to determine the prevalence of Orthorexia in this group, and to explore the psychological factors underlying the disorder. They found Orthorexia to be a frequent eating disorder in the study participants, also noting that, '… some women take up dietetics because of an existing eating disorder and their hope of coping with it' (Kinzl et al., 2006, p.395). Suggesting that the advice of individuals whose mission is to encourage healthy eating may prove harmful is open to criticism. However, this is further confirmed by Tandoh (2016). In documenting her own journey from Orthorexia to regaining a healthy relationship with food, she reports that 'clean-eating' authors and their blogs and cookbooks, had a major influence on her rapidly restrictive eating pattern at the time. She explains that the

majority of 'clean-eating' bloggers are young, attractive females intent on pursuing what appears to be a healthy diet that is, in fact, extremely restrictive. Tandoh also criticises the wealth that these untrained bloggers/authors accumulate as they sell a lifestyle to other vulnerable young women. She does, however, believe that, in her opinion, a backlash is occurring with accredited chefs and cooks highlighting the dangers, and the misconceptions, of such restrictive eating practices (Tandoh, 2016).

Finally, Bratman (2016), urges caution in diagnosis, arguing that, 'Enthusiasm for healthy eating doesn't become "Orthorexia" until a tipping point is reached and enthusiasm transforms into obsession' (Bratman, 2016).

What causes eating disorders?

According to Eating Disorders Victoria (2017), eating disorders are complex conditions without a single, identifiable cause and they occur across all ages, genders and socio-economic groups. Although no single cause has been identified, psychological, biological, and social risk factors all increase the possibility of developing an eating disorder, in addition to, '…. behaviour and traits, such as dieting, poor self-esteem, and perfectionism' (Eating Disorders Victoria, 2017, para 5).

Psychological factors that may influence the onset of an eating disorder include low self-esteem, feelings of inadequacy, depression, anxiety and beliefs that love from family and friends is dependent on high achievement. Biological factors include adolescence and its associated physical, hormonal and neural changes and genetic or familial factors. Additionally, scientists are currently researching possible biochemical and biological factors for their role in the development of eating disorders. The cultural value placed on thinness as an inextricable component of beauty, and the emphasis on striving for a perfect body, together with the mass and social media's unrealistic portrayal of body images, are suggested as the major drivers socially. External factors involving major change, exposure to dieting and peer pressure may also influence the development of disordered eating, or a diagnosable eating disorder (Eating Disorders Victoria, 2017).

Bruch (1904-1984), a psychoanalyst specialising in eating disorders, focused her work primarily on the emotional aspects of eating disorders. Writing in 1973, Bruch, in her seminal book, 'Eating Disorders: Obesity, Anorexia Nervosa, And The Person Within', believed that disordered eating often began early in life with a confused relationship with food. She argued that practices of imbuing food with non-biological currency, for instance, using food as reward or punishment, caused children to view food as a psychological tool, rather than as a biological need. Bruch believed that eating is such a social function that it is never detached from emotion and suggested that obesity and eating disorders are behaviours resulting from early conditioning (Bruch, 1973). Bruch was meticulous in separating those sufferers who she considered typical (appearance oriented), from those who she considered atypical (those who used food refusal to coerce others). This clear delineation of the causal factors for eating disorders is less accepted in the current discourse as research indicates the development of an eating disorder to be more multi-faceted in origin. Nevertheless, many of Bruch's earlier observations, particularly relating to appearance, have increased in validity (Carey et al., 2010).

Gordon (2000), discussing what he perceives to be the origins of eating disorders, suggests that most Anorexic individuals begin their illness in adolescence with a decision to diet. The author also states that Anorexic adolescents, usually female, are compliant, perfectionist and eager to please. Gordon maintains that this initial decision to diet is indistinguishable from their peers who also decide to diet. However, for those who continue, dieting becomes a means that allows the sufferer some control over her life (Gordon, 2000). In this respect, Gordon's view about control reinforces that of Bruch's.

This view is unwittingly confirmed by the author of 'Brave Girl Eating' (Brown, 2011), whose daughter suffered from Anorexia Nervosa for many years before a slow recovery. Brown writes about the devastating effect that her daughter's illness had on her family while wondering how this challenging and newly uncooperative person could be her daughter. Brown's daughter, according to her mother, was, '… cheerful and well adjusted. She had friends, interests, and a passion for new experiences. She wrote her sixth-grade research paper on eating disorders. She knew the dangers' (Brown, 2010a, p.4). Furthermore, when discussing her own

reading of Bruch (1973), Brown dismisses the writer's descriptions of the Anorexic family, including the seeking of attention by the eating disorder sufferer. However, as Brown recounts her own history growing up in a family where personal appearance was the major topic of conversation and, recognising her own fear of fat, she wonders if she has passed this on to her daughter in spite of taking care not to do so. This personal account, by a mother of an adolescent with Anorexia Nervosa, highlights the potential unintended consequences of linking food and obesity. More specifically, Brown writes that her daughter began focusing on healthy eating in Sixth Grade (11-12 years old), after learning about calories and nutrition to prevent obesity, having her BMI calculated and fat measured with calipers (Brown, 2010a, p.13).

Concerned about the increasing medicalisation of eating disorders, Bordo (1993) rejects the argument, expressed by many medical researchers, that eating disorders are not culturally acquired or all women equally exposed to the same sociocultural influences would succumb. Writing from a feminist position, Bordo urges researchers to consider eating disorders, '... in the context of ideological and institutional parameters governing the construction of gender in our culture' (Bordo, 1993, p.61), rather than only the more personal social and cultural influences impacting individual women (Bordo, 1993). This argument by Bordo is compatible with research discussed previously on the gendered nature of obesity, the transgender experience and the perpetuation of the thin-ideal for women, but not for men (Bergman, 2009, Young, 2014). Blowers et al. (2003) elucidate further stating that the pursuance of the thin-ideal is a mainly female gender construction in Western society regardless of individual sociocultural influence and culture, and, as such, is a continuous presence (Blowers et al., 2003).

Dieting and other weight-loss practices

The NEDC argue that dieting is a strong trigger for eating disorders. In their e-bulletin, released in 2012, they report that, 'Longitudinal research shows that those who diet and use unhealthy weight control practices are at risk of both eating disorders and obesity' (National Eating Disorders Collaboration, 2012a, p.3).

Supporting the hypothesis that dieting alone is a major risk factor for eating disorders, Stice et al. (2011), prospectively studied 496 adolescent girls to identify those at risk of early onset of eating disorders. The subjects were followed for eight years with annual diagnostic interviews and surveys to collect data and information. The results revealed that, among participants who had problems with low body dissatisfaction, this in itself was the most potent predictor of eating disorder onset, amplified for those also suffering from depression. However, among those who were generally more satisfied with their bodies, dieting, for whatever reason, was the most potent eating disorder predictor with a 3.6-fold increased incidence of onset than those who did not diet (Stice et al., 2011).

In addition, adolescents who use unhealthful, weight-control behaviours may find that their weight increases compared to those not engaging in any weight-control behaviours. In an American, five-year prospective study of adolescents (N = 2,516) who reported dieting or other weight-control practices, Neumark-Sztainer et al. (2006), found that an increase in BMI of one unit, and a greater risk of binge-eating and other disordered eating patterns, were linked to those self-reporting dieting and unhealthful weight-control practices. Behaviours deemed unhealthful included fasting, food restriction, use of a food substitute (powder or a special drink), skipping meals, smoking more cigarettes, taking diet pills, induced vomiting, and laxative and diuretic use. The sex ratio was approximately 2:1 for females and males indicating that these behaviours in adolescence are not restricted to females (Neumark-Sztainer et al., 2006b).

Despite the known risks of dieting on the development of eating disorders, especially in the adolescent population, a decision was taken in early 2019 by the National Health and Medical Research Council (NHMRC) to provide $1.2 million to the Monash Children's Hospital in Melbourne, and The Children's Hospital at Westmead, Sydney, to conduct an adolescent weight-loss study. The 'Fast Track to Health' study, also called 'Fast Track', targets adolescents from the age of 13 years to 18 years using an extremely restrictive diet of 800 calories a day for four weeks. This is followed by 12 months of low calorie dieting for 50% of the participants, and alternate day fasting for the remaining 50%. According to the 'Fast Track' website, the diet for the initial four weeks will consist of, '... 3-4 meal

replacements like shakes, soups or bars, and a small meal … ' (Fast Track to Health, 2019). This has caused disbelief and concern for local and International eating disorder experts because of the link between dieting and eating disorders which often start in adolescence. On February 19th, 2019, the Australia & New Zealand Academy for Eating Disorders (ANZAED) released a position statement condemning the research. Within the statement, they explain that a complaint was made to the Sydney Children's Hospital Network Human Research Ethics Committee (HREC) by a group of 29 eating disorder professionals. In answer to this, the Executive Officer of research ethics, responded, "The HREC recognises that there is a risk for a young person to develop an eating disorder with exposure to restrictive diets and in particular very restrictive diets. Although these risks appear to be lower in medically supervised dieting programs, they will still be present" (Australia & New Zealand Academy for Eating Disorders, 2019). As the ANZAED points out, it appears that the researchers consider the risk of developing an eating disorder acceptable because of the possible benefits of the trial and the inclusion of a risk management plan to mitigate this. The risk management plan referred to consists of, '… communicating to participants and their parents/guardians the potential for an eating disorder to develop' (Australia & New Zealand Academy for Eating Disorders, 2019).

It could be argued that, far from mitigating the risk of development of an eating disorder, issuing a warning may, in fact, precipitate the development of an eating disorder, especially if the adolescent is vulnerable to messages about the thin-ideal, and has some knowledge about how girls, in particular, restrict intake. In addition, the HREC, in discussing the potential risk to participants and their parents/guardians, do not explain the full effects of Anorexia, in particular, that the disease has the highest fatality rate of all psychological illnesses and often has a lasting effect on the health and well-being of the individual even if recovery is achieved.

In a different vein, and prompted by the increased use of health tracking technology and activity monitors, Simpson and Mazzeo (2017) examined the relationship between use of these devices and whether they trigger, maintain or exacerbate eating disorder symptomatology. They explain that, although studies

have considered the role of calorie trackers and eating disorders, no one to date had yet explored the role of activity monitors in eating disorder pathology. Participants (N=493) were college students who reported their use of tracking technology and completed measures of eating disorder symptoms. The authors report that the results reinforce previous research reporting a link between calorie tracking and weight monitoring however, '… fitness tracking, but not calorie tracking, emerged as a unique indicator of eating disorder symptomatology' (Simpson and Mazzeo, 2017, p. 91). They believe that, 'This finding suggests that activity monitoring might be more aligned with disordered eating attitudes and behaviours than calorie tracking' (Simpson and Mazzeo, 2017, p. 91). The researchers argue that, although preliminary, the results suggest that for some individuals tracking devices might do more harm than good (Simpson and Mazzeo, 2017).

Despite these findings, the NEDC is careful to point out that dieting, or any other activity, on its own, is not necessarily a pathway to an eating disorder but is more likely when other risk factors are present (National Eating Disorders Collaboration, 2011).

Eating disorders and the power of social media

In this section the influence of social media on the development and sharing of restrictive eating practices is explored. Pro-Ana websites are discussed for their role in providing a space not only for those diagnosed with Anorexia, but for the many women, in particular, who seek to become Anorexic. The role of social media platforms in sharing ways to hide restricted eating, especially by the adoption of a vegan diet, is also described.

The diagnosis of eating disorders is complicated by strict weight criteria critical to the diagnostic process. The NEDC explains how the BMI is used to specify the level of severity of Anorexia Nervosa with adult severity indicated by the following:

Mild: BMI less than or equal to 17

Moderate: BMI between 16 and 16.99

Severe: BMI between 15 and 15.99

Extreme: BMI less than 15

(National Eating Disorders Collaboration, 2012a)

Because of the strict weight criteria necessary, many who are eating disordered are never diagnosed despite being very ill (Madden et al., 2009). Other diagnostic complications include a general lack of understanding about the pathology of eating disorders, and the veneration of the thin-ideal in the Western and Westernised world that may trigger disordered eating, and subsequent illness, despite the individual being of normal weight, or even overweight. The complexities that surround eating disorders are discussed in depth in Chapter 4, but perhaps of greatest concern are individuals who present clinically, but not diagnostically, with an eating disorder and are, therefore, often undiagnosed and untreated. These include obese individuals who present with the biochemical signs of starvation (Madden et al., 2009).

The popularisation of social media over the last ten years or so has provided new and innovative ways by which to connect to others around a shared interest or concern. Pro-Ana (pro-Anorexia) websites and blogs are popular sources of information and support for (mainly) young women whose aim is to be extremely thin. Such is the power of social media today that the Pro-Ana community is able to engage with individuals around the world who share the commitment to the Pro-Ana lifestyle. However, as Canto-Mila and Seebach (2011) point out in their study of friendships among the Pro-Ana online community, 'This does not mean that the members of the community solely communicate about their illness' (Canto-Mila and Seebach, 2011, p.3). The authors highlight the importance of the friendships forged on these sites because of the difficulties that many face within their families in their struggle to continue with their chosen lifestyle. They explain that although site members acknowledge their illness, they wish to continue to live this way and support others to do so. Moreover, these online friendships often evolve into more than just supporting the illness as members share their unique experiences and, in doing so, create strong bonds they may not have in their real-life world. Thus, the Pro-Ana community becomes strong and exclusive, focusing

on maintaining and safeguarding the boundaries of their community. This is accomplished, according to Boero and Pascoe (2012), by policing, '… who is allowed on the sites, and guarding against people they call 'wannarexics' (Boero and Pascoe, 2012, p. 29). As Canto-Mila and Seebach (2011) point out, 'People search for, and enter Pro-Ana (Anorexia) forums with the very explicit intention of finding other people who are struggling with the same eating disorder, and who share similar views to their own on the subject' (Canto-Mila and Seebach, 2011, p.3). Thus, the Pro-Ana community could be considered exclusive, and, as social media has a global reach, it may be assumed that there are many Australians who participate in these online forums.

Several researchers have written about pro-eating disorder websites, particularly Pro-Ana sites, and their promotion of unhealthy food practices (Bardone-Cone and Cass, 2007, Brotsky and Giles, 2007, Tong et al., 2013). Others have explored the issue of censorship and what this means in terms of controlling women, feminine agency and the feminist response (Schott and Langan, 2015, Cobb, 2016, Day and Keys, 2008, Pollack, 2003, Dias, 2003).

Pro-Ana sites often elicit anger from the general community because of the assumption that members of these sites proselytise the Anorexic lifestyle. This is refuted by members of Pro-Ana sites who claim only to provide a safe haven for those already suffering from an eating disorder. Nevertheless, these sites are ambiguous spaces where Pro-Ana images are not hidden but able to be viewed by the casual visitor, thus, appearing to contradict the assertion that the sites only target those with an existing problem. Moreover, the literature is conflicting, with research by some reflecting a hostile environment for visitors who must prove that they are truly Anorexic not merely have a desire to become Anorexic (Brotsky and Giles, 2007), while others have observed a welcoming and supportive community determined to uphold the right to pursue their chosen lifestyle and help others to do likewise (Dias, 2003, Crowe and Watts, 2014).

In contrast to eating disorder websites, social media platforms, such as YouTube, Facebook and Instagram, among others, are freely available on all digital devices and can be a fast and easy source of information and advice. They require no

membership and the aim is not exclusivity but to attract as many views as possible to obtain sponsorships from affiliate organisations. In addition, the power of the dynamic visual representation can, for many, mean a faster social connection to the person speaking (YouTube), or posting (Instagram), than the less dynamic blog and website model.

The need to hide restricted eating practices while still sharing advice and support is of paramount importance for those who restrict food intake, and, the co-option of a vegan diet affords a legitimate way to restrict whole food groups without suspicion (Larbi, 2017). Although there are no studies that specifically explore the use of veganism as a smokescreen for restricted eating, the vegetarian diet, and its link to eating disorders have been studied. Bardone-Cone et al. (2012) studied 160 individuals, 93 of which were diagnosed sufferers of an eating disorder, and 67 who had never been diagnosed with an eating disorder to determine whether those with an eating disorder had a greater prevalence of vegetarianism than the controls. Their results demonstrated that individuals with an eating disorder were more likely to be vegetarian (52% vs 12%) and primarily motivated by weight-loss. Furthermore, 68% believed that their vegetarianism was related to their eating disorder and that the adoption of the vegetarian diet was fuelled by a desire to lose weight without arousing concern (Bardone-Cone et al., 2012).

No research could be located that explores YouTube as a way to share restrictive eating practices and YouTube remains under-researched in general. However, the YouTube platform, according to Rahebi (2016), who writes for The Odyssey University (an American university for content creators), explains that YouTube has many features that are attractive to viewers; it has a wide content variety and is easily watchable anywhere, and anytime, and on any electronic device. The writer also believes that, 'YouTube creates a more personal relationship with its viewer with just one simple technique — acknowledging that there are viewers on the other side of the screen' (Rahebi, 2016, para 4). The simplicity of the platform allows for anyone to create an account and to start uploading videos immediately. It offers a unique means of communication between the host (often called a YouTuber) and the viewer resulting in a sense of intimacy (Rahebi, 2016).

The use of 'thinspo' images has been described earlier in this chapter but their use in YouTube video thumbnails (the preview image advertising the content) is unexplored. These images, usually photographs, and often edited to further enhance thinness and attractiveness, commonly feature the host herself and closely resemble the 'thinspo' images found on Pro-Ana websites. Together with a reference to the vegan diet for weight-loss, this signals that the content is aimed at losing weight rather than improving health. These features differentiate content from that which promotes a vegan diet as a legitimate healthy way of living.

Although there is a scarcity of literature exploring the Australian anti-obesity campaign and its relation to eating disorders, many who work with eating disorder sufferers, of all ages, genders, and sizes, are raising concerns (Carey et al., 2010, Fry, 2012, Thomas et al., 2010b, National Eating Disorders Collaboration, 2011, Wykes, 2013). This narrative from experts in the field provides important, 'on-the-ground' information, critical to the understanding of the many facets of this complex issue. It may be in the minutiae of real situations that important clues are detected that provide a depth of understanding and clarity that defy capture by any other means.

As no comprehensive data are collected by the Australian Bureau of Statistics (ABS), or any other government organisation, on eating disorders in Australia, it is not possible to ascertain the size and particularity of the problem, analyse rates of different types of eating disorders, explore possible links with other disorders, or identify any emerging social consequences related to the eating disorder spectrum. In addition, the gathering of knowledge about the scope of disordered eating, which may pre-date a full-blown eating disorder, is difficult because of its elusive nature and the lack of diagnostic criteria. Moreover, the strict criteria necessary for a diagnosis of an eating disorder precludes many who are suffering clinically without a formal diagnosis, so access to health services may be limited.

Being fat today

According to Swinburn (1999), we now live in an obesogenic environment. This researcher was the first to describe the phenomenon of the "obesogenic environment" which he explains thus, '... an environment which is defined as the

sum of influences that the surroundings, opportunities, or conditions of life have on promoting obesity in individuals or populations' (Swinburn, 1999, p. 564). In 2008 Swinburn further explained it as an environment that reflects the commercial interests that have influenced our lifestyle over the past 40 years. The writer believes that the rapid expansion of the fast food and car industries, the decrease in manual labour and the general increase in disposable income since the Second World War, have all contributed to the increase in obesity and chronic disease such as Diabetes Type 2. Swinburn argues that, 'The commercial drivers of the obesity epidemic are so influential that obesity can be considered a robust sign of commercial success' (Swinburn, 2008, p.1). Likewise, Walls et al. (2011), following a critique on public health campaigns to reduce obesity, suggest that, 'A more appropriate strategy would be to enact high-level policy and legislative changes to alter the obesogenic environments in which we live' (Walls et al., 2011, p. 1). However, there is little evidence to demonstrate such environmental action other than a few low-key policies, such as guidelines for school cafeterias, and star ratings for various foods.

No formal definitions of fat acceptance and fat activism have been identified; however, it is important to clarify how these two states differ. The main focus of fat acceptance is acceptance of size. The HAES movement embraces fat acceptance as one of its underlying principles underpinning the ability to be healthy regardless of size (Bacon, 2008). While HAES does not specifically focus on weight-loss, this may happen because of its focus on mindful eating.

Fat activism tends to be more assertive and politically motivated, operating from a human rights perspective similar to gay or gender rights with the focus on equality regardless of size (Read, 2018, Perkins, 2017, Harry, 2014). Although this viewpoint may appear to be reasonable from a human rights perspective, not everyone supports fat activism. Lizzie Cernik (2018), a journalist for the Guardian in the UK, expresses her dismay about fat activism suggesting that this movement has gone too far. In an article published in the newspaper, she writes, 'No one should be bullied for their weight or food choices, but "fat pride" promotes dangerous weight levels' (Cernik, 2018, p. 1). She discusses a well-known UK comedian who, she claims, '… accused Cancer Research of bullying fat people, after the charity

launched a campaign to raise awareness about the link between cancer and obesity' (Cernik, 2018, p. 4). The writer contends that, although actions such as the move to ban the use of very underweight models from the catwalk are welcome, celebrating being fat is not (Cernik, 2018). Cernik appears to support a concept of passive fat acceptance but not fat activism or fat pride, concerned that celebrating one's own body will somehow promote obesity. It is unclear whether the writer is worried that those who are already fat will give up the fight to lose weight, or that those who are not fat will cease maintaining their weight and embark on a life of non-stop eating. It is worth remembering that the guiding principle of fat acceptance is celebrating one's own body no matter its size and, according to self-declared fat activist Kath Read, her view on fat activism involves working towards, '… obtaining the basic human right for fat people to live their lives in peace, dignity and with respect, without fear of vilification, ridicule or discrimination' (Read, 2018). Proselytising fatness appears to form no part of this agenda.

In a similar vein to Cernik, Nick Mitchell (2017), a fitness instructor, in an article for The Telegraph (UK), features a headless fat torso to illustrate obesity and criticises the notion that it is possible to be fit and fat. He writes, 'Subjectively, fat is rarely beautiful because we are hard-wired by evolution to want to pass on the best genes from the healthiest bodies' (Mitchell, 2017, para 7). In his view, it is not possible to be fat and beautiful and entreats fat individuals to, '… stop making excuses for obesity' (Mitchell, 2017, para 1). In terms of using a headless fat torso to denote fatness, Mayes and Kaldor (2016), writing for HuffPost Australia, criticise the media's common practice of using the 'headless fatty' photograph as dehumanising, arguing that, '… removing a person's head reduces their humanity and their citizenship. It makes them a mere body-object that can be discussed in the abstract, ridiculed or openly abused' (Mayes and Kaldor, 2016, para 9).

Further to this, Couch et al. (2015), in a qualitative study in Australia used in-depth interviews of 142 obese individuals' perceptions of, and responses to, news reporting on obesity. The results demonstrated that participants believed, ' … news reporting on obesity focused on personal responsibility and blame, and portrayed obese people as "freaks"' (Couch et al., 2015, p. 1). Furthermore, they perceived that they were portrayed as enemies of society unless succeeding at weight-loss (Couch

et al., 2015). This concept of 'otherness' is central to the understanding of how the process of community stigmatisation operates to exclude individuals. Thus, in the current anti-obesity discourse, the visual message of fat body parts encourages quick identification of the target group to be excluded (Thomas et al., 2010a, Thomas et al., 2008b).

Sarah Harry (2014), a founding member of Body Positive (Australia), and a larger woman herself, recalls her experience of being interviewed as a yoga instructor by SBS television, highlighting the common stereotypes that were reinforced by the producers of the program. She explains that assumptions were made about her having expert knowledge of fat acceptance, and the HAES concept, merely because she is a larger than average woman. Additionally, the notion that a large woman is always clumsy and a figure of fun was also reinforced, albeit surreptitiously, by editing the footage to highlight Harry overbalancing while practicing yoga. Harry explains that she became concerned after the interview when she observed the tag line for the show, promoted as '"Taboo Week", fitness and health regardless of body shape?' She expresses regret for participating in what she understood to be a program on body positivity that turned out to be very negative and personally shaming (Harry, 2014).

Jackie Wykes (2013), a Melbourne academic and a self-identified fat woman, also discusses her experience after appearing on an episode of SBS TV's program 'Insight' to take part in a panel discussion on, what she believed to be, a rational discussion on the reality of being both fit and fat (this relates to the program featured in study 1 in the current research). After agreeing to take part, Wykes reports that she and the other fat women on the panel were subjected to intrusive questioning about their private lives and habits, reinforcing the oft-touted stereotype that all fat individuals are greedy and lazy. She argues that this type of behaviour would never have been allowed had the topic featured a discussion on race, religious views or sexual orientation. However, the most difficult part of the whole experience, according to Wykes, was the realisation that she had allowed herself to believe in the promise of a true change in fat discourse where, in reality, and on the night, the discourse reverted to the usual somewhat hackneyed views about fat people, especially fat women (Wykes, 2013). This program exemplifies

the phenomenon of Foucault's spectacle and is identified in the form of the fat women on the panel being shamed for their lifestyle, thus, signaling, via the wide media coverage of SBS, that being fat is undesirable in a healthy Australian society.

According to Harriet Brown (2010) a writer for the New York Times, one of the most damning consequences of being fat is being judged by appearance rather than ability in the workplace. Brown discusses instances of prejudice relating to job interviews and employment, arguing that, far from being covert, hirers often state quite openly that if they could get away with it, they would never hire anyone who is obese (Brown, 2010b). Similarly, Bacon (2009), in an essay on thin privilege, relates the story of being on an interview panel where one of the candidates was criticised for being fat. In recalling this episode, she states, 'I was horrified, and what it reinforced for me was that had this candidate been up against a thinner woman similar in other aspects – or even with lesser qualifications - the thinner person would have gotten the job – just by virtue of what she weighed' (Bacon, 2009).

Kate Fridkis (2014), writing for HuffPost, also discusses common assumptions about size when she writes about her own experience of being thin and unfit. While she is praised for being thin, the author confesses that she eats mainly processed food and cannot even climb to the top of a flight of stairs at the local train station without becoming breathless. As a result, she questions the, '… casually ignorant logic of "if you are thin you must be healthy"' (Fridkis, 2014, para 21). Fridkis also bemoans the prejudice in our culture that has welded thinness to attractiveness, and the, '…. assumption that someone is "better" in practically every way by virtue of their slimness' (Fridkis, 2014). Other writers agree that the state of being thin is often unfairly endowed with positive attributes (Carels and Musher-Eizenman, 2010, Thomas et al., 2010a).

Several US researchers (Brown, 2013, Huizinga et al., 2009, Schwartz et al., 2003, Teachman and Brownell, 2001, Brownell et al., 2005) have examined health practitioners' responses to obese individuals in the clinical setting. Brownell et al. (2005), writing about the experiences that larger individuals may encounter with medical professionals, highlight many, seemingly unimportant, details such as the

lack of larger sizes of disposable gowns in doctors' surgeries, pointing out that these daily occurrences reinforce the underlying message to the obese consumer of being 'other' or different. The researchers argue that such everyday unthinking and casual shaming may result in the obese consumer believing that it is the obese individual's sole responsibility to be able to fit into mainstream hospital clothing, rather than the responsibility of the surgery to provide a range of sizes (Brownell et al., 2005).

As Abigail Saguy (2013) explains in her book, 'What's Wrong with FAT?' many fat people do not have a problem with obesity per se but with society's attitude towards them. As an example, she argues that in the presence of a person who is obese, many medical problems are laid at the foot of the obesity often without any supporting evidence. Saguy relates the story of an obese woman who was prescribed antihypertensive (blood pressure lowering) medication, solely on the basis of her size, without any investigation to ascertain the need for this or any consideration of contraindications (Saguy, 2013). The medical stigmatising of fat patients is discussed in more detail in the literature review.

This type of stereotyping and weight bias, especially in the medical field, and the distress this may cause to the individual, is recognised by clinicians and researchers. Concerned about increasing weight bias in the US, especially within the medical profession, Phelan et al. (2014) designed a study to discern the extent of weight bias in medical students. They used a web-based survey that included a validated measure of implicit association test and two measures of explicit bias: a feeling thermometer (participants indicated their feelings toward obese people by moving a slider along a thermometer) and the anti-fat attitudes test. A total of 4,732 medical students completed the survey as part of a larger study to determine the Cognitive Habits and Growth Evaluation Study (CHANGES), of students who graduated in US medical schools in 2010. The researchers report that 74% of students displayed either moderate or strong implicit bias, comparable to the magnitude of documented implicit anti-black bias held by healthcare providers and medical students. Sixty-seven percent of students displayed explicit weight bias. This finding, according to the authors, is more negative than bias against racial minorities, gays, lesbians, and poor people. The researchers suggest that

there may be less societal pressure to appear unbiased towards obese people compared to other social groups, stating, 'This relatively high level of explicit weight bias may result from low internal or external pressure to appear unbiased against obese people' (Phelan et al., 2014, p. 1206). It is unclear if these findings are echoed in Australia as no similar studies on this subject could be located.

Likewise, Brown (2010) argues that, 'Over the last few years, fat people have become scapegoats for all manner of cultural ills', including, she notes, climate change, as heavier people supposedly need more fuel (Brown, 2010b, para 4).

Conversely, and following concern from mainly feminist critiques about how bodies present in medical geography in the context of obesity, Evans (2006), explains that medical discourse has shifted. From viewing bodies as containers that could be healthy or unhealthy, the discussion now focuses on a more holistic definition of health where, '…understanding the complex relationships between biological, social and cultural factors in shaping people's embodied experiences of health, illness, and impairment', is critical (Evans, 2006, p.1). It is difficult, however, to rationalise this as general given the previously presented literature of Saguy (2013), Phelan et al. (2014) and Brown (2010) who find the opposite (Saguy, 2013, Phelan et al., 2014, Brown, 2010b).

With the advent of social media, and the instant, and constant, Internet streaming of news and views around the world, there is a plethora of information and images online, many of which are strongly image-focused. In relation to this, Dickens et al. (2011) argue that, '… obese adults face pervasive and repeated weight-based stigma' (Dickins et al., 2011, p.1), explaining how many obese individuals are now choosing to respond proactively to stigma by joining online fat acceptance communities such as the Fatosphere. In this online space, individuals support one another to move from the more typical reactive fat discourse involving weight to a proactive model that resists stigma and promotes self-acceptance. The bloggers who were interviewed reported feeling more empowered by being part of the Fatosphere (Dickins et al., 2011). However, it should be noted that many of the fat acceptance blogs initially found online for this thesis, are no longer active,

including Fatosphere. A few bloggers explain that they are tired of having to justify and acquit themselves repeatedly, but others just cease without explanation.

One fat activist blog that remained active until May 2018, is an Australian blog written by Kath Read (Read, 2018). This blog, like many fat activist websites and blogs, incorporates a feminist manifesto reflecting the evidence demonstrating that women are reportedly targeted because of their weight more often than men (Read, 2018). This is confirmed by other writers (Bell and McNaughton, 2007, Bergman, 2009, Chrisler, 2011, Fikkan and Rothblum, 2011). While Read is obviously committed to obtaining basic rights for fat people, she, nevertheless, closed her blog in May 2018, disclosing that she was tired of being used as a mouthpiece for other fat activists and bearing the brunt of all of the negative responses personally. She writes, 'Others push me out in front of them expecting me to do all the work and take all the heat, while they benefit from it all with none of the negativity' (Read, 2018). As Kathy Obear, a sociologist and change manager in the US explains, 'It is imperative that leaders and staff demonstrate the capacity and competence to create inclusive environments that support the success of the full breadth of members in their organisations and effectively meet the needs of the increasingly diverse populations they serve' (Obear, 2018, para 1).

One of the most prolific writers of fat studies in Australia, Jenny Lee, writes about fat frameworks and the current obesity discourse, in addition to sex, health, and society. Lee writes openly about her experiences of stigma, stereotyping and the challenges of living life as a fat person in Australia (Lee, 2012). She explains that accepting statistics and common assumptions, without question, about a topic such as fat people, and the difficulty in relinquishing long-held beliefs, even in the face of irrefutable evidence to the contrary, is common. The writer urges the public to consider that, 'Fat hatred is not confined to those who are actually fat. The self-loathing is a human rights issue; it is a reaction to anti-fat messages and weight-loss campaigns' (Lee, 2012, p.13). Thus, by urging weight reduction for obese individuals and encouraging the public to monitor personal weight to prevent obesity, the government's anti-obesity message risks being interpreted as appearance-driven, becoming a vehicle of self-hatred for all susceptible individuals, not just those who are fat.

In this section, the complexities that make understanding the complete entity of obesity so difficult today were explored. The subject of obesity is complicated and inter-related to many social structures, attitudes, and opinions, rendering it equal to eating disorders in the degree of difficulty in understanding and treatment. The inter-relationship between obesity and disordered eating will be examined later in the literature review.

2.4. About the current research

This thesis is designed to explore common social spaces where disordered eating and, what is often its precursor, fat stigma, can be found, and investigates the disordered behaviour occurring and being shared within these spaces. The impact that the Australian anti-obesity campaign may have in unintentionally encouraging the actions and behaviour of individuals inhabiting these spaces due to its singular focus on weight-loss, rather than health-gain, is examined. Inadvertent condoning of fat stigma, negative body image, pursuit of the thin-ideal, disordered eating and diagnosable eating disorders, are investigated as possible collateral damage of the Australian anti-obesity campaign.

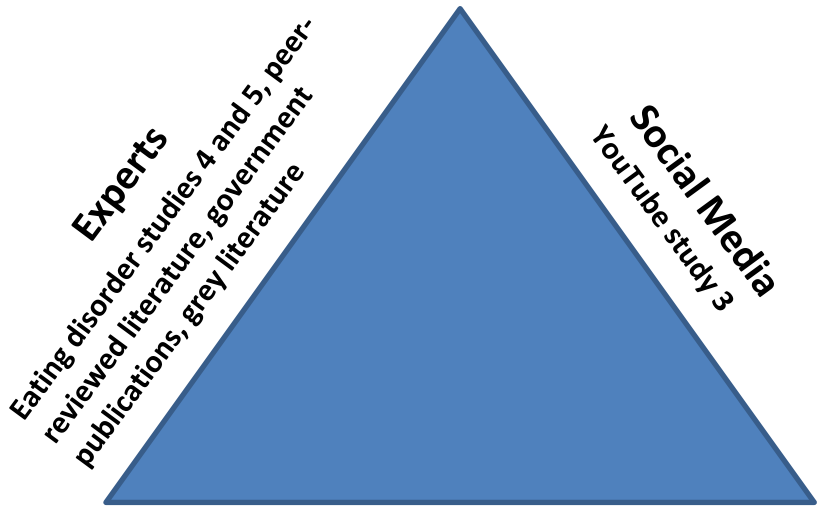
To accomplish this, in the absence of existing data, a triangulated approach was adopted using bricolage. Bricolage is a qualitative research approach that acknowledges the fact that nothing exists in isolation, and that every phenomenon is influenced, not only by its context in the world, and the factors impacting on it, but also by the individual characteristics of the researcher. This allows a greater depth of understanding by the piecing together of blocks of information, dissimilar in most aspects, to produce a tapestry of findings that allow a better understanding of the phenomenon.

Five studies were conducted that sought to examine spaces where the government's anti-obesity message may be contributing to fat stigma, negative body image, unhealthy dieting and disordered eating. The studies, each representing a unique viewpoint of the topic, were conducted using different data collection methods. This approach was used to elicit a more holistic and contextual picture of the issue than would be possible if relying on a single study method, thus providing a greater level of confidence when analysing the data. This

is particularly important as the research question is complex and formal data limited. Jick (1979) explains the benefits of triangulation thus; '... triangulation can capture a more complete, holistic, and contextual portrayal of the unit(s) under study' (Jick, 1979, p. 603).

Figure 3 illustrates the three data groups; online, which encompasses the Pro-Ana and fat stigma studies, the experts, which comprise the two studies drawn from the eating disorder field and social media which refers to the YouTube study. (Figure 3)

Figure 3 Triangulation of data sources



To provide a sound knowledge base on which to base the studies, a systematic literature review was conducted. This was considered critical if the studies were to avoid repetition of information already known and to capitalise on what was available at the time the studies commenced. Because of the contemporaneous nature of the research subject, it was necessary to repeat the literature search regularly during the life of the research.

The first study explored fat shaming observed in the comments section of the website of a popular Australian television program following the broadcasting of an episode that discussed whether it is possible to fat and healthy. The panel

featured all-female guests who considered themselves to be fat and defended their view that it is possible to be fat and fit. The comments left on the program's website after the show were analysed by the tone of the comment and the sex of the commenter, to explore the types of comments in terms of negativity, personal negativity and whether the severity of the comment related to the sex of the commenter.

The second study examined the promotion of eating disorders via Pro-Ana websites to identify the sites' main features and how they operate to encourage and empower their visitors to adopt the Pro-Ana lifestyle. Styles of communication and the promotion of specific diets for the purposes of restriction were of particular note. In addition, the environment of exclusivity and the monitoring of website visitors to ensure the authenticity of potential members were explored for their role in ensuring that all conversations and activities support 'Pro-Ana' as a valid lifestyle. The view held by some writers that opposition to these sites disempowers the members' personal agency is also discussed, and, because the members of eating disorder sites are predominantly female, the roles that feminism and female agency play are also explored.

The importance of the social media platform YouTube is investigated in the third study for its links to the promotion of restrictive eating practices, often disguised as healthy eating. In particular, the co-option of veganism is examined for its natural restriction of whole food groups. While there is no doubt that veganism is a legitimate diet practised by many worldwide, often for religious and ethical reasons, it also offers an ideal way to hide disordered eating. Although there are other legitimate diets that could be used for this purpose, the vegan diet, unlike, for instance, the paleo, ketogenic or vegetarian diets, offers a unique means of doing so because of its ability to heavily restrict intake by removing several food groups without arousing suspicion. In contrast, a diet that demonstrates more obvious restriction, such as consuming only fruit or only green vegetables, will usually arouse concern at some stage.

The fourth study gathered the views of a group of professionals in 2015, all working in the Australian eating disorder field either as academics, clinicians or both, on

the unintended effects of the anti-obesity campaign on eating disorders. The views of the participants were sought to determine whether, in their opinion, the current Australian anti-obesity campaign, has had a negative impact on Body Dysmorphic Disorder (BDD was included for its links to negative body image) and eating disorders. In addition, the participants' views on the HAES approach that shifts the emphasis from weight to health were also sought.

As the field of experts in this particular subject is not large in Australia, the fifth study sought to involve the original group of participants from 2015. This group was contacted three years later (2018), with the aim of collecting the participants' views on more recent issues such as fat stigma and the function of social media as a gateway to disordered eating, including the practice of using specific eating practices, especially veganism, to hide an eating disorder.

A narrative line was followed that could potentially explain how women, in particular, could journey from fat stigma to an eating disorder. Furthermore, the steps along this journey, such as fat stigma, negative body image, distress and disordered eating, are explored to illustrate how the Australian anti-obesity campaign, with its singular focus on weight-loss, is inadvertently supporting each step.

Because of the lack of peer-reviewed research literature on the subjects of this thesis, the evidence used will comprise formal studies, where these are available, accompanied by a large amount of grey literature. Grey literature provides unique information many sources, including government documents and personal accounts, thus providing a more holistic view than could be obtained by relying on formal studies only. In other words, the formal studies provided the bones of the issue and its concepts, but the less formal information provided the richness and depth of understanding about the complex and complicated subject of eating disorders, that the formal studies could not.

In summary, this research seeks to demonstrate the different ways by which the Australian anti-obesity campaign with its promotion of weight-loss, might be inadvertently promoting fat stigma and eating disorders. Because weight-loss generally infers dieting, a known and potent trigger for disordered eating and

diagnosable eating disorders, the Australian anti-obesity campaign may be deemed, at least partially, blameworthy for any increase in these disorders in Australia over the last ten or so years. If this is the case then it may be argued that the Australian government should provide funding equal to the funds provided for the anti-obesity campaign, to focus on the amelioration of disordered eating in the Australian community.

Obesity and eating disorders, with their individual complexities, are increasingly viewed as having similarities in underlying pathology (National Eating Disorders Collaboration, 2011, Star, 2012a, Hill, 2007). Indeed, the National Eating Disorders Collaboration (2012, p.4), suggests that they are, 'two sides of the same coin' (National Eating Disorders Collaboration, 2012a).

In her article on the ethical, moral and political implications of using disgust in public health campaigns, published in 2014, Deborah Lupton, referring specifically to the Australian anti-obesity campaign, wrote, 'The developers of public health campaigns have often attempted to elicit disgust to persuade members of their target audiences to change their behaviour' (Lupton, 2014b, p.1). Like others of its kind internationally, the Australian campaign uses shame and blame to pressure obese individuals to lose weight. Additionally the cost to the public is emphasised by referring to the economic burden of a preventable disease such as obesity. As a consequence, obese individuals are encouraged to not only feel ashamed of their bodies, and their inability to lose weight, but also ashamed for the economic burden for which they are charged. Moreover, the campaign may be regarded as empowering members of the non-obese public to blame obese individuals for their selfishness, lack of willpower and the drain on public resources. The negative effect of this public blaming and shaming is demonstrated in a study by Couch (2015), who explored obese adults' perceptions of news reporting on obesity. In summarising the results, the author reports that participants believed, '… the presentation of obesity within news reports had led to an increase in the amount of negative commentary that was directed at them' (Couch et al., 2015, p.6). In addition, 'Participants described how the news presentation of obesity as an issue that could be controlled through healthy eating and increased exercise had

created a “culture of stigma” where it was acceptable to publicly abuse and ridicule people because of their weight’ (Couch et al., 2015, p.6).

Media sources, particularly news sources, as highlighted by Couch (2015), often choose to overtly stigmatise obesity by using negative, stereotypical text and images suggesting that obese individuals are lazy and unkempt. As Puhl et al. (2013) found in a study of the video content analysis of news reporting on obesity, ‘… overweight/obese individuals were significantly more likely than were non-overweight individuals to be portrayed as headless, with an unflattering emphasis on isolated body parts, from an unflattering rear view of their excess weight, eating unhealthy foods, engaging in sedentary behavior, and dressed in inappropriately fitting clothing’ (Puhl et al., 2013, p.686). This kind of stigmatisation is clear and unambiguous. However, casual, or covert fat stigma is often more difficult for a non-fat person to identify but can be just as damaging, causing shame and distress to obese individuals who are exposed to it. There are many examples of casual fat stigma; the provision of narrow seating in waiting rooms, the lack of large patient gowns in medical facilities, side glances by members of the public to the obese individual’s choice of food in restaurants and supermarkets (Lewis et al., 2011, p.1353). Although it seems unlikely that fat stigma was the original intention of the anti-obesity policy, it appears that the adopted model of shaming and blaming has, nevertheless, resulted in obesity stigma and paved the way for disordered eating.

Each subsequent chapter in this thesis will commence with a short description of its content and aims and conclude with a short summary of the issues covered.

Chapter 3: Methodology and methods

Introduction

In this chapter, the theoretical basis of the research and the assumptions and rationale which underpin the selected theoretical frameworks are explained, including the choice of theories and why these were selected. Details of the methods of the individual studies can be found at the beginning of each individual study chapter.

3.1. Methodology

Research design

Because there are no comprehensive, centrally-collected data about either disordered eating or diagnosed eating disorders in Australia, it may be argued by some that these conditions are uncommon, or not serious enough to warrant concern. Therefore, suggestions that the Australian anti-obesity campaign may be encouraging negative body image, dieting and disordered eating, may be refuted due to lack of evidence. This risk may also be dismissed as negligible compared to the damage caused by obesity (Fast Track to Health, 2019). However, many health professionals and academics are expressing concern that the campaign is having a negative effect on susceptible, individuals and groups for some time, although this is proving difficult to verify (Arnold, 2013, Couch et al., 2017, Pause, 2017, Catling and Malson, 2012, Armstrong, 2014).

The main aim of this research was to investigate spaces in Australia where activities that may be worsened by the campaign, such as fat stigma, unhealthy dieting, and disordered eating, occur and often thrive. Prior to defining the research questions, a systematic review of the literature was conducted. This aimed to establish a current knowledge base about the complex fields of eating disorders, obesity and body image, and how they interlink with, and influence, one another. It was important to ensure that the current research, given its complexity, did not repeat previous research but remained focused on the primary aim of the work; to investigate possible negative consequences of the Australian anti-obesity campaign on eating disorders.

Because of the nature of the research question, and as no data exist on this subject, an eclectic approach was adopted. This approach embraces the concept that different types of information and knowledge about a subject may be gathered by studying it from different dimensions. In this case, unhealthy eating behaviours are investigated using three different locations in Australian society, namely, the Internet, social media and the practical experience of experts in the field of eating disorders. The five resulting studies explored fat stigma online as the often-precursor to distress and dieting, Pro-Ana websites to analyse content with regard to female agency and the culture of the Pro-Ana movement, YouTube social media platform for its role in hiding and sharing eating restriction advice using veganism, and the views and experiences of experts in the eating disorder field. These data were triangulated to provide a comprehensive set of results to inform the overall research. Bricolage was used to weave together the pieces of information gained from the individual studies to make meaning of the individual results and answer the overall research question.

Systematic literature review

The value of utilising a systematic approach to inform evidence in the health care field has been discussed by Grant and Booth (2009) among others. In their article analysing review types and associated methodologies, the authors emphasise how important it is to, 'Map out and categorize existing literature from which to commission further reviews and/or primary research by identifying gaps in research literature' (Grant and Booth, 2009, p.94). This is particularly important for the current work which, although commencing from a low base of knowledge, has the potential to inform future investigations. In their systematic review about how scholars approach the circular economy, Merli et al. (2017) point out that the other major advantage of using a systematic approach is that it aims to provide an, '… exhaustive analysis of the phenomenon with rigorous and reproducible research criteria …' (Merli et al., 2018, p.703). It is suggested that the production of a systematic literature review that engages with the current research issues, with all of their complexities, will contribute to building a knowledge-base. The need to determine the current knowledge base in a systematic manner was critically important to the current research given the sheer breadth of topics and issues that

are involved. If the literature review had not been conducted in a systematic manner, the risk of lack of discovery of important and relevant work would have been high, particularly as a great deal of the relevant work was found in the grey literature.

Eclectic research

According to Armstrong (1974), unlike intensive research that aims to demonstrate the reliability of findings by the collection of measurable and observable data to answer questions that are specific, eclectic research seeks to demonstrate construct validity and is especially suitable, '... for situations where uncertainty is high and measurement difficult' (Armstrong, 1974, p. 68). By ensuring that the instruments used to test the variables address the research question, in the absence of data reliability and reproducibility, a level of confidence in the findings is conferred (Armstrong, 1974). At present, this approach is mainly used in the fields of social science, psychology and education, however, several researchers believe that eclectic research is undervalued and underutilised and holds value for all types of research (Westen and Rosenthal, 2003, Armstrong, 1985, Larsen, 1999).

It should, however, be noted that the purpose of the eclectic approach is not solely for cross-validation of data. Capturing multi-dimensional views of the same phenomenon remains the primary reason for the selection of the eclectic approach in this research.

Nevertheless, there are shortcomings with the adoption of the eclectic approach for this research, particularly the decision about what to include and why it may assist in answering the research questions. None of the issues to be addressed have been studied specifically before so the decision on what to include, to a large extent, relied not only on what information is available but also on the researcher's own experience and expertise in online content and social media. Therefore, the researcher's knowledge of the issues, and where to locate the information, was paramount in the decision-making process. This is both a weakness and a strength of the research, as, although the decisions about data collection were informed

subjectively, they are data that may not have been otherwise located. It should be noted that the results of each study, taken together or considered separately, are not intended to provide conclusiveness about the many issues inherent in the broad topic of the research, but to draw attention to the subject, demonstrate the existence of these spaces and locations, and encourage further research.

Most of the data gathered were observational and, therefore, limited by what was chosen to be sampled. In addition, any data obtained using Internet search engines are subject to that search engine's algorithmic determination of what results are displayed. Moreover, the results are, to an extent, tailored to the previous search history of the user, aimed at providing the most relevant information for the individual. This is a potential weakness as relevant data may never be displayed to the researcher. This issue was addressed, to some extent, by the researcher repeating data searches on different devices, for example, home, university computer, work, and friends' computers, various iPhones and laptops, and using different search engines, such as Google, Bing, Safari and Yahoo. The previous web search history and embedded data were deleted prior to conducting the data search on any device. Although data of this nature would not be considered of high enough quality for quantitative research, for instance, clinical trials, it is an appropriate and effective approach for obtaining observing behaviours.

The decision to adopt a mixed methods approach was informed by the nature of the investigation and the lack of prior data. The spaces chosen to study may be considered complex phenomena occurring in natural settings, best investigated using both quantitative and qualitative methods. As the subjects of three of the five studies operate in a naturalistic environment, the capture of only quantitative data would not provide the depth of information that qualitative data is able to capture. As Pope and Mays (1995) affirm, qualitative study method allows exploration of, '... the parts other methods cannot reach' (Pope and Mays, 1995, p. 42).

In addition to the ability to provide more and nuanced data, the use of multiple types of measurement may uncover unique subtle variances that a single method

fails to detect; in particular, qualitative methods may elicit data that would otherwise remain hidden. Thus, the value of triangulating data from different sources to obtain a comprehensive view of the problem, rests, as Jick argues, '... on the premise that the weaknesses in every single method will be compensated by the counterbalancing strengths of another' (Jick, 1979, p. 604). Although this is reflected in the studies conducted for the current research, it could be argued that in two of the studies (the experts' views and follow-up study) there is a lack of statistical power due to the small number of participants. Although this is a valid point, the information gathered from the experts in the field is unique and not otherwise readily accessible and, perhaps, the small number of respondents in these studies is compensated, to an extent, by the larger numbers of observable data in other studies. While each study is completely different in target population, design and aims, they all provide data, from dissimilar standpoints, to inform an integrated result, rather than a collection of loosely-connected studies.

Although valuable for demonstrating the size of the problem and adding power to research findings, one major disadvantage of quantitative data is that it is unable to explain social experience. It may describe what is happening, and the size of the phenomena, but it cannot interpret why it is happening. As such, it cannot account for information based on human beliefs or emotions. In addition, a quantitative approach may preempt the discovery of valuable data by its necessary reductive method in the collection and subsequent handling of data. In the current research, because of its contextual matter and the variance of situations and responses sought, quantitative data collection is less useful without the qualitative information that is critical to understanding this work. However, the two approaches may be complementary and each may work to describe aspects of the research of which the other is incapable; as Sechrest and Sidani (1995) state, '... good science is characterised by methodological pluralism' (Sechrest and Sidani, 1995).

One of the most important aspects of a qualitative approach is articulated by Atieno (2009) who observes that, '... qualitative methodology attempts to study the whole situation in order to evaluate the complexity and ensure that their conclusion takes account of both unique and general factors' (Atieno, 2009, p. 13).

In the context of the current research, it was important, while making meaning of the results of the individual studies, not to lose sight of the overall research aim and how these results and analyses inform and shape the context for answering the broader research questions.

The value of qualitative methodology, particularly for the qualitative studies conducted for the current research, is explained well by Denzin and Lincoln (2000) as, '… an emphasis on the qualities of entities and on processes and meaning that are not experimentally examined or measured in terms of quantity, amount, intensity and frequency' (Denzin and Lincoln, 2000, p. 8). In this way, not only can the spaces where unhealthy practices thrive be described, but conversations can be captured and the overall culture and type of discourse evaluated. This information is critical to understanding the level of risk that disordered eating practices pose to the health of women, and whether the Australian anti-obesity campaign, with its precise focus on weight-loss, is unknowingly contributing to this risk.

Nonetheless, a major drawback to an eclectic approach that relies on the triangulation of data, such as the current research, is that it can never be certain that data have truly converged, that is, the results reflect little difference across the studies such that any further studies would not significantly change the outcome. Furthermore, because data interpretation relies largely on the researcher, it is subjective. To try to minimise this as much as practicable, the author was careful to interpret the data based on whatever previous research was available and by constant reference to the goal of the overall research. However, due to the nature of the issues researched, and the lack of existing data, a degree of subjectivity was necessary when attempting to triangulate the different datasets. Ignoring what may be important information for future research in order to avoid any subjective interpretation, would have been unhelpful in this context.

Bricolage

Wibberley (2017) explains bricolage as a different perspective; one that, '… attempts to present research findings in a way that challenges its audience to see

its subject matter in an unexpected, irregular or offbeat way (Wibberley, 2017, p. 1). The use of materials that are to hand, rather than validated tools and logical steps, can uncover information and patterns otherwise unknowable to the researcher. Also acknowledged is the critical part that the researcher plays in all research, because, no matter how many validated processes are used, the personal lens of the researcher acts as a filter to obstruct complete understanding, just as it does in real life. As Kincheloe and McLaren (2011) put it, '... bricolage highlights the relationship between a researcher's ways of seeing and the social location of his or her personal history' (Kincheloe and McLaren, 2011, p. 316), and, 'In its embrace of complexity, the bricolage constructs a far more active role for humans in shaping reality ...' (Kincheloe and McLaren, 2011, p. 317).

Wibberley (2017) further explains, '... bricolage allows for bite-size chunks of research to be carried out; such "data chunks" may well have an individual meaning, but when pieced together result in the creation of a more meaningful whole. This "whole" should be greater than the sum of its parts in the way that it is pieced together' (Wibberley, 2017, p. 2).

This approach may be criticised for its lack of adherence to formal rules and guidelines, for its complexity, and for its lack of reproducibility. However, this does not negate the innovative and creative ways this approach offers, in making meaning of world phenomena.

Regardless of the criticisms of the approach, and the political arguments about qualitative method in general, bricolage offered a way for the writer to investigate the complex issue of the Australian anti-obesity campaign, and disordered eating, in a useful and creative way.

Theoretical frameworks

Although initially this research was not restricted to women, it became evident early in the systematic literature review and data collection that the majority of people affected by weight-stigma and unhealthy eating practices are women. Therefore, this research largely describes women's behaviour when confronted with weight stigma, and how this drives many to engage in unhealthy eating

practices. The ways in which women may engage with, and support one another, in restrictive eating behaviour, are also described. To explain these phenomena, three interlocking theories form its underpinnings: feminist theory, social theory and a new stigma theory that helps to explain its role as a weapon in the current environment

New Stigma Theory

The use of shame and stigma to change behavior with respect to the Australian anti-obesity campaign is well documented (Lupton, 2014b, Pause, 2017, Hartlev, 2017, Arnold, 2013, Couch et al., 2017). Because this is considered to be a deliberate social marketing strategy, Goffman's stigma theory fails to explain this use of stigma, by governments and agencies, as an act of power. Goffman (1963) argued that stigmatised individuals should not rebel against their status but instead learn to manage their spoiled identity (Goffman, 1963). There is passivity to Goffman's work that encourages acceptance of societal injustice to those stigmatised by circumstance. As mentioned earlier in this thesis, Goffman did not base his stigma work on ethnography, but on literary texts, so it could be argued that the validity of many of his teachings is challengeable. Therefore, for this research, the recent work on stigma by Tyler (2018), Tyler and Slater (2018) and Scambler (2018) was used to interpret and explain how stigma may be understood as a weapon, rather than as a passive state accrued by personal condition (Scambler, 2018, Tyler, 2018, Tyler and Slater, 2018). As Scambler (2018) explains, stigma in its current form has been redefined as deviance, rather than societal non-conformance. As such, morality is questioned and the individual's shame becomes blame due to non-compliance with accepted community standards. In other words, stigma has been 'weaponised' (Scambler, 2018). It is this 'weaponisation' of stigma that assists in understanding how groups become stigmatised as part of the anti-obesity strategy in Australia. While obese people have always existed, and have frequently been shamed and embarrassed for their fatness, the current climate of distaste and disgust for those who are obese has increased in most Western countries including Australia (Lupton, 2014b). The 'weaponisation' theory of stigma acknowledges that stigma may be the result of a deliberate act. It can, therefore, be used as a tool with which to threaten and ultimately control the behaviour of social groups and

populations. Using this theory of stigma offers a way to understand how the anti-obesity campaign works to disempower and control, arguably for health reasons, Australian citizens, particularly women.

Additionally, in seeking to explain how women journey from fatness to dieting, and often to disordered eating, the stigma work of Tyler (2018), Tyler and Slater (2018) and Scambler (2018) is more helpful that Goffman.

Social theory: agency or structure?

As this research is essentially a women's narrative, the influence of gendered assumptions, and a woman's right to personal agency was also explored within the context of social control. Personal agency, in the sense of the freedom, to make one's own decisions, features as a theme that may be found throughout this narrative. Interpreting the issues that affect and influence the expression of this relies on an understanding of how societies are formed, and the identification of theories that explain the process.

There have been many social theorists who have attempted to explain why individuals within societies behave the way they do, how structure is created and how society is shaped. Talcott Parsons (1905-1979), a social theorist active in the early to mid-20th Century is regarded, along with predecessors Max Weber and Emile Durkheim, to have laid the foundation for what was to become the modern functionalist perspective. Parsons furthered his predecessors' work by developing Action Theory as a tool with which to study, and attempt to categorise, social actions and interactions and how these inform the structure of society. Parsons' theory contends that people, by their voluntary actions, informed by motives and values, give shape to the structure of society by subjective connotation rather than an imposed structure, and is, therefore, '… a system of interconnected parts that work together in harmony to maintain a state of balance and social equilibrium for the whole' (Bell, 1979).

Thus, individuals conform to the behaviours and norms inherent in the role that they fulfil in the community. These norms and expectations are assumed because of shared beliefs that are a result of selected actions that become subsumed into

accepted units of action. Society remains stable if this model is adhered to, that is, if individuals perform the roles ascribed to them (Talcott Parsons, 1951).

Talcott Parsons aspired to further the work of his predecessors by developing a set of categories with which to interpret the social world, resulting in an attempt to develop an overall system, including interactive sub-systems. Parsons argued that, '… all social relations will fit into the following categories, which can be used as a framework for comparing different societies …' (Bell, 1979). These were; norms or standards, statuses (achieved or ascribed) and roles and emotions (neutral or affective).

As attractive as this model of structural functionalism is, it does not, however, appear to consider the conduct of organisations, nor how their conduct may differ from societal groups, or why institutions develop and how they operate as a means of control. In this sense, the work of French philosopher and social theorist, Michel Foucault, in seeking to explain the use of government to shape the populace to fulfil its own needs, which he termed governmentality, as part of his social theory on the concept of bio power, is more cogent to the current research. The use of spectacle, explored more fully earlier in the thesis, to demonstrate what is desirable in a society fits well with the use of stigma as a tool to compel change (Foucault, 1975). Understanding that using stigma in this way often drives self-surveillance to conform to social norms, sheds light on why many individuals considered overweight or obese (and often those who are neither) are driven to often desperate measures to lose weight and conform to the current thin-ideal.

The self-discipline that this requires can become a lifestyle that women, in particular, adopt, often finding fulfilment in food restriction and a lightness of body that frequently ushers in disordered eating and ill-health. Couch (2017) expounds on this process in her study investigating the LiveLighter Campaign which is detailed in Chapter 4.2 (Couch et al., 2017).

Feminist theory and eating disorders

There is no single explanation that describes the historical breadth and meaning of feminism but Carlson and Ray (2018) explain it thus, 'Feminist theory explores

both inequality in gender relations and the constitution of gender' (Carlson and Ray, 2018, para 1). Most commonly, feminist theory is understood to refer to the second wave feminists of the 60s and 70s. As the writers explain, 'Feminist theories first began as an attempt to explain women's oppression globally, following a grand theoretical approach akin to Marxism ….' (Carlson and Ray, 2018, para 1). However, this has evolved into examining gendered practices and socially constructed gendered assumptions. It is this aspect of feminist theory that underlines much of the behaviour in relation to body image, gendered identity, and disordered eating.

In accepting Foucault's social theory as one of the theories underpinning this research, the subject of personal agency cannot be avoided. If individuals are indeed compelled to change behaviour in response to an external force, how does this fit with the notion of self-determination? Feminist writers, who have written about eating disorders, such as Bruch (1973) and Orbach, in her earlier work (1978), did not address self-determination or the pressure of outside societal forces, although Orbach did, in part, acknowledge external factors, for instance, the pressure to conform to the accepted view of a woman living in a patriarchal society (Bruch, 1973, Orbach, 1978). These writers, at the time, believed that the problem was located within the individual, or within the individual's family circle. Bruch argued that eating disorders begin early in life with a confused relationship with food, mainly was due to a vulnerable child living in a family that valued high achievement and perfection (Bruch, 1973).

Not until her later work in 1986, with a new edition of her book, 'Fat is a Feminist Issue' (Orbach, 2006), did Orbach write about the influence of societal expectations on the individual. This is explained in more detail in Chapter 4.2. However, in her book, 'Hunger Strike: The Anorectic's struggle as a Metaphor for Our Age' (1986), Orbach acknowledges Anorexia as a rebellion against what is expected of a female in Western society (Orbach, 1986).

It is this rebellion that is echoed in the later work of Malson and Ussher (1997) who write that anorexia is a rebellion against sociocultural surveillance and the, '… disciplining and individualising gaze' (Malson and Ussher, 1997, p. 9). In

particular, because the writers use Foucauldian theory to make meaning of this phenomenon, it provides, in the current era of governmentality, and assisted by mass and social media, a new understanding of feminism and eating disorders that is relevant to the current research about how women react when faced with societal pressure to become thin. In her book, 'The Thin Woman: Feminism, Post-Structuralism and the Social Psychology of Anorexia Nervosa' (1997), Malson describes a process of pathologising anorexia as a women's disease. It is, thus, socially constructed and must, therefore, be conceptualised, not as, '… an individual pathology but within a framework that acknowledges the complexities of its socio-cultural locations …' (Malson, 1997, p. 6). Furthermore, in an article examining the discursive constructions of the anorexic body from the perspective of death, Malson and Ussher (1997) state that, '… anorexia can be viewed as a metaphor for, and a manifestation of, a multiplicity of contemporary socio-cultural concerns, for example, about gender politics, individual control and consumption' (Malson and Ussher, 1997, p. 45). This is a clear departure from the earlier work of feminist writing and eating disorders, whereby, the problem was deemed to lie within the individual and her family and although others, such as Bordo (1989) and Orbach (2006) also expanded their examination of Anorexia to discuss the broader socio-cultural influences, for instance, Bordo (1989) also uses Foucault to explain how women self-regulate their bodies by using the body as a practical locus of social control (Bordo, 1989). Malson and Ussher's work is more forensically conducted in its exploration of detail, and its focus on discursive practices around Anorexia. This work assists in understanding how female bodies become subservient to social pressure and, although written prior to the advent and influence of social media, it still resonates today. In addition, their work focuses more precisely on the abstract to ascribe meaning, thus, demonstrating the many and unique ways that Anorexia may be interpreted contemporaneously. Furthering this understanding, and writing ten years later, Malson and Burns (2009) express their view on how the contemporary feminist view has evolved to focus on how discursive practices shape and constitute eating disorders, '… within and by a plethora of culturally constituted discourses, values, "ideals" and concerns' (Malson and Burns, 2009, P.2).

Thus, for currency and relevance, the theories of Malson and Burns (2009), Malson and Ussher (1997), Malson (1997), Bordo (1989) and the later work of Orbach (2006) are more helpful in understanding the factors, and influences, that trigger reactions to stigma that may result in unhealthy dieting, and the emergence of disordered eating in the current climate of pursuance of the thin-ideal.

Conclusion

This chapter has sought to explain how the methodology chosen assisted in the collection of relevant data, and why the approach was used. Theories chosen that underpin this research, facilitate interpretation and explanation of the data, and help in understanding the larger picture, were explored and discussed.

Because this research consists of separate and disparate studies, it is important to investigate theories that help in connecting these to form a cohesive and integrated whole as failure to do so may result in a disjointed set of studies, rather than unified research. This consolidation required subjective selection, albeit informed, of locations, participants, type of data and methodological approach, combined with continued reference to the overall aims of the research, which were to investigate whether the Australian anti-obesity campaign may be unintentionally promoting the thin-ideal, how this might be occurring, and the possible ramifications of this influence.

On a background of little existing research, and none that could be located that could provide a starting point, these subjective choices may prove unhelpful or non-viable for future research. To guard against this, the individual studies and research designs were crafted to form part of a narrative that would make sense of the data and information in an integrated way. The original plan for the overall research acknowledged that, because of the nature of the studies and the necessity of studying quite different locations and populations, a line of narrative was necessary. This informed the choice of methodology so that the studies did not become isolated and meaningless outside of their immediate location but contributed to a much broader understanding of the issues.

3.2. Methods

A brief outline of the methods adopted for each element of the research. These are described in more detail in the systematic review of the literature chapter and in the individual research chapters.

1. **Systematic literature review**

   Formal search strategy conducted and repeated regularly.

2. **Fat stigma on show**

   Comments were captured from a SBS website and analysed.

3. **Pro-Ana websites: content analysis**

   Pro-Ana blogs and Internet websites were visited to gather information relating to Pro-Ana content for subsequent analysis.

4. **The influence of YouTube on eating and appearance-mediated behaviour**

   An audit was conducted on the YouTube platform to determine the number of videos published by women that could be identified as promoting veganism as a way to lose weight.

5. **The views of eating disorder experts on the effect of the Australian anti-obesity campaign on ED and BDD**

   A qualitative study using semi-structured questions was designed to explore the opinions of those working in the field of eating disorders on whether the Australian anti-obesity campaign has caused an increase in BDD or eating disorders.

6. **Study five: The views of eating disorder experts on weight-loss inspiration, social media, and the use of specific diets to hide disordered eating.**

A qualitative study was for the 12 participants from the first study. The questions and consent tick box formed part of the email which was sent to the 12 participants from the first study (See Appendix 4).

This chapter sought to explain the methodological approaches chosen to interpret and understand the results in light of the overall research aims. The individual methods of each study were also briefly presented.

Chapter 4: Systematic literature review

For this particular research, it is important to describe the nature of evidence and to explain why this approach was taken. Because the topics studied have very little existing research on which to base the current work, this literature review consists of academic literature (peer-reviewed) and grey literature (non-peer-reviewed). When collating data and information on a topic, academic searching was undertaken first. If this yielded information that lacked the contemporaneousness required to fully explore the topic, other literature was searched that either added to the academic studies in terms of bridging the gap between formal study and the everyday world, or, made the point more clearly than the academic literature.

It was considered essential by the writer to include grey literature for its often-nuanced information and data. For example, websites, blogs, government documents, and media articles, often provide different points of view and more up to date information than it is possible to obtain from journal articles and similar academic sources. Because of the contemporary nature of the subjects studied, it was necessary to continue to search and monitor new conversations to maintain immediacy throughout the life of the research. In all cases, however, whatever academic literature could be located was used if relevant.

4.1. Method

The aim of the literature review was to gather as much information as possible on a wide range of issues that feed into the main topic of anti-obesity campaigns and possible consequences for eating disorders. As a result, in order to ensure that no relevant literature of any type was overlooked, inclusion and exclusion criteria were necessarily broader than is usual for a systematic literature review.

Because of the lack of formal literature on the current issues, a substantial amount of grey literature was utilised. When searching a subject, formal literature was searched first followed by grey literature.

Due to the nature of the research, the review of the literature was iterative and continued to inform the work to completion.

The research objectives:

1. Contribute to the knowledge base pertaining to the anti-obesity campaign and eating disorders and the various interlinking issues, such as body image, stigma and disordered eating in order to demonstrate how these can work together to trigger disordered eating.

2. Discover how the dynamics of these spaces enable eating disorders to grow and thrive in order to increase understanding about their importance in sharing information.

3. Explain how the Australian anti-obesity campaign might be inadvertently endorsing these restrictive eating practices, and encouraging disordered eating in order to highlight the inherent danger in pursuing a campaign to reduce obesity that focusses mainly on weight-loss.

4. Identify the potential consequences in order to signal the need for policy change relating to reducing obesity.

Inclusion criteria:

Due to the necessary lack of specificity of the subjects under research

1. Material in any format later than 2000 if the work was a journal article or periodical. No historical cut-off date was applied to books.

2. English language or translated.

Exclusion criteria:

1. Because of the need to include historical texts, no exclusion date was determined.

2. Scientific literature that focused only on the biochemistry and/or biological aspects of obesity and/or eating disorders.

The search was current as at October 2019.

The following electronic databases were searched:

Research literature: LaTrobe University Library databases: CINAHL, Cochrane Library, EMBASE (Ovid), Informit Health, MEDLINE, PsycINFO (Ovid), Scopus, Web of Science. Google Scholar. Google,

Grey literature: Google, Trove, Web of Science, WorldCat and Australian and state government websites and government-funded organisational websites.

Search terms: Stigma; and obesity, eating disorders, fatness, feminism

Ethics; and obesity policy and Australia, ethics and obesity

Obesity; and Australia, policy, health, statistics, eating disorders

Eating disorders; and women, men, gay men, children, feminism, feminist theory, policy, statistics, prevention, interventions, media, social media, Pro-Ana

Feminist theory; and eating disorders, disordered eating, obesity, fatness, Anorexia

Social media; and eating disorders; and, Facebook, Instagram, Twitter, YouTube

Veganism; and eating disorders, disordered eating, Anorexia, YouTube

YouTube; and veganism, 'thinspo', 'thinspiration', weight-loss, Anorexia, disordered eating

The search was current as at October 2019. Because of the contemporaneous nature of the research, the search was repeated every six months, or as required. For instance, if new information was located, the search was repeated to ensure that no new literature had superseded that already collected. This could be viewed as a limitation as it strays from the more formal systematic review where the search is conducted solely at the beginning of the review. However, it was considered vital to continue to recapture the latest relevant information given the changing and evolving understanding of one or more of the issues covered in the current research. Because of this, a consort flowchart could not be produced.

The literature

The specific focus of this section will be on studies, and other literature, that examine or discuss eating disorders in the context of populations that are vulnerable to any negative effect of anti-obesity campaigns in Australia and overseas. To obtain as much information as possible on this theme, especially about the lived experience of individuals, autobiographies of those suffering from an eating disorder will also be included. Please note that Anorexia Nervosa is used interchangeably with Anorexia, and Bulimia Nervosa is used interchangeably with Bulimia

4.2. Obesity shame and stigma

Obesity stigma

Possibly the best described unintended consequence of the anti-obesity campaign is the stigma generated by focusing solely on weight-loss. In this section, the stigma associated with being obese, the ethics of using shame to change health behaviour and the gendered nature of obesity stigma will be explored.

Over the last 10 years, the increased focus on chronic disease prevention in Australia, and internationally, has raised public awareness about obesity by the use of public health messages focused on losing weight. Unfortunately, this appears to have supported weight bias, discrimination, and prejudice resulting in obesity-related stigma.

To maximise the effect of government public messaging about losing weight, the use of metaphor is often employed., in particular, the practice of describing the anti-obesity campaign as the 'war on obesity' (Holland et al., 2011). However, this has been criticised by Barry et al. (2009), who argue that this lends undue power to the message by inferring that obesity is an enemy to be conquered, rather than a health condition to be managed (Barry et al., 2009). The use of metaphor in illness is not a new phenomenon and was used successfully in the early AIDS campaigns of the 1970s (Sontag, 1978), particularly the use of the mythical figure The Grim Reaper as the personification of death (Padula, 2008).

Barry et al. (2009) suggest that the current anti-obesity campaign appropriates many of the tactics of the early AIDS discourse, particularly the use of metaphor to apportion blame, suggest contagion and create 'otherness' (Barry et al., 2009). Moreover, Carels et al. (2013), believe that the common obesity metaphor, such as the 'war on obesity', 'obesity crisis' and the 'burden of disease', reduces a complex issue to simple messages that shape public opinion about individuals who are overweight and obese (Carels and Musher-Eizenman, 2010).

For those already experiencing discrimination and marginalisation because of obesity, current weight-loss messages may cause further distress and shame, in particular being blamed for the country's disease burden (Brown, 2010b). Nevertheless, at least two researchers, Callahan (2013), and Bayer (2008) encourage the use of shame to generate a sense of responsibility by the obese individual to the general community. This approach encourages those who may not have any interest in losing weight personally, to feel shamed into losing weight for the well-being of others (Callahan, 2013, Bayer, 2008). Thus, the message becomes one of community harm rather than just personal harm. Such powerful messaging can provoke exclusion and encourage stigmatisation by the community, which may lead to stigma and ostracism.

In his seminal book 'Stigma: Notes on the Management of Spoiled Identity', Erving Goffman (1963), identifies different types of stigma, including physical stigma and stigma of group identity, but explains that, although the stigma of group identity also plays a part, it is the stigma of character traits that is utilised for behaviour change (Goffman, 1963). According to Goffman, a stigmatised person loses social acceptance, is rejected by society and must deal with this either by trying to fit in or searching out others who are stigmatised for the same character trait (Goffman, 1963). This fits with the personalised quality of the anti-obesity campaign where the obese individual is negatively portrayed as lacking in will power or concern about the impact of the economic burden of obesity on their community. Furthermore, the media often reinforce this negative view by representing fat individuals as dirty, unkempt and stupid when writing about the 'obesity crisis. The role of the media will be discussed later in this chapter.

Goffman's stigma theory has served as the gold standard of stigma work for many decades. However, recent studies have begun to refocus and extend his work while also drawing attention to weaknesses inherent in Goffman's original work (Tyler, 2018, Tyler and Slater, 2018).

In her critical re-reading of the understanding of stigma, Tyler (2018) questions Goffman's place in ethnographic research pointing out that much of the status granted to Goffman for his seminal work on stigma is disproportionate to the actual rigour of the work itself. Explaining that, '… despite his self-presentation as pioneer of observational methods …' (Tyler, 2018, p. 751), the writer argues that, unlike his other works, Goffman's stigma work is not grounded in original ethnographic research, instead relying on literary texts and anecdotes to inform his work. Resituating Goffman's stigma theory as stigma power and using the example of Black Power, Tyler explains how Goffman never contested the presence or power of stigma used for political gain, despite the Black Power demonstrations of the 1960s that were occurring at the time that he wrote arguably his most successful work, 'Stigma. Notes on the management of a spoiled identity' (Goffman, 1963). Instead, the author explains how Goffman argued that, '… the stigmatised should not contest the norms that produce stigma, but instead develop strategies of stigma management …' (Tyler, 2018, p. 757). Such strategies included, according to Tyler, the stigmatised individual helping the 'normals' to feel more comfortable with the stigmatised person's failing by reducing tension, becoming adept at the art of 'impression management' and 'information management' and building tolerance to 'normals' negative reaction (Tyler, 2018).

Likewise, Tyler and Slater (2018) argue that the conceptual understanding of stigma inherited from Goffman and the sociological and psychological research that followed failed to recognise that, '… stigma functions as a form of power' (Tyler and Slater, 2018, p. 721), or examine, '…where stigma is produced, by whom and for what purposes' (Tyler and Slater, 2018, p. 721). The writers discuss the British health programs that aim to reduce the stigma of mental illness, pointing out that much of the distress caused by the increase in mental illness in Britain has been deliberately caused by the political and social reaction to the Global Financial Crisis (GFC) in 2008. An intense campaign to justify the severity of the

austerity measures taken as a result of the GFC involved British 'elites', described by Tyler and Slater as including, '... politicians, journalists and television producers, engaging in an intensive program of welfare stigma production, reanimating longer histories and figures of the undeserving poor' (Tyler and Slater, 2018, p. 727).

In some ways, this can be likened to the action taken by the Australian government in 2009 to adopt the NPAPH. The Australian government (2009-2015) using the well-publicised rapid increase in the costs associated with non-communicable disease, embarked on a nationwide consultancy in 2008 to formulate what eventually became the NPAPH which included, among other programs, the anti-obesity campaign. As Lupton (2014) explains, developers of anti-obesity campaigns, including Australia, use shame to provoke change so, in order to instigate shame, the offending behaviour is first stigmatised by eliciting disgust at the behaviour (Lupton, 2014b). This, in turn, produces stigma against groups and individuals who continue to either embody or practice the now-stigmatised trait or behaviour. This demonstration of seemingly deliberate governmental stigma production against targeted population groups, to exact a desired social response to fit a political need, in this case, the marginalisation of obese individuals, was discussed in some depth in the previous section.

Scambler (2018) discusses this in depth in his monograph, 'Heaping blame on shame: "Weaponising stigma" for neoliberal times' (Scambler, 2018). The author examines stigma and its weaponisation in neoliberalist power relations. Discussing what, he believes, is class-based exploitation Scambler argues that deviance and stigma are derivatives of the possession of capital (involving relations of class) and their concomitant modes of regulation (involving relations of command) with the resultant oppression deriving from the possession of power (Scambler, 2018). Furthermore, the author asserts that stigma in its classic form of non-conformance with norms, or shame, has been redefined as deviance, indicating a moral deficit, non-compliance or blame. Scambler argues that, as such, stigma has been 'weaponised'. In addition, he points out that, 'If deviance can be effectively appended to stigma, then the austerity of neoliberalism that seeks to blame and

punish vulnerable people like the disabled might obtain sufficient purchase to open the door to enhanced capital accumulation' (Scambler, 2018, p. 777).

Several researchers have written about the effect of such stigma on obese individuals including Australian researchers Thomas et al. (2008), and Lewis et al. (2010, 2011). Thomas et al. (2008), interviewed a community sample of 72 individuals, augmented with purposive sampling to ensure diversity of responses, to discover the lived experience, and the impact of socio-cultural factors of those living with obesity. The researchers found that 45 of their participants had struggled with weight issues for most of their lives, 36 had experienced stigma and discrimination in childhood, 41 in adolescence, and all participants reported experiencing this in adulthood. In addition, approximately half reported having been humiliated by health professionals because of their weight. Participants reported feeling responsible, and many had tried extreme diets to lose weight. Of particular relevance to the anti-obesity campaign, 'Participants described an increasing culture of blame against people living with obesity perpetuated by media and public health messages' (Thomas et al., 2008a, p.321). In this study, the majority of participants stated that they hated or disliked the word 'obesity', and would rather be called 'fat' or 'overweight' (Thomas et al., 2008a).

Lewis et al. (2010) explored obese individuals' perceptions of the stigma they encounter in their daily lives, including health messages about the need to lose weight. The researchers interviewed a community sample of 142 obese individuals with results demonstrating that, although personal and contextual factors influenced an individual's perceptions, 82 women and 20 men spoke extensively about the impact of societal reactions to their weight, including the messages about obesity, on their emotional well-being. They reported that they felt, '... the public glare on their weight "constantly" or "all the time". In particular, participants with a BMI over 40 stated that, far from motivating them to "lose weight", they felt a "failure"' (Lewis et al., 2010, p. 5).

In a similar study by the same researchers, Lewis et al. (2011) surveyed a diverse sample of 141 obese Australian adults to determine the type of stigma that had the most impact on their health and social well-being. Participants reported their

perceptions of encountering subtle stigma, such as 'people staring at the contents of their supermarket trolley' (Lewis et al., 2011, p.1353), as being the most difficult to cope with. Participants explained how this type of stigma caused them to avoid situations where they thought they may be stigmatised, and that they, '…constantly thought about how they could find a solution to their obesity' (Lewis et al., 2011, p.1349).

Evaluating the association between weight-based stigmatisation, psychological distress and binge eating behaviour, Ashmore et al. (2007), studied a group of treatment-seeking obese adults (n=92). Using three questionnaires, the Stigmatising Situations Inventory, Brief Symptoms Inventory and Binge Eating Questionnaire, the researchers, using correlational analysis, found that, 'Stigmatising experiences predicted both binge eating behavior and overall psychological distress' (Ashmore et al., 2007, p. 203). They conclude that, '… weight-based stigmatisation predicts binge eating behavior and that psychological distress associated with stigmatising experiences may be an important mediating factor' (Ashmore et al., 2007, p. 203).

In a similar vein, O'Brien et al. (2016) studied 634 university students in the US to test whether the association between weight stigma experiences and disordered eating behaviours, such as emotional eating, uncontrolled eating and loss-of-control eating, are mediated by weight bias internalisation and psychological distress. Using an online survey to collect the data and demographic details, the researchers report that, 'Statistical analyses found that weight stigma was significantly associated with all measures of disordered eating, and with weight bias internalisation and psychological distress' (O'Brien et al., 2016, p. 70). The researchers conclude by reiterating the importance of health and social policy-makers being made aware of the research literature and therefore, encourage the development of anti-stigma policies for school, work and medical settings (O'Brien et al., 2016).

With the aim of locating studies examining obesity stigma beliefs, for example, labelling obese individuals as lazy, unintelligent and unmotivated, Sikorski et al. (2011), conducted a systematic review to find out how the public perceives those

who are overweight or obese (stigmatising attitudes); what they attribute obesity to (causal attribution); what types of interventions are supported by the public and which factors determine that support (prevention support) Although only five studies met the inclusion criteria, causal attribution of blame, rather than genetic or environmental causes, was the most frequent finding. The authors postulate that this finding (of causal attribution of blame) may be the, '... potential origin of stigmatising attitudes towards obesity' (Sikorski et al., 2011, p.5). However, while identifying the belief that prompts obesity stigma (that fat people cause their own obesity by eating too much and exercising too little) this review did not explore possible causal factors that trigger the belief initially. It is possible that further examination of this may have implicated the anti-obesity campaign, mass media, and social media as augmenters of fat stigma.

Obesity stigmatising behaviour towards self, or other obese individuals, is often observed in many overweight and obese individuals (Lewis et al., 2011, Puhl and Heuer, 2009, Puhl et al., 2006). Unlike other stigmatised social groups, such as racial or gender, who accrue resilience by group self-identification, the obese population lack a self-identification group, which can further worsen isolation and negatively affect mental health (Puhl et al., 2008). Although lacking a large population identification group that counts obesity as its only necessary entry criterion, the growth of fat activist cohorts across the Western world has provided a support structure for obese individuals, but this is qualified. These groups are usually identified, not just by obesity, but also by other beliefs, such as human rights, gay rights and black rights, which may deny access to many obese individuals who do not share these beliefs.

One common aspect of stigma is the stereotyping of overweight and obese individuals as embodying a lack of self-control, social irresponsibility and laziness (Brewis et al., 2011). In 2012, two US researchers (Brewis and Wutich) conducted a global survey to ascertain the degree to which the slim-body ideal has spread globally over the past few decades and whether fat stigmatising beliefs have proliferated accordingly. The researchers used cultural surveys and body mass estimates collected from 680 adults from urban areas in 10 countries and territories, and from a mixture of cultures as varied as; Tanzania, New Zealand,

Iceland, UK, American Samoa, and Mexico. While the authors concede that the number of participants and countries was limited, they found that, 'globalisation of a cultural model about obesity and the globalisation of fat stigma is clearly evident' (Brewis et al., 2011, p. 273). However, the study results also revealed a shared belief of the participants, that, 'the culturally correct perspective that expressing those judgments too obviously and forcefully is not acceptable' (Brewis et al., 2011, p. 273). This finding supports the view that much of the fat stigma experienced is an everyday casual stigma, rather than overt stigma. In addition, the latter finding of this study explains why this covert and casual stigma, experienced by obese individuals, may not be noticeable to others, although, according to Lewis et al (2011), this is equally as damaging as overt prejudice (Lewis et al., 2011).

Exploring casual fat stigma and the entertainment industry, a study by Domoff et al. (2012), examining the influence of the entertainment industry on anti-fat stigma, measured the reactions of a group, after viewing an episode of America's 'The Biggest Loser'. The researchers found that the group, '... had significantly higher levels of dislike of overweight individuals and more strongly believed that weight is controllable after the exposure' (Domoff et al., 2012, p.993) than the control group who viewed a nature documentary. This result underscores the power of the media, in this case, television, to subvert and shape public opinion. Whether intentional or not, the culture depicted in the program of using individuals desperate to lose weight for entertainment appears to send a message that those who are obese deserve derision.

As discussed earlier, anti-fat attitudes also exist in the medical and allied health professions (Brown, 2013, Robertson and Vohora, 2008, Schwartz et al., 2003, Teachman and Brownell, 2001). In an Australian study by Thomas et al. (2008), using interviews to discover the lived experiences of people with obesity in Australia, 76 individuals (aged 16-72) were interviewed. The researchers reported that, 'About half stated that they had been humiliated by health professionals because of their weight' (Thomas et al., 2008a, p.321).

In another Australian study, Diversi et al. (2016) explored weight bias and the effect of client weight status on dietetic practice, amongst Australian Accredited Practising Dietitians (APDs). The researchers sampled 201 APDs using a self-administered questionnaire, the Fat Phobia Scale (FPS). The participants were randomised to assess either a female within the healthy-weight range or a female with obesity contrasted with an identical case study for a condition unrelated to weight. The participants were asked to assess the client based on data provided, provide recommendations, and rate their perception of the client. The results revealed mild fat phobia based on the FPS. However, the study demonstrated that dietetic practice was significantly affected by the client's weight status. Dietitians tasked with assessing the female with obesity found the client to have, '… significantly lower health and were more likely to provide unsolicited weight management recommendations. In addition, dietitians rated the client as less receptive, less motivated, and as having a lower ability to understand and sustain recommendations' (Diversi et al., 2016, p.462).

The significance of experiencing stigmatising attitudes from medical and allied health professions is noteworthy because of its rejection of the principles of health care, that is, caring for those who need help in a non-judgmental way. Individuals generally consider medical and health professionals to be trustworthy because of the personal nature of the transaction; therefore, it is likely that damage to this relationship may have more serious personal consequences, such as avoidance of health care due to embarrassment and shame, than stigma from non-health professionals. Phelan et al. (2015), in a narrative review of obesity stigma and patient care report that, 'Many healthcare providers hold strong negative attitudes and stereotypes about people with obesity' (Phelan et al., 2015, p. 319), believing that, ' … obesity is an avoidable risk factor that impedes their ability to treat and prevent disease' (Phelan et al., 2015, p. 323). In addition to the impact of the health professional's attitude that prevents many obese individuals from pursuing medical or other health care, the authors describe practical issues that may cause distress and shame. Among others, equipment, such as scales, blood pressure cuffs and pelvic examination instruments designed for smaller individuals, can signal to patients who are obese that, ' … their size is unusual and that they do not belong'

(Phelan et al., 2015, p. 322). The stress from these encounters that may also include mandatory weighing and collection of other anthropomorphic data may result in health care avoidance by those suffering from obesity (Phelan et al., 2015).

In an auto-ethnographic article exploring the barriers to health for fat people, Australian researchers Lee and Pause (2016), question the structural and institutional policies, attitudes and practices that impact on the health treatment and health-seeking behaviour of fat people. In particular, the impact that health providers who hold anti-fat attitudes and confirmation bias, have on treatment-seeking fat individuals. Speaking as self-proclaimed 'fat scholars', the authors discuss how this medical stigmatising of fat patients, in their view, constitutes, '… the failure to provide evidenced-based healthcare to fat patients' (Lee and Pause, 2016, p. 1), resulting in healthcare avoidance by those being stigmatised. The writers' postulate that health itself may now be the, '… new social contract' (Lee and Pause, 2016, p. 1), explaining how, from the perspective of fat, female scholars, medical stigmatising attitudes and practices, together with the current obesity discourse, affects their individual agency. The writers argue that medical stigma accomplishes this by implying that to be fat is to be considered as 'other' and therefore, stigmatised with their behaviours corrected to fulfill current health and societal expectations. The researchers explain the reality of the situation, that. 'For many fat people, fat stigma is a daily part of their life' (Lee and Pause, 2016, p. 3). These particular Australian writers focus on how fat stigma affects the individual on a personal basis, in particular on independent agency and the right to live their lives without the stress caused by fat stigma. In this way, they offer a unique insight into what it is truly like to be considered 'other' rather than relying on speculation by non-obese individuals about what effect the anti-obesity campaign may have wrought on their obese counterparts.

Writing from the point of view of an obese person about fat stigma and the Australian obesity discourse on her fat activist blog, Kath Read (using the pseudonym 'Fat Heffalump') argues that it is impossible to help anyone if you do not like the person you are trying to help. With reference to the Australian anti-obesity campaign, she writes that the negativity generated towards fat individuals is not helping anyone pointing out that, 'You cannot help those you loathe' (Fat

Heffalump, 2014, para 2). Read continues, 'When we find an environment that we can enjoy physical activity without shaming or stigma, we learn to enjoy things like dancing, swimming, and other activities' (Fat Heffalump, 2014, para 10). Furthermore, she adds that when obese individuals are shown compassion and respect and taught to value their bodies, and those in the medical and dietary fields genuinely care about helping heal the damage caused by the diet culture and fat loathing, '… our well-being and quality of life improve. Regardless of what weight we happen to be' (Fat Heffalump, 2014, para 11).

Fellow Australian writer Cat Pause (2017), whose name is not a pseudonym, agrees, calling attention to the everyday stigma experienced by fat people. Arguing that even the challenge of walking through a busy café is often fraught for fat people and is an example of an everyday occurrence that non-fat people take for granted. Discussing the stigma provoked by anti-obesity campaigns around the world, she points out, 'The war on obesity has many meanings, and only contributes to the violence experienced by fat people through stigma and discrimination' (Pause, 2017, p. 5). Pause explains the personal effect that many anti-obesity messages have on the fat , in particular, the presentation of fat people as body parts, such as media depictions of bulging abdomens with no head, arguing that, ' … this disembodying process contributes to the dehumanisation of fat people and fat stigma' (Pause, 2017, p. 1). Believing that, 'Fat stigma is a social determinant of health', the writer strongly suggests that public health policy-makers, '… should refrain from utilising fat stigma as a tool, and rather recognise it as a threat to health and treat it thusly' (Pause, 2017, p. 5). It is notable that Pause is the only writer identified, apart from Scambler (2018) mentioned earlier in this section, who writes about stigma as a weapon, considers fat stigma a tool and not merely the result of former action, such as shaming. The viewing of stigma as a weapon, or tool, significantly alters the way in which stigma may be understood. By applying this understanding to the Australian anti-obesity campaign, particularly with reference to its possible incursions on personal freedom and agency, the deliberate use of stigma may be viewed differently. It offers the ability to perceive stigma as a weapon used by governmental policy-makers to mould the individual to produce desired behaviours. In so doing, it also interferes with the ability to

freely choose how to live one's life. Such deliberate use of fat stigma often encourages weight prejudice and can generate a negative bias in the community towards obese individuals. The fear of becoming ostracised from their community, in some individuals, whether objectively obese or not, may induce extreme dieting leading to disordered eating (Lewis et al., 2011, Lee, 2012, O'Brien et al., 2016).

In a commentary on weight bias, Alberga et al. (2016) call for, ' … substantive upstream modifications and collaborative efforts in multiple settings to achieve sustainable reductions in weight bias at a population level (Alberga et al., 2016, p. 4). The authors explain that weight-related bias may also affect Anorexia Nervosa sufferers, pointing out that although traditionally weight-related disorders, such as obesity and Anorexia, have been considered, treated and researched as separate domains, the issue of stigma and bias affects both ends of the spectrum and may warrant a joint approach to management of these conditions (Alberga et al., 2016).

In a similar vein, Schvey and White (2014) explored whether weight bias is also associated with clinically significant eating pathology in lean individuals who perceive themselves as overweight and subsequently internalise weight bias. Using an anonymous online survey, 197 lean adults (mean BMI: 22.28 ± 1.89, range 15.80–24.98) completed the Weight Bias Internalisation Scale (WBIS) and measures of disordered eating behaviours and attitudes. The results revealed that 10% and 15% of participants were classified into a binge eating and binge/purge group respectively. In addition, positive correlations were found between WBIS scores and BMI (believed themselves to be overweight) depression and all of the subscales of the Eating Disorder Examination Questionnaire (EDE-Q) which are, restraint, eating concern, shape concern and weight concern. Additionally, internalised weight bias was significantly associated with binge/purge behaviours (Schvey and White, 2015). This study is important for its demonstration that, even in lean individuals the public discourse on the unacceptability of obesity with its subsequent manifestation of weight bias and stigma may be a powerful trigger for clinically significant disordered eating.

The ethics of using shame and disgust to change health behaviours

As mentioned previously, disgust is often the tool used to elicit change via personal shame and public stigma, but in a research article on stigma and the ethics of public health, Bayer (2008, p.463), questions whether this is necessarily unacceptable and asks, 'Is it true that stigmatisation always represents a threat to public health? Are there occasions when the mobilisation of stigma may effectively reduce the prevalence of behaviors linked to disease and death? And if so, how ought we to think about the human rights issues that are involved?' (Bayer, 2008, p. 463). Moreover, Callahan (2013), without any apparent concern for the ethical implications, suggests that a little tasteful shaming may be the edgier strategy needed to help people to recognise that they are obese, and therefore need to lose weight. He suggests that, '… strong and somewhat coercive public health measures, childhood prevention programs, and social pressure on the overweight, are promising strategies' (Callahan, 2013, p.4). According to Aleccia (2013), this statement by Callahan caused concern among a number of academics and health experts who warned that more stigmatisation is not the answer, especially with children (Aleccia, 2013). Vartanian (2013), also commenting on Callahan's suggestions, argues that using stigma as a tool for behaviour change has never been found to be effective, and that, as with all health interventions, 'Fundamentally, these campaigns should, first, do no harm' (Vartanian and Smyth, 2013, p.49).

Writing about the ethical considerations of obesity prevention in Australia, Fry (2012), warns about the possible unintended consequences of favouring certain health identities over others. He writes that endorsing identities that are rational and responsible, disciplined and in control, and aspire to be healthy, may be at the expense of others who may not choose (or be able) to foster these aspirations. The researcher proposes, '… that the Australian obesity prevention strategy could be evaluated using the Nuffield Council on Bioethics stewardship model of public health' (Fry, 2012, p.1). At the time of writing, there was no evidence to demonstrate that this has occurred.

Carter et al. (2012), also from Australia, examined similar ethical issues, this time in health promotion practice. Health promotion in Australia usually refers to on-the-ground interventions and programs, rather than high-level policy. The researchers examined the aspects of health promotion interventions that delve into the heart of individual freedoms and societal expectations and discuss the ethics of intervening at all. Possibly their most powerful observation is that, 'Different people will make different moral evaluations on each of these issues in a way that is informed by, and informs, their vision of a good society' (Carter et al., 2012, p.1). The writers argue that this complicates an already complex situation and demands skill to achieve an outcome that is beneficial to the individual and to society without victim blaming (Carter et al., 2012).

From a health and human rights perspective, Hartlev (2017) cites the United Nations (UN) Committee on Economic, Social and Cultural Rights, which states that the right to health is enshrined in human rights law. The author believes that there is often a tension between government's commitment to ensuring the good health of the population and the rights of the individual to be able to live a life in accordance with one's own preferences. Hartlev argues the importance of integrating a human rights approach in public health policies suggesting that, '… a human rights compliant public health policy should not only strive to ensure that governments live up to the duty of ensuring the individual's right to health but also take action to prevent and combat human rights abuses of overweight and obese individuals caused by stigmatisation' (Hartlev, 2017, p. 22).

Long before the more recent concerns about the ethics of harnessing stigma for political use were aired, the Nuffield Council on Bioethics (UK) published a report in 2007 on this subject. The aim, in part was, 'To identify and consider ethical, legal and social issues arising when designing measures to improve public health' (Nuffield Council on Bioethics, 2007a, p.12). Following the release of this report, the Council developed a framework to guide future policy-making in public health with the aim of avoiding stigma (Nuffield Council on Bioethics, 2007b). However, there is no evidence that this framework has been applied to the development of policy-making either in the UK or elsewhere. The Nuffield report and subsequent framework will be discussed in more depth later in the thesis.

Although the ethics of public health interventions are often discussed, very little has been written about how to successfully deliver interventions that avoid ethical complications. Possibly the most comprehensive approach regarding this is by the UCONN Rudd Center for Food Policy and Obesity, which is a non-profit organisation in the US (UCONN Rudd Center For Food Policy And Obesity, 2017). Their policy brief, 'Weight Bias; A Social Justice Issue', outlines in detail the consequences of bias in the Western culture. From employment to health-care and education, the specific forms of bias that impact on individual lives and the damage that this can cause to mental and physical health, are researched and discussed (Puhl and Heuer, 2010, Puhl and Brownell, 2012). Acknowledging the difficulty in promoting healthy food policy, while preventing weight bias, the UCONN Rudd Center, provides information, checklists, guides and toolkits to assist workers to approach and manage obesity without causing weight bias or stigma. The UCONN Rudd Center appears to be unique in its ability to address the complexity of obesity management, weight reduction, and the avoidance of weight stigma within one organisation. Apart from the Nuffield Council on Bioethics mentioned earlier, there appears to be no other publicly funded program expressly working to prevent stigma and bias in the delivery of public health programs.

There is no comparable framework in Australia although the NHMRC published a set of clinical practice ethical guidelines on their website to assist clinicians in managing obesity with their adult and child patients, while avoiding any unintended and unwanted consequences, such as poor body image, depression and, eating disorders (National Health and Medical Research Council, 2013). However, to date, these guidelines do not appear to be well known or utilised.

The Australian anti-obesity campaign as social control

Unlike previous years, from 2009-2015, when the National Preventative Health Taskforce guided chronic disease prevention, there is no overarching national policy for obesity reduction or chronic disease prevention in 2019. The Australian government health promotion website, that was in place for 2015-16 and beyond featuring individual initiatives, campaigns, and public health information of a general nature, was decommissioned in May 2018 without a replacement. Carriage

of the anti-obesity campaign has been devolved to state government organisations, such as state Cancer Councils, and the Heart Foundation, to set priorities and plan interventions with the intention to change individuals rather than the environment.

One such campaign mentioned briefly in the previous section that commenced at a local level in Western Australia and quickly spread to the rest of Australia, deserves attention for the controversy it has caused. The LiveLighter Campaign (Government of Western Australia, 2015) first launched in Western Australia in 2012, and extended nationally in 2015, is a campaign about the hazards of abdominal fat, termed 'toxic fat' by the campaign developers. Using animation, in video format, the advertisement focuses on the accumulation of 'toxic fat' around the abdomen, and its putative negative consequence on health. The campaign utilises the power of disgust to promote its message of weight-loss, which Lupton (2014) argues, is a very powerful tool when used, '… in relation to health and medical issues to reinforce stigmatisation and discrimination against individuals and groups who are positioned as disgusting' (Lupton, 2014b, p. 2). This particular Australian campaign has been criticised by several researchers, and social commentators, for its brutality and graphic content, arguing that the distress caused by such social marketing campaigns may cause misery to individuals, and their families (Lupton, 2012, Kausman, 2014, Morley et al., 2016).

It is useful when considering the ramifications of the Australian anti-obesity campaign to consider the effects from a sociological viewpoint in addition to the more general conversation about the effects on health, such as disordered eating. This allows a more holistic view to be appreciated and illustrates the interconnection of individual health and the sociological impact on public health.

In a recent article by Australian researchers analysing the LiveLighter social marketing campaign from a Foucauldian view of social control, Couch et al. (2017) take the discussion on the campaign a step further arguing that this particular campaign clearly demonstrates the use of governmentality, ' … to regulate people's thoughts, feelings, appearances, and behaviours' (Couch et al., 2017, p. 3). Developed by the French philosopher and social theorist Michel Foucault, as part

of his social theory on the concept of bio power, governmentality is the use of government as a tool to shape and guide the conduct of its populace to fulfil its political and social needs. Using spectacle to demonstrate what is desirable and undesirable, the generation of voluntary control by individuals to conform to cultural norms using self-surveillance and self-discipline is accomplished. (Foucault, 1975) This is exemplified by the LiveLighter Campaign due to its use of the spectacle of the fat gut, feeding children unhealthy food, the image of internal organs as undesirable, and taking the stairs as desirable (Couch et al., 2017).

In applying the LiveLighter Campaign to a wider system, Couch et al. (2017) also argue that, from the Foucauldian viewpoint, it clearly illustrates the interaction of 'panopticon' and 'synopticon' measures of social control (Couch et al., 2017). The panopticon is a term coined by Foucault to theorise the concept of Jeremy Bentham's prison design where the few watched the many, thus providing uncertainty and generating self-regulation to conform to accepted norms. Foucault applied this concept to theorise social control of the state over its populace (Foucault, 1975). The 'synopticon', discussed by the researchers, is a concept developed by Mathiesen in 1997 as an extension to Foucault's social control theory, to describe how the many watch the few, and explains how governmentality works today via the 'viewer society' that allows the many, enabled by the mass media, especially television, and more recently, social media, to watch, admire and comment on the few. In this way, both mechanisms work in synergy to optimise social control (Mathiesen, 1997).

Couch et al. (2017) argue that the LiveLighter Campaign is a prime example of social control in public health with the interaction of the panopticon through data collection and population profiling, and the, ' … 'synopticon' for the concept of the media as a system of messages, which works alongside the panopticon as a complementary form of social control' (Couch et al., 2017, p.3). The writers emphasise the importance of understanding that this campaign does not exist in isolation but, '… is part of a wider system of media messages that act as forms of governmentality of bodyweight' (Couch et al., 2017, p. 11).

Continuing the discussion on bio power, Foucault explains his concept thus, '… an explosion of numerous and diverse techniques for achieving the subjugations of bodies and the control of populations' (Foucault, 2008, p. 140), or, in other words, having power over others' bodies.

In this vein, and discussing the widespread practice of routinely measuring bodies, Harjunen (2016) writes, 'Body weight is probably one of the most common targets of bio power today. Our bodies become objects of measuring and monitoring from early on. Newborn babies are routinely measured and weighed right from birth and measuring has usually already started while in utero' (Harjunen, 2016, p. 37). Standards for normalcy are determined by medical expertise, 'Meanwhile, the disciplinary form of bio power aims at creating subjects who have internalised these standards to the extent that they have become self- disciplined subjects' (Harjunen, 2016, p.37). This concept is exemplified by current health practice in Australia where bodies are continually weighed, measured and recorded from pre-birth, through school, at routine doctor's visits, workplace health checks and so on until death. These are routinely presented as tables, charts and by other statistical methods by government bodies in Australia and elsewhere to inform policy and campaign material. As Harjunen (2016) suggests, 'Perhaps more than ever, the physical, social, and moral body are now seen as being interconnected and overlapping' (Harjunen, 2016, p.37).

At this point, it is worth briefly examining personal agency, as it is this construct that is impeded by forms of social control. In an article discussing the importance of understanding personal agency and free will, Moore (2016) explains the sense of agency as, ' … the feeling of control over actions and their consequences' (Moore, 2016, p. 1). The importance of this to psychological health has been widely acknowledged by many social theorists including prominent social theorist Albert Bandura (2001) who believes that, ' The capacity to exercise control over the nature and quality of one's life is the essence of humanness' (Bandura, 2001, p. 1). Similarly, Smith et al. (2000) state that, 'Social support and personal control are widely recognised by clinicians and researchers as perhaps the two most important predictors of morbidity, mortality, and psychological well-being in adulthood' (Smith et al., 2000, p. 458).

This is relevant when considering the various public health messages that are promoted to the public via social marketing. Arguably, the most well-known of these is the QUIT campaign for smoking cessation with its increasingly strong social controls over individuals who smoke. Another, less obvious but potentially more impactful, is the anti-obesity campaign. Over time, it is the latter that may prove to be the most damaging as eating is a function that must be undertaken by all in order to survive, so health messages and campaigns about obesity are applicable to everyone. Although these campaigns have the potential to affect a large proportion of the population, they generally cause only mild concern by health professionals possibly due to the incremental nature of the effect over time. However, there are individuals and groups that do recognise a potential loss of personal agency, such as fat activists (discussed in the following section), who are resisting what they regard as incursions on their right to choose their lifestyle. According to Bandura (2001), this is normal human behaviour in the face of such loss explaining that, 'It is not uncommon for individuals to invest their self-worth so strongly in certain convictions that they will submit to harsh and punitive treatment rather than cede to what they regard as unjust or immoral' (Bandura, 2001, p. 9).

The gendered nature of obesity stigma

Women suffer the effects of obesity-related stigma more than men (Bergman, 2009, Young, 2014, Orbach, 2006) and, according to Fikkan and Rothblum (2011, p.575), 'Across numerous settings, fat women fare worse than thinner women and worse than men, whether the men are fat or thin' (Fikkan and Rothblum, 2011).

Discussion in this section will focus on gender differences with respect to the lived experiences of fat women. As such, it would be remiss to discuss women and obesity without, at least briefly, mentioning Susie Orbach (1982) and her seminal book, 'Fat is a Feminist Issue', reissued with a new preface in 2006 (Orbach, 2006). Writing in the early 1980s, Orbach argued strongly that living in a patriarchal society influences the rules about food and body size for women and discussed the external pressures on women to fulfill expected roles. She explained how these roles, at the time, focused strongly on being a good wife, gaining admiration by

others for appearance, and possessing remarkable mothering skills, while still maintaining an acceptable weight and appearance, and acting in an acceptable way. Orbach observed how much of a woman's identity is, thus, dependent on how she sees herself and how others see her (Orbach, 1982). In the preface to the reissue of her book in 2006, Orbach suggested that the social media saturation (in 2006) had increasingly sharpened the focus on appearance and that, although the external pressures may have changed, with less focus on finding a husband and on actual mothering skills, and more on the child's skills as a reflection of mother, there still remained the same focus on the need for admiration (Orbach, 2006). In 1982, Orbach wrote, 'For a woman to take pride in her body for herself rather than as an instrument or as an object is a radical act'. (Orbach, 1982, p. 206) This, according to the author, still holds true today (Orbach, 2006).

Several writers have revisited the issue of whether obesity is a feminist issue (Fikkan and Rothblum, 2011, Roehling, 2011, Saguy, 2011, Chrisler, 2011) and argue that, while agreeing that fat is a feminist issue, the way in which feminist scholars analyse the obesity discourse varies. They all agree that while some researchers approach obesity from the belief that it is a coping mechanism for distress (Orbach, 2006, Chrisler, 2011), others see it primarily as a continuation of the gender discourse (Fikkan and Rothblum, 2011, Fikkan and Rothblum, 2012, Roehling, 2011, Saguy, 2011). Returning to the everyday lived experience of the fat woman, others speak of the tyranny that the fear of fat can generate, pervading every aspect of a woman's life and causing dissatisfaction and reduced quality of life (Roehling, 2011, Saguy, 2011).

Fikken et al (2012), in an evidence summary examining the topic of women and weight stigma, believe that women are fat stigmatised more than men, suggesting that this, in part, may be due to Western society's tendency to view physical attributes as a proxy for health. The authors also state that while height may be considered the most salient trait for male attractiveness and virility, this is not viewed as controllable, whereas, women's most salient trait for female attractiveness, and suitability to reproduce, is generally considered to be her weight which is deemed controllable. They argue that the common use of, '... weight as a proxy for health means that fat women may receive the message that

they can and should wish to control body weight, whereas the bias against a short man would not intersect with these kinds of moral overtones' (Fikkan and Rothblum, 2011, p.4). Although this is no doubt true, this explanation does not describe, what happens if the man is tall and fat, if height is the barometer of virility for men? It could be argued that, in most cases, the presence of overweight supersedes height, thus rendering the tall, fat man also vulnerable to fat stigma having relinquished his status as a virile being.

Interestingly, transgendered persons may be in a unique position to comment on the gendered nature of fat stigma. Young (2013), who transitioned from a fat woman to a fat man and documented his journey in a blog, argues that women suffer the effects of obesity-related stigma far more than men due to the higher expectations that society places on them to be attractive. Young comments that, as a man, he is no longer under the same pressure to look good as when he was a woman (Young, 2014).

Likewise, Bergman (2009), who is transgendered and considers themself gender-fluid, and may be perceived as either gender, makes the same observation, that they are perceived to be fat if seen as a woman, with all of the attendant judgment of appearance, but not if perceived as a man. Bergman states that, '… whether the world thinks of me as fat depends entirely on how it interprets my gender" (Bergman, 2009, p.15).

While these two studies cannot be considered representative of the transgendered population, they offer a rare insight into the lived experience of being a fat woman, both having also experienced being a fat man. Young and Bergman offer a very rich, personal account of gender difference in obesity, while clearly reflecting the beliefs of current Western society.

In this section, the complexities of obesity stigma, the drivers of this behaviour, the deliberate use of shame and disgust as tools for change, and the possible ramifications of such an approach on the mental health of those stigmatised, was discussed. Casual, often unseen, obesity stigma, and the subtle ways that this may erode the self-esteem of obese individuals was also explored, especially with regard to health professionals who may be biased in their treatment of obese patients.

Lastly, the role of gender on obesity stigma, including the unique information that can be gained from those who are transgendered, was examined.

4.3. Exploring Body Dysmorphic Disorder and Muscle Dysmorphia

In this section of the literature review, BDD, a sub-classification of Obsessive-Compulsive Disorder (OCD) that affects all genders and Muscle Dysmorphia, a subtype of BDD, and known colloquially as 'Bigorexia', will be explored. Almost exclusively a male disorder of body image, Muscle Dysmorphia reflects particular issues facing young men. Further to this, the role of the media, and the promotion of the muscular ideal will be discussed. Evidence is examined suggesting that negative body image, eating disorders and Muscle Dysmorphia, have become significant problems for many young men.

Body Dysmorphic Disorder and Muscle Dysmorphia are included in this research because of their strong links to disturbed body image and disordered eating. Although classically described as OCD, these disorders have more recently been studied for their links to body image and eating disorders (Kittler et al., 2007, Kollei et al., 2013). If this is true, it is possible that these conditions may be triggered by the anti-obesity campaign because of its specific focus on weight-loss, which is, to many, synonymous with appearance.

Prior to discussing BDD and Muscle Dysmorphia, it is important to consider the pivotal role that body image plays in image-based disorders, particularly as these are often the gateway to disordered eating and eating disorders.

The importance of body image

The NEDC explain body image as '… a person's perception of their physical self and the thoughts and feelings, positive, negative or both, which result from that perception' (National Eating Disorders Collaboration, 2017c, para 1).

As previously mentioned, negative body image or body dissatisfaction happens when an individual develops negative thoughts and feelings about his/her body. According to the NEDC, this is greatly influenced by external factors, such as family, friends and the media (National Eating Disorders Collaboration, 2017c). However, the media, and more recently social media are increasingly viewed as a powerful external contributor to body dissatisfaction (National Eating Disorders

Collaboration, 2017c, Pepin and Endresz, 2015, Holland and Tiggemann, 2016, Arseniev-Koehler et al., 2016, Camussi et al., 2015).

As negative body image is the underlying basis, at least in part, for the development of disordered eating, eating disorders and BDD, it may be reasonable to suggest that the Australian Government's anti-obesity campaign with its focus on weight-loss, may inadvertently reinforce the necessity of a slim, attractive body by inferring that any other body is not good enough. Although being attractive is not the intent of the anti-obesity campaign, it nevertheless may be misinterpreted as such because, in Western developed countries, at least, the traits of slimness and attractiveness, as pointed out by the NEDC, are often inseparable (National Eating Disorders Collaboration, 2015).

The studies examined here reflect the importance of negative body image firstly by recognising this as a problem, and secondly, by intervening to build resilience to prevent the development of negative body image and low self-esteem in the first place, rather than pursuing the often-difficult task of reducing well-established unhealthy behaviours.

The NEDC describe the four aspects of body image that dictate whether an individual has a positive or negative body image. 1) Perceptual body image is how a person perceives his/her own body, which is not always a correct representation of others' perception. 2) Affective body image relates to the amount of personal satisfaction felt about shape, weight and individual body parts, whereas, 3) cognitive body image is the way an individual thinks about his/her own body, which may lead to preoccupation with body shape and weight. Lastly, 4) behavioural body image is how a person engages and behaves as a result of personal bodily satisfaction or dissatisfaction. This dissatisfaction may result in self-isolation or the employment of destructive behaviours to change the parts of appearance causing dissatisfaction or distress. The NEDC consider managing body image to be the cornerstone of any intervention targeting eating disorders (National Eating Disorders Collaboration, 2015).

In a synthesis of research findings on body dissatisfaction and eating disorders, US researchers, Stice and Shaw (2002) found support for the claim that sociocultural

processes foster body dissatisfaction and consequently, eating disorder pathology and that this relationship is mediated by dieting and negative body image. In addition, evidence confirmed that perceived pressure to be thin, increased weight, and internalisation of the thin-ideal increase the risk for body dissatisfaction. Similar to the NEDC, the authors suggest that focusing greater attention on body image disturbances than on preventing unhealthy practices might enhance prevention and treatment interventions (Stice and Shaw, 2002).

Another US study by Neumark-Sztainer et al. (2006) addresses the question 'Does body satisfaction matter?' by examining longitudinal associations between body satisfaction and weight-related, health-promoting and health-compromising behaviours, in adolescents over a five-year period. Adolescents (n=2516) from a mixed cultural and socio-economic background were assessed in 1999 and followed up in 2004. The results demonstrated that lower body satisfaction, as measured in 1999, predicted higher levels of dieting and unhealthy weight control behaviours in young women in 2004. Binge eating and lower levels of healthy behaviours, for example, reduced physical activity and reduced fruit and vegetable intake, were common findings. Young men with lower body satisfaction, as measured in 1999, also had higher levels of dieting and unhealthy weight control behaviours in 2004. Binge eating, low levels of physical activity and smoking were all important observations. The authors conclude that, contrary to their expectations, lower body satisfaction is not necessarily a motivator for healthy weight management behaviours but, in fact, predicts the use of unhealthy behaviours. The researchers argue that, given these findings, interventions with adolescents should focus primarily on enhancing body satisfaction in the first instance, rather than attempting to reduce unhealthy behaviours, and the authors also suggest that messages likely to lead to decreases in body satisfaction be avoided. They recommend that, 'Parents, educators, and health care providers should resist utilising messages aimed at motivating adolescents toward behavioral change via decreasing their comfort with their bodies. Instead, they suggest, it may be more effective to encourage positive change using messages that enhance body satisfaction and encourage a desire to care for one's body' (Neumark-Sztainer et al., 2006a, p.249). This point is notable as obesity-related

health messages in Australia, and elsewhere, usually focus on shaming obese individuals using negative messages, for example, the LiveLighter campaign discussed earlier. However, in a recent departure from this strategy, the VicHealth campaign This Girl Can, (VicHealth, 2018), borrowed from the UK government program of the same name, is one that does use the notion of caring to promote the fostering of a healthy body image to women through engagement in sport.

Much of the research on body image is conducted on adolescents and young people, especially women, and as Carey et al. (2010) comment, 'High school is a key venue for the development and expression of body image concerns in adolescent girls' (Carey et al., 2010, p.299), In a small study examining the views of high school students in an all-girls private school in Australia, the researchers interviewed ten students aged 14-15 years of age with the aim of exploring the high school environment and its contribution to body image. The researchers used in-depth interviews to capture the adolescent girls' perspective with particular attention to the manifestations of an appearance culture within the school. The results confirmed that a strong appearance culture did exist at the school exerting a major influence on the body image of its students. During the interviewing phase, the interviewees recounted the ways in which appearance-focused conversations prevailed about dieting and weight monitoring as part of their everyday interaction with peers at school. Additionally, the authors note that, 'Dieting was frequently portrayed as a group activity in the school, as something that friends do together in order to maintain their friendship and "fit in"' (Carey et al., 2010, p.305). When discussing dieting, several participants reported that many girls at school took the healthy eating mantra too far with one participant expressing, '… some frustration with the way in which "health" was automatically seen to be equated with thinness' (Carey et al., 2010, p.309). They also admitted that, '… concerns about "health"' provide a legitimate cover for the surveillance of body size that was a taken-for-granted aspect of the appearance culture in the school' (Carey et al., 2010, p.309). The 'obesity crisis' was mentioned by the participants as sending a message that, '… you're either like, fat, or you're acceptable' (Carey et al., 2010, p.309). The ways in which their school attempted to address body image concerns are portrayed as ineffective, unrealistic and out of

touch with reality, if not counter-productive. The researchers argue that schools while attempting to reduce unhealthy body image by promoting body acceptance, are met with frustration by the students' lived reality, that, '… what you look like does matter' (Carey et al., 2010, p.311). This study, although small, highlights the gap in understanding of the lived experiences, especially of young women, by health and other professionals, and explains, at least in part, the frustration and lack of trust in health and other authorities by young women who feel that they are not heard or understood.

An Australian study examining peer and mass media influences (women's magazines and television) on the development of body image in young girls was conducted by Dohnt and Tiggemann (2006) who surveyed a sample of 97 girls aged 5-8 years. This prospective study interviewed the participants initially, and followed this with another interview one year later and found that perception of peers' desire for thinness was a temporal antecedent to the girls' own desire for thinness, appearance satisfaction and self-esteem one year later. In addition, the watching of appearance-focused television programs was temporally antecedent to appearance dissatisfaction. The authors argue that this study confirms with other similar studies, that desire for thinness is a temporal antecedent to subsequent low self-esteem in young girls. They conclude that, '… as early as school entry, girls appear to already live in a culture in which peers and the media transmit the thin-ideal in a way that negatively influences the development of body image and self-esteem' (Dohnt and Tiggemann, 2006, p.929).

In a similar study, also from Australia, Blowers et al. (2003) investigated the relationships among sociocultural pressures to be thin, internalisation of the thin-ideal, social comparison, body mass index, and body dissatisfaction in 153 young girls aged 10-13 years of age. They found that the only factor that uniquely influenced internalisation of the thin-ideal was perceived media (television) pressure. However, internalisation of the thin-ideal was also influenced, to some extent, by social comparison, higher body mass and the presence of body dissatisfaction. Body mass alone was found to be directly associated with body dissatisfaction (Blowers et al., 2003).

Negative body image is not solely the province of girls and young women. Australian researchers Slevec and Tiggemann (2011) reviewed empirical research to determine the factors associated with body dissatisfaction and disordered eating in middle-aged women and found that these are strongly linked. The researchers also found that older women share the same risk factors as younger women, for example, a BMI in the overweight or obese range, internalisation of the thin-ideal, and socio-cultural influences, such as weight-related teasing or comments. However, the authors point out that unlike their younger counterparts, older women must also contend with the developmental challenges of menopause and ageing which often compound existing body anxiety. They suggest that as there is very little research on these issues across the female lifespan, it would be useful to conduct longitudinal studies tracking a group of women, over a considerable period of time, to record their experiences of body image and eating concerns. This would provide an insight into how these relate to age, and other important developmental transitions, such as childbearing and menopause (Slevec and Tiggemann, 2011).

Highlighting the importance of social media and its high global prevalence and influence today, Fardouly et al. (2014), also from Australia, explored the effect of Facebook usage on women's body image and mood, compared to the effect of browsing a fashion magazine. The study investigated the experiences of 112 female participants, aged 17-25 years of age, who were randomly assigned to ten minutes browsing their Facebook account, a magazine website or an appearance-neutral control website. Measures of mood, body dissatisfaction, and appearance discrepancies were then collected and analysed. The results revealed that the women who spent time on Facebook reported feeling more negative than those on the control website. In addition, women high in appearance comparison tendency reported more perceived dissatisfaction with appearance details, for example, face, hair, and skin, after Facebook exposure, than those high in appearance comparison tendency that were exposed to the control website (Fardouly et al., 2015).

Similarly, with respect to the importance of body image and quality of life, Wilson et al. (2013) studied 414 undergraduate students in the US to examine BMI and

body image dissatisfaction as predictors of physical and mental health-related quality of life (HRQL). Mean age was 21.5, SD = 4.9; BMI was 23.6, SD = 5.2. The results demonstrated that in men and women a higher BMI was correlated with body image dissatisfaction but not with measures of psychosocial functioning. However, higher body image dissatisfaction was associated with poorer physical HRQL and psychosocial functioning. In addition, body image dissatisfaction was found to mediate the relationship between BMI and physical HRQL in both men and women (Wilson et al., 2013). The findings of this study indicate that BMI is not a good predictor of poor psychosocial functioning, however, body image dissatisfaction, which may arise from any source, not just from a high BMI, appears to correlate with poorer mental health-related quality of life and psychosocial functioning. The finding that body image dissatisfaction mediated the relationship between BMI and physical HRQL suggests that, '... body image dissatisfaction may be an important target for health interventions' (Wilson et al., 2013, p. 644). This study is critical to understanding the importance of body image and its role in the generation of body image disorders and disordered eating.

With the emphasis on intervention, Australian researchers, McLean et al. (2011), examined the outcome of a behavioural therapy-based intervention on 61 women with body dissatisfaction and disordered eating, aged 30 to 60 years. The intervention consisted of an eight-session facilitated group cognitive behavioural intervention. Following the intervention, the women completed a selection of questionnaires relating to body image and eating disorders. According to the authors, the results, '... demonstrated that the intervention group had large improvements that were statistically significantly different from the control group in body image, disordered eating, and risk factor variables and that were maintained at 6-month follow-up' (McLean et al., 2011, p. 751). This study, and the Slevec and Tiggemann (2011) study discussed earlier, draw attention to the significance of body image in the ageing woman, a population group not usually included in studies on body image. In their study, McLean et al. (2011) included a large age range of women from 30 to 60 years, which would have inevitably included menopausal women. It may have been useful for future intervention

planning if the researchers had been able to ascertain whether responses differed depending on whether participants were pre-menopausal or post-menopausal.

Discussing the importance of building resilience, Australian researcher, Susan Paxton (2011), writes about the effect of the media on body image, arguing that the widespread digital manipulation of images in the mass media, and increasingly, in social media, make critical the importance of teaching media literacy in schools. Paxton suggests that public policy initiatives addressing media literacy may have a widespread impact on issues relating to body image and have the potential to positively influence young people by increasing their resilience to media messages (Paxton, 2011).

The need for engagement between those in the eating disorder field and policy-makers is also reinforced by US researchers, Buchianeri and Neumark-Sztainer (2014) who argue that, 'Body dissatisfaction is implicated in a range of public health concerns, including impaired psychological health (for example, depression) and eating and weight-related problems (for example, eating disorders, obesity)' (Bucchianeri and Neumark-Sztainer, 2014, p.64). The writers assert that, in contrast to other fields of research, there has been very little primary research on body image within the field of Public Health. Similar to Paxton (2011), they believe that because of the association between body dissatisfaction and impaired psychological health, there is a critical need to address the prevalence of body image concerns as a public health issue within programs and policies (Bucchianeri and Neumark-Sztainer, 2014).

The argument that body dissatisfaction impairs psychological health, progressed by Bucchianeri and Neumark-Sztainer (2104), may have implications for public health authorities. By urging of weight-loss, it can be argued that public health authorities are complicit in the augmentation of body dissatisfaction and psychological distress, which may, as the previous researchers argue, trigger the development of an eating disorder such as Anorexia or obesity.

Body Dysmorphic Disorder

Following on from the previous discussion of body image and its critical place in body image disorders and disordered eating, it is pertinent to explore how this may manifest clinically. With this in mind, the following section examines Body Dysmorphic Disorder (BDD) and Muscle Dysmorphia, both of which have as their genesis, to varying degrees, disturbed body image.

Body Dysmorphic Disorder is defined as, 'A psychological disorder in which a person becomes obsessed with imaginary defects in their appearance. (Oxford University Press, 2014) BDD is classified as a sub-section of OCD in the DSM-5 (2013). In turn, OCD is defined as an anxiety disorder. It is important to note that BDD is different to the more usual insecurities about appearance with affected individuals suffering from an obsession about a perceived flaw, to such an extent, that quality of life is impaired (Phillips, 2004).

There is very little research on BDD globally, and in Australia, and most published studies focus mainly on causation, such as genetic susceptibility, brain abnormality and the role of medication (Bjornsson et al., 2010, Phillips, 2004). However, more recently, BDD has been studied for possible links to eating disorders and the presence of shared sociocultural factors (Bartsch, 2007, Grant et al., 2002). Moreover, research suggests that BDD has a high rate of suicidal ideation and completed suicide, thus affirming the seriousness of the disorder (Bjornsson et al., 2010, Buhlmann et al., 2010).

Weiffenbach et al. (2015) describe BDD as, '… the manifestation of multiple biological, psychological, and sociocultural factors' (Weiffenbach and Kundu, 2015, p.115), rather than a single impairment. The researchers explain that biological factors, neuroanatomical differences, impaired visual processing, neurotransmitter alterations and genetic predispositions all contribute to BDD. In addition, psychological factors including childhood adversity, personality traits and the roles of gender, culture, and media, all play a part in the development of the disorder. They argue that the role of the media, in the development of BDD, plays only a minor role initially but the constant reinforcing of the importance of

appearance while promoting unrealistic expectations about beauty, may lead to the maintenance of BDD. When discussing BDD and the media, the researchers advise caution in attributing too much influence to the media because, '... reports of BDD date back as far as the 1800s, prior to current media trends and the ideals it helps enforce' (Weiffenbach and Kundu, 2015, p.121). However, it is interesting to note that this timeline does not pre-date the printing press or newspapers (both forms of media) suggesting that this access to information may have contributed to, or exacerbated, BDD in susceptible individuals in the 1800s. Scheck (2001) writes about what constituted beauty throughout the ages, prior to the 1800s, and argues that artists and sculptors of the day were undeniably influential on what was considered beautiful. The writer explains that the current ideals of the day were indeed accepted, and amalgamated, into everyday life, just as they are today. However, rather than through the media, these ideals were disseminated to the public in the form of collections in museums, art galleries, stage productions, and musical theatre (Scheck, 2001).

Concerned that BDD does not receive the attention it deserves, Dianna Bartsch (2007) studied 619 Australian university students to investigate the frequency of BDD symptoms and predictors indicating dysmorphic concern. Using standard measures in a questionnaire, Bartsch found that 62% of the respondents were concerned with parts of their body and that 30% of these were preoccupied with these perceived flaws. Fourteen participants (2.3%) met the full criteria for BDD. The data also revealed the predictors of BDD concern to be: low self-esteem, depression, self-oriented perfectionism, socially prescribed perfectionism, and gender. To control for eating disorders, Bartsch excluded 17 participants from the analyses where the individual indicated they were currently, or had previously, suffered from an eating disorder (Bartsch, 2007). While understanding the rationale behind the researcher's decision to exclude those with a history of an eating disorder, it may have been useful to include these cases to determine whether the predictors of BDD, in an Anorexic population, are different to those without the illness.

Although BDD is formally classified as a variant of OCD (Oxford University Press, 2014), there is evidence to suggest that those with BDD share similar concerns

with individuals with Anorexia Nervosa, particularly relating to body image and weight concerns (Kittler et al., 2007).

With the aim of examining weight concerns in BDD sufferers, US researchers, Kittler et al. (2007), recruited 200 individuals meeting the DSM-4 (2000) criteria for a diagnosis of BDD. To determine the prevalence of weight concerns, subsequent depression, and suicidality in this cohort, participants were interviewed in person to assess for any significant weight concerns that were preoccupying the individual, causing stress or interfering with daily functioning. A set of measures, the 'BDD Form', (not standardised but commonly used in the field) was used to capture information about weight concerns. In addition, other information, designed to assess the level of functioning and suicidality, was collected. The study revealed that 58 (29%) of participants had weight concerns and that these participants suffered from greater body image disturbance, a higher frequency of several BDD behaviours, suicide attempts, and co-morbidity, than the rest of the group who did not have weight concerns. Results also indicated that those with significant weight concerns exhibited a higher lifetime prevalence of mood disorders, including severe depression, personality disorders, and substance use disorders. The authors argue that, 'Weight concerns in BDD deserve further study, as they appear relatively common and are associated with greater symptom severity and psychopathology in several domains' (Kittler et al., 2007, p.1).

With a similar aim of exploring co-morbidity between Anorexia Nervosa and BDD, but examining the prevalence of BDD in individuals with eating disorders, rather than identifying signs of eating disorders in BDD sufferers, German researchers, Kollei et al. (2013) interviewed 100 inpatients with Anorexia Nervosa or Bulimia Nervosa. Using a structured diagnostic interview and a self-report questionnaire, they determined the prevalence of non-weight related concerns about appearance that matched those diagnosed with BDD. Twelve patients (12%) were identified as suffering from comorbid BDD. The researchers found that concerns relating to body features, such as skin, hair, teeth, nose, and height, prevailed and argue that BDD is a frequent comorbidity in individuals with eating disorders (Kollei et al., 2013). However, caution should be observed in generalising these findings to the

wider community of Anorexia Nervosa sufferers as the studied population were inpatients and possibly more severely affected than those living in the community.

Another smaller study, by Grant et al. (2002), with 41 participants, and a similar method to the previous study, revealed similar findings. Thirty-nine percent of patients with Anorexia Nervosa diagnosed using the DSM-4 (2000) diagnostic criteria, also fulfilled the diagnostic criteria for BDD. They were also found to have significantly lower overall functioning than those without a comorbid diagnosis of BDD. The researchers suggest that BDD may be relatively common in patients with Anorexia Nervosa and that this may indicate a more severe form of the illness (Grant et al., 2002).

From a preventive viewpoint, Schneider et al. (2017), from Australia, argue the importance of recognising sub-threshold-BDD. Sub-threshold disorders present with core disorder symptoms and associated distress or impairment but do not meet the full diagnostic criteria of the core disorder. To determine the prevalence of sub-threshold-BDD, the researchers conducted a study on a sample of 3149 Australian high school students. Self-report questionnaires assessed DSM-5 (2013) criteria for BDD, past mental health service use and symptoms of BDD, anxiety, depression, obsessive-compulsive disorder, and eating disorders. The results revealed a sub-threshold-BDD prevalence of 3.4% and a probable-BDD prevalence of 1.7%. Compared with the non-BDD group, the sub-threshold-BDD group was associated with, '… elevated symptoms of comorbid psychopathology and greater past mental health service use, and in male-only measures, with poorer quality of life and elevated muscularity concerns' (Schneider et al., 2017, p.125). The authors contend that although BDD is considered to be a severe disorder with a high rate of suicide, very little is known about sub-threshold-BDD. They argue that, like anxiety and depression, sub-threshold-BDD can pose a significant burden for families and the community and that most sub-threshold disorders, especially in the adolescent male population, remain unrecognised although they may constitute a severe impairment to the social functioning of the individual (Schneider et al., 2017).

Suicidality in BDD is a major concern according to Phillips (2007). 'Suicidal ideation, suicide attempts and completed suicide are common in individuals with BDD' (Phillips, 2007, p.1). Approximately 80% of individuals with BDD experience lifetime suicidal ideation and 24% to 28% have attempted suicide. Similar to Schneider et al (2017), Phillips warns that, although BDD is relatively common and these statistics underscore the importance of recognising and treating BDD, it is under-recognised and under-treated in clinical practice (Phillips, 2007).

Buchanan (2015) agrees, stating that, although the prevalence of BDD is about five times that of Anorexia Nervosa, it is underdiagnosed and undertreated. He argues that once diagnosed, '… research indicates that cognitive behavior therapy with an emphasis on exposure and response prevention is an effective treatment' (Buchanan, 2015, p.20).

Although the prevalence of BDD is relatively small compared to other psychological disorders, such as anxiety and depression, the seriousness of the disorder warrants attention. Moreover, although considered a variant of OCD, evidence demonstrates a link to eating disorders and body image disturbance. Similar to eating disorders, any health policy that promotes weight-loss may risk instigating, or triggering, impaired body image and the possible consequence of the development of BDD in susceptible individuals.

Discovering Muscle Dysmorphia (Bigorexia)

The NEDC state that, 'Rates of body dissatisfaction in males are rapidly approaching that of females. For males, body dissatisfaction is more commonly manifested as the pursuit of a muscular, lean physique rather than a lower body weight' (National Eating Disorders Collaboration, 2017d, p.1). In addition, an Australian study found that adverse relationships between body dissatisfaction and psychological distress were more pronounced in males than females (Griffiths et al., 2016).

Recent research demonstrates that over-exercising and extreme pursuit of muscle definition are often perceived as healthy behaviours for males (Mitchison and

Mond, 2015), however, such behaviours can lead to severe health issues, such as Muscle Dysmorphia (National Eating Disorders Collaboration).

Muscle Dysmorphia is primarily a disorder of muscularity. It is defined in various ways, and to date eludes a definitive description. It has been variously described as, '... the pathological pursuit of the hyper-mesomorphic physique' (Rhea et al., 2004), and, '... a syndrome in which individuals (usually men), although highly muscular, have a pathological belief that they are of very small musculature' (Choi et al., 2002). In addition, Leone et al. (2005) state that, 'Athletes are particularly susceptible to developing body image disorders because of the pressures surrounding sport performance and societal trends promoting muscularity and leanness' (Leone et al., 2005).

Non-prescribed steroids are commonly used to assist in acquiring muscle definition and this use is rising according to the Australian Crime Commission (McKeon, 2014). In an interview with ABC Radio National, in 2014, to discuss steroid use and body image in young men, Scott Griffiths, from the University of Sydney, and a specialist in male eating disorders, explains the difference between Muscle Dysmorphia and Anorexia in men, 'Guys with Muscle Dysmorphia are not trying to be skinny: their ideal physique is lean, cut and very big, so the type of dieting and exercise they do is different to people with Anorexia but it's just as aggressive' (McKeon, 2014, para 4). Griffiths argues that males who misuse steroids feel discouraged from discussing their vulnerabilities due to perceived, and actual, stigma, and are therefore often reluctant to seek help (McKeon, 2014).

With a focus on prevention, and in an effort to identify possible role models that may influence body image perception, Bratland-Sanda et al. (2015) studied Norwegian fitness instructors. A self-report online survey to identify disordered eating (DE) and eating disorders (ED) using the Eating Disorders Inventory (EDI) and the Exercise Dependence Scale (EDS), produced a response rate of 57% (685 females and 152 males). A total of 22% of the male and 59% of the female respondents were classified with disordered eating. Those respondents who were identified with DE had a higher BMI and a higher total EDI score compared with the respondents without an identified DE. A correlation was found between EDI

total score and EDS total score in both sexes. Four percent of females and none of the males reported having a current eating disorder. The researchers responded by raising concerns about the fitness industry and its, '… massive focus upon body weight, shape and appearance, and classes called "fat burner", "booty blast" and "body sculpting"' (Bratland-Sanda et al., 2015, p.1). They express disquiet about the high prevalence of DE behaviour in fitness instructors, usually regarded as healthy role models and health authorities, by the public and point out that the prevalence rates of DE behavior, found in this group, are higher than those of elite athletes in general. Acknowledging the secrecy surrounding eating disorders, and the general unwillingness to admit to a problem, the researchers call for physicians and physiotherapists working in sports medicine to be aware of this link and to screen for DE and ED. In addition, the authors recommend raising awareness of these issues with management and staff of fitness centres about the importance of prevention, identification and management of DE behavior in these settings (Bratland-Sanda et al., 2015). While acknowledging the wisdom of this recommendation, it is possible that, in some centres at least, management and staff are implicated by their role in creating their own culture that rewards the appearance outcomes of disordered eating, thus rendering this approach ineffective. The possibility of a broader awareness among the public, as users of fitness centres, is not discussed in this study.

There is little research on how disordered eating pertains to the muscular ideal. As Griffiths et al. (2013) observe, most men in Western society favour a male body combining a low body fat percentage with well-developed musculature, broad shoulders and a thin waist. They explain that, unlike disordered eating driven by a desire for thinness, disordered eating, for muscularity, is characterised by behaviours that are antonymic to those utilised to lose weight. The writers state that a high intake of protein, restriction of non-protein dietary components, and a strict regimen of frequent eating, including liquid meals for greater calorific intake and the use of steroids, testosterone boosters, and other supplements are not unusual in those seeking increased muscularity. They also argue that the notion that eating for muscularity is not associated with eating disorders is false. They explain that because disordered eating of this type is not identified using the

current gold standard tools that focus on a drive for thinness and restricted eating only, there is very little understanding about the degree of disability eating for muscularity may cause. The authors suggest that a reconceptualisation of disordered eating is warranted, arguing that, '… the current conceptualisation of disordered eating is concerned only with thinness, weight loss and calorie restriction, making it outdated and in need of reform' (Griffiths et al., 2013, p.2).

A recent US study by Klimek et al. (2018) to determine the factors of influence on the development of disturbed body image, Muscle Dysmorphia and eating disorders… One hundred and eighty men, with ages ranging from 18 to 33 years, were recruited to complete an online survey consisting of several assessment items, to identify the factors explaining how thinness and muscularity interact in predicting Muscle Dysmorphia and disordered eating in men. Although it is known that internalisation of the ideals of thinness and muscularity are associated with body dissatisfaction and disordered eating, how these interact is not known. Regression models were used to test the interactive effects of thinness and muscularity internalisation on (a) muscle dysmorphia symptoms and (b) disordered eating. The researchers found that, '… men who internalised the muscular ideal had higher levels of muscle dysmorphia when they did not highly internalise the thin-ideal'. (Klimek et al., 2018, p. 352) Nevertheless, the authors believe that both the muscularity ideal and thin-ideal should still be considered regarding the development of male disordered eating behaviour (Klimek et al., 2018).

Muscle Dysmorphia has only been recently identified as a psychological disorder and is not yet included in the DSM-5 (2013). Because of this, there are no clear diagnostic criteria or validated instruments for effective diagnosis. Australian researchers, Murray et al. (2010) explain, in a synthesis of extant literature on the disorder that since its inception there has been a lack of consensus relating to its place as either an eating disorder, or a type of BDD within the somatoform disorders. The authors suggest that, although Muscle Dysmorphia shares many of the obsessive qualities of BDD, it may be of greater clinical utility for the disorder to be re-analysed through the lens of an eating disorder. They argue that recognising the male experience of eating disorder pathology may help reduce the

number of Muscle Dysmorphia cases being included in the EDNOS category of the DSM-5 (2013) and suggest that categorising it as an eating disorder will enhance visibility and the opportunity for increased research (Murray et al., 2010).

In a narrative review undertaken from a public health perspective, Australian researchers, Mitchison and Mond (2015) discuss the difficulties in identifying the public health burden of male eating disorders arguing that the accuracy of data is critical to inform the resources needed to provide effective interventions. The authors cite low base rates (very few data have been collected and analysed), residual diagnostic categories and the female-centric nature of current classification schemes as major issues to epidemiological accuracy. In addition, due to a lack of appropriate assessment tools, there are difficulties in accurately investigating specific factors that contribute to male eating disorders. Discussing Muscle Dysmorphia and muscularity-oriented excessive exercise in particular, the researchers agree with those of the previous two studies (Murray et al. 2010; Griffiths et al. 2013), about the need to re-classify Muscle Dysmorphia as an eating disorder to encourage the development of specific assessment tools and research. However, they also stress that a focus on features of a disorder, rather than just on diagnoses, is more likely to advance the field (Mitchison and Mond, 2015).

In this section, the current literature on BDD and Muscle Dysmorphia was presented and discussed and the intricate links of both of these to eating disorders was highlighted. The acknowledged difficulties relating to diagnosis, given the inherent interdependency of both conditions, was also presented to further underline the overall complexity, and lack of clear demarcation, between the various types of disorder that hold negative body image as its genesis. Although research in the field is limited, especially regarding Muscle Dysmorphia, several articles have been published recently that raise awareness of this disorder and its link to eating disorders, and body image concerns, in men (Anorexia Nervosa Genetics Initiative (ANGI), 2015, Griffiths et al., 2015, Neumark-Steiner and Eisenberg, 2015, Mitchison and Mond, 2015, Field et al., 2014).

Both BDD, and Muscle Dysmorphia, rely heavily on disordered body image to trigger the disorders in susceptible individuals. The ongoing narrative of weight-

loss as the crux of the Australian anti-obesity campaign may, unfortunately, be perceived as authorising the view, often depicted in the media, in advertising and on health and fitness websites, that to be acceptable, a healthy male must possess a lean, but muscular, body.

Lastly, body image was examined, in some detail, because of its underlying role as the cornerstone in the formation of a positive, or negative, relationship with the body, thus, governing susceptibility to development of disordered eating. Literature was presented and discussed supporting the fact that this is valid for men and women alike.

4.4. Eating disorders can affect anyone

In this section of the review, eating disorders are explored for the effect they may have, not only on women and girls but other population groups, such as children and men. Men who identify as gay, in particular, are discussed because of the unique challenges some may face when pursuing their desired appearance whether muscular or thin-ideal.

This thesis, thus far, has shown that eating disorders are clearly extremely complex and intersect many other related conditions such as BDD and negative body image. In addition, the DSM-5 (2013) determines clear, strict criteria for diagnosing eating disorders, one of which is weight-loss. So, although individuals may become very unwell as a result of an eating disorder other than Anorexia, this may not be recognised as such until well advanced.

Children and eating disorders

Although adolescent girls and young women are most commonly the focus of eating disorder research, it is critical for early intervention to identify when factors that influence disordered eating, such as media exposure to the thin-ideal and peer pressure, begin to have an effect on children's behaviour.

An Australian study of five-year-old girls, conducted by Damiano et al. (2015), demonstrated that disordered eating and societal pressures to be thin may be affecting very young girls. The aim of the study was to explore individual and

sociocultural factors related to 5-year-old girls' dietary restraint. Participants were 111 5-year-old girls interviewed about their dietary restraint, body image, appearance ideals, positive weight bias, and peer conversations. The mothers of the girls completed a questionnaire about dietary restraint and appearance ideals and measures assessing their daughter's media exposure and peers' appearance interest. Results revealed that, 'A moderate level of dietary restraint was reported by 34% of girls, half showed internalisation of the thin-ideal, while the majority were satisfied with their body size' (Damiano et al., 2015, p.23). Also, 'Higher levels of girls' dietary restraint were associated with the attributing positive characteristics to thinner figures, greater internalisation of the thin-ideal and peer conversations' (Damiano et al., 2015, p.23). The authors argue that this study confirms the hypothesis that the consideration of food restriction/dietary restraint is not necessarily linked to negative body image but that, '... girls may have a tendency to diet due to social pressures rather than dissatisfaction with their size' (Damiano et al., 2015, p.23).

Although the focus of weight-related research is generally on females, there is growing evidence that young boys are also affected by weight concerns. A study by Daraganova (2013) of 2,212 boys and 2,119 girls of age 8-9 years and 2,075 boys and 1,975 girls of age 10-11 years, conducted for the Australian Institute of Family Studies (AIFS), showed that body image and weight concerns may affect boys as young as eight to nine years of age. Regardless of whether the boys were satisfied with their body image or not, a similar pattern of weight-control aspiration emerged, 'Among boys who were satisfied with their body size, 30% of underweight, 49% of normal weight and 65% of overweight boys tried to control their weight. A similar pattern was observed among those who were dissatisfied with their body; that is, 39% of underweight boys, 63% of normal weight and 84% of overweight boys tried to control their weight' (Daraganova, 2013, p.122). However, research indicates that as boys mature, they aspire to the muscular ideal rather than the thin-ideal that persists with girls (Murray et al., 2013).

A Western Australian, a study by Allen et al. (2009), explored possible predictors of eating disorders in a population-based sample of 14-year-old boys and girls (N=1597). Using previously collected antenatal, biomedical, familial, demographic,

and psychosocial data (including the routine collection of anthropometric data at school), the researchers found that, '… parents' perceptions of their child's weight are more powerful than objective child body weight in predicting the development of eating disorders' (Allen et al., 2009, p.807). The authors conclude that these findings, '… have implications for the prevention of eating disorders, particularly in light of recent increases in the prevalence of childhood obesity' (Allen et al., 2009, p.800). The practice of collecting anthropometric data at school, often beginning in early primary school, and distributing a child's report to the parents, has been usual practice in Australia for many years.

Parental identification of their children as overweight may appear to be considered an important requisite in tackling childhood obesity. However, in a similar vein to the previous research, a study by Robinson and Sutin (2017) clarifies why this may negatively affect a child arguing that, '… parental identification of their child as being overweight results in that child viewing his or her body size negatively and attempting to lose weight, which eventually results in weight gain' (Robinson and Sutin, 2017, p. 321). The researchers conducted two studies. One of these used Australian data from The Longitudinal Study of Australian Children (LSAC), a longitudinal cohort study of Australian families (N= 4,983) in 2016. The other used data from the Growing Up in Ireland (GUI) cohort which is a nationally representative cohort study of children living in the Republic of Ireland (N=. 8,568 families) across 2007 and 2008. Both studies demonstrated that children whose parents perceived them to be overweight were more likely than their peers to be actively trying to lose weight. As the authors point out, 'This same pattern of results was observed across two cohorts of children and their families in two different countries, which suggests that these mechanisms are not culture-specific' (Robinson and Sutin, 2017, p. 326).

Early diagnosis of eating disorders in children is preferable but difficult. Researching the difficulties, Madden et al. (2009), prospectively studied Early Onset Eating Disorders (EOEDs) in 5-13-year-olds (N=101). Using the national surveillance system of the Australian Paediatric Surveillance Unit (APSU), from 2002 to 2005, the researchers collected information from paediatric specialists, of all disciplines, to identify EOEDs. They found that 78% of the total (N=101) had

been hospitalised, many with severe medical complications. However, when the DSM-4 (2000) diagnostic criteria for eating disorders (the precursor to the current version) were applied, only 38%, of the 78% admitted to hospital met the criteria for Anorexia Nervosa. Although 67% of this cohort met the psychological criteria, and 61% had potentially life-threatening complications of malnutrition, only 51% met the weight criteria. Discussing the limitations of the DSM-4 (2000) diagnostic criteria, the authors conclude, 'This highlights the limitations of a criterion that requires a body weight less than 85% of ideal weight (or expected weight during a time of predicted growth)' (Madden et al., 2009, p.411). It should be noted that although the DSM-4 (2000) has now been superseded by the DSM-5 (2013); the criterion for weight is unchanged.

In a similar vein, Australian researchers, Sawyer et al. (2016) investigated adolescents who had lost significant amounts of weight but had not yet reached a classification of underweight. The researchers sought to describe the physical and psychological morbidity of adolescents with atypical Anorexia Nervosa (AN) and to compare them with underweight adolescents with AN. Between July 2010 and June 2014, 42 adolescents with atypical AN were recruited for the study as part of the eating disorders program at the Royal Children's Hospital, Melbourne. In addition, 118 adolescents diagnosed with full-threshold AN (formal criteria including underweight were fully met) were also recruited. The diagnosis was determined using the Eating Disorder Examination and anthropometric measurement to assess BMI. Psychological morbidity measures included eating and weight concerns, bingeing, purging, compulsive exercise and psychiatric morbidity. The results revealed that more adolescents in the atypical group had lost more weight compared to the AN group (17.6 kgs. vs. 11.0 kgs.) over a longer period (13.3 months vs 10.2 months). There was no significant difference between the two groups regarding the physical findings of orthostatic instability or bradycardia. Likewise, there was no significant difference in the frequency of psychiatric comorbidities or suicidal ideation. The writers found that, 'Distress related to eating and body image was more severe in atypical AN' (Sawyer et al., 2016, p. 1) than those with diagnosed AN (Sawyer et al., 2016).

The findings of this study support those of other researchers Maddern (2009) and Schneider (2017) with respect to the seriousness of sub-threshold disorders. According to Sawyer et al. (2016), 'Despite not being underweight at presentation, nearly 1 in 4 adolescents with atypical AN had bradycardia, 1 in 3 had amenorrhea, and >40% required admission to hospital' (Sawyer et al., 2016, p. 3). The researchers warn that because of the well-known health and social impacts of obesity, health professionals and parents typically welcome any weight-loss in their adolescent children. However, the authors are clear that any weight-loss in adolescents should be assessed for physical, behavioural and psychological findings that may signal an underlying eating disorder in order to ensure early intervention (Sawyer et al., 2016).

Men and eating disorders

When considering whether the anti-obesity campaign has contributed to an increase in eating disorders, it is critical to examine all populations to gain a thorough understanding of the multifaceted presentations of these disorders, and the possible depth of the problem. Examining how eating disorders manifest in males provides insight into how they may differ from females. The inclusion of literature on gay men, while acknowledging that not all homosexual men identify with the gay community, provides a richness of information that may not be reflected in the general male community.

Although the majority of eating disorders are generally portrayed as almost completely female-dominated, the NEDC report that, '… large population studies suggest that up to a quarter of people suffering from Anorexia Nervosa or Bulimia Nervosa are male, and almost an equal number of males and females suffer from Binge Eating Disorder' (National Eating Disorders Collaboration, 2017d, p.1). The NEDC also explain that under-diagnosis and cultural stigma prevent many young men from seeking help, thus, the actual proportion of eating disorders may be higher in this group. Bulimia Nervosa generally affects males in their late teens/ early twenties, while Binge Eating Disorder (often part of BDD) tends to affect men in their mid-twenties (National Eating Disorders Collaboration, 2017d).

The Anorexia Nervosa Genetics Initiative (ANGI) was, according to their website, the world's largest, and most rigorous, investigation into Anorexia Nervosa ever undertaken. Findings of this initiative suggest that, '… eating disorders in males may be increasing at a faster rate than among females and this may be a direct result of a more "toxic" advertising environment' (Anorexia Nervosa Genetics Initiative (ANGI), 2015, para 6). It is argued that advertising campaigns based on taut, beautiful bodies may act as triggers for men, as much as for women, and that both groups share the same fears of weight-gain and obesity. As one of the researchers, Wade (2015), explains, 'A need for perfection, an obsessive personality, a desire to be in control or alternatively, feelings of ineffectiveness, alienation and inability to cope with the challenges of life, appear just as commonly in men with the illness, as in women' (Anorexia Nervosa Genetics Initiative (ANGI), 2015, para 11).

Strother et al. (2012), in an article examining the literature on eating disorders in men, suggest that males suffering from eating disorders must overcome 'immense stigma', and, because of this, are diagnosed and treated less often than their female counterparts. The writers also reiterate the claims of the NEDC in proposing that as many as 25% of eating disorders are found in men, with Bulimia being more prevalent than Anorexia. They conclude that, '… men with eating disorders are currently under-diagnosed, undertreated, and misunderstood by many clinicians who encounter them' (Strother et al., 2012, p.346). Because of this, there is a lack of available, evidence-based interventions targeting eating disorders in males (Strother et al., 2012).

In 2008, two meta-analyses were conducted in the US by Bartlett et al, '… to determine the extent to which pressure from the mass media to conform to the muscular "ideal" male body affects men's self-image, for instance, body satisfaction, body esteem, and self-esteem' (Barlett et al., 2008, p.279). Twenty-five studies contributing 93 effect sizes were included in the two meta-analyses. Results revealed that, '… pressure from the mass media was significantly related to men feeling worse about their own bodies' (Barlett et al., 2008, p.279). The researchers argue that pressure from the mass media to conform to the ideal male body is related to body dissatisfaction, reduced self-esteem and body esteem, and

psychological disorders such as depression and over-exercising (Barlett et al., 2008).

In Australia, in 2003, the State Government of Victoria requested that a Parliamentary Inquiry be conducted into body image and young people of all genders. Titled, 'Inquiry into issues relating to the development of body image among young people and associated effects on their health and well-being,' the aim of the inquiry was to guide effective action to prevent eating disorders by focusing on the triggers for these in Victoria. This Inquiry investigated all youth, not just females. The final report, released in 2005, recommended that, amongst other more government-led project matter, the State Government of Victoria dedicate funding for the establishment of an Australian centre for research into body image and eating disorders and that a code of conduct for the media industry be developed recognising the media's social responsibility to display images that are representative of the community (Family and Community Development Committee, 2003). To date, no government, or other, documentation that relates to either this report, or these recommendations, could be located.

Gay men and eating disorders

Earlier, in Chapter 4.3, Muscle Dysmorphia was discussed along with its effects on men and eating disorders. As mentioned in that section, Griffiths et al. (2013) observed that there is little research on how disordered eating pertains to the muscular ideal and that most men in Western society today favour a male body with a low fat percentage, but muscular with broad shoulders and a thin waist (Griffiths et al., 2013). However, the literature is sparse on how Muscle Dysmorphia may affect gay men. The following section explores the literature available on gay men, body appreciation and disordered eating.

Questioning whether susceptibility to eating disorders is more prevalent in the male gay community, the US National Eating Disorders Association (NEDA) argue that, 'Compared with heterosexual men, gay and bisexual men have a significantly higher prevalence of lifetime full syndrome Bulimia, subclinical Bulimia, and any subclinical eating disorder' (National Eating Disorders Association, 2017, para 7). However, NEDA also report that, 'A sense of connectedness to the gay community

was related to fewer current eating disorders, which suggests that feeling connected to the gay community may have a protective effect against eating disorders' (National Eating Disorders Association, 2017, para 7). The NEDA reportedly used existing research to formulate their report; however, the literature sources are not identified.

The finding by NEDA, that gay men accrue resilience by affiliation with their population groups is not supported by other evidence that demonstrates that sexual minority males (SMM) often feel more distressed the greater their affiliation to their minority community. According to Simpson et al. (2016), '… contemporary gay communities place greater emphasis on male appearance than the heterosexual culture …' (Simpson et al., 2016, p. 1282).

An Australian study by Yelland and Tiggemann (2003) investigating body image concerns and eating disorders in 158 individuals (52 homosexual men; 51 heterosexual men and 55 heterosexual women) found that, 'Gay men were found to score significantly more highly than heterosexual men on all measures of disordered eating, and did not differ significantly from women on Drive for Thinness or Bulimia' (Yelland and Tiggemann, 2003, p.107). This study suggests that the findings differ from studies of general male populations where drive for muscular ideal has been demonstrated to be paramount (Field et al., 2014, Griffiths et al., 2013). However, this finding is not supported by other research that indicates gay men are more likely to demonstrate a drive for muscularity than thinness in line with their heterosexual counterparts rather than the pursuance of the thin ideal (Alleva et al., 2018, Brennan et al., 2011, Duggan and McCreary, 2004).

Simpson et al. (2016) contends that both the drive for thinness and the drive for muscularity may be found within gay men's communities explaining that, '… body image disturbance in SMM involves both drive for thinness and drive for muscularity …' (Simpson et al., 2016, p. 1282). The US researchers studied the connections between heterosexism, mental health, body appreciation and community consciousness in SMM. Accepting that sexual minority groups such as

SMM experience stress due to marginalisation (minority stress perspective[2]), they conducted a national online survey using existing standardised questionnaires. Eighty-nine participants completed a set of questionnaires assessing their experiences with heterosexism[3], symptoms of depression and anxiety, body image and community consciousness (a sense of belonging to the gay community). The results revealed that heterosexism, especially harassment and rejection, was, '… a unique positive predictor of mental health problems and a unique negative predictor of body appreciation …' (Simpson et al., 2016, p. 1279). In turn, depression was also a unique negative predictor of body appreciation. Furthermore, '… depression mediated the relationship between harassment/rejection heterosexism and body appreciation, but only in men who endorsed high community consciousness' (Simpson et al., 2016, 1279). The authors argue that this study indicates a high degree of body dissatisfaction within SMM groups, and, like other populations, this generates a vulnerability to the development of disordered eating. In addition, far from being a support, affiliation with the gay community may potentiate the increase the risk of mental health disturbances, particularly body dissatisfaction (Simpson et al., 2016).

Studying the correlates of body appreciation in men and the differences across sexual orientation, UK researchers, Alleva et al. (2018) conducted an online survey comprising several existing, standardised questionnaires with 440 men (301 identified as heterosexual, 114 as gay, 14 as bisexual, 3 as 'other', 7 indicated that they would prefer not to say and 1 did not answer the question). The researchers found that, 'Body appreciation was lower among sexual minority (men) compared to heterosexual men, and athletic appearance-ideal internalisation and upward appearance-based social comparisons mediated this relationship' (Alleva et al., 2018, p. 174). In addition, '… men with higher levels of body appreciation (were

[2] 'Minority stress is the relationship between minority and dominant values and resultant conflict with the social environment experienced by minority group members.' American Psychological Associaton. Washington DC. Available: https://www.apa.org/pi/aids/resources/exchange/2012/04/minority-stress [Accessed 22nd March 2019].

[3] Heterosexism is the, 'Discrimination or prejudice against homosexuals on the assumption that heterosexuality is the normal sexual orientation.' Oxford University Press. 2014. *Oxford Dictionaries* [Online]. UK. Available: https://en.oxforddictionaries.com [Accessed 5th September 2019].

found to) endorse lower levels of conformity to masculine norms' (Alleva et al., 2018, p. 174). The findings of this study support the proposed connection between SMM and the muscular ideal.

Progressing the research on gay men and disordered eating, Brennan et al. (2011) conducted a study with participants (N=383) of the annual Pride Toronto festival go investigate whether certain psycho-social factors, such as race, age and history of sexual abuse (CSA), were associated with disordered eating symptomatology (DES). The researchers used cross-sectional data collected from the festival. Multivariate analysis demonstrated that CSA, depression, being White (compared to Black or Asian), being younger, and engaging in behaviours to increase muscle mass. The researchers suggest that the increased vulnerability of White-identifying men may arise because of, '... media images and gay cultural norms that are oriented around an idealised White body of a specific stature and shape' (Brennan et al., 2011, p. 262).

US researcher, Chaney (2008), in a study (N=304) exploring loneliness, Muscle Dysmorphia and gay and bisexual men, used an online questionnaire to find out whether gay and bisexual men who reported symptoms of Muscle Dysmorphia, also reported increased feelings of loneliness and reduced self-esteem than gay and bisexual men who reported fewer symptoms. Participants (N=304) completed three validated assessments examining muscle appearance satisfaction, self-esteem, and loneliness. According to Chaney, a relationship was found to exist for gay and bisexual men among self-esteem, loneliness and Muscle Dysmorphia. Furthermore, the higher the number of Muscle Dysmorphic symptoms displayed, the higher the feelings of loneliness and the lower the reported self-esteem (Chaney, 2008). Although the findings support Chaney's hypothesis, he points out that the scales used to assess the items are standardised only for the general male population. When the specific socio-cultural factors of gay men are considered, the tools used, in this instance, may prove to be unsuitable.

Although there appears to be evidence that gay men are more susceptible to acquiring a negative body image than heterosexual men, and that this may be linked to affiliation with gay culture, it is unclear whether the muscular ideal is

more aspirational to gay men than the thin ideal although this hypothesis appears to be supported.

Stigma and eating disorders

When comparing eating disorders to obesity in terms of stigma, there is a scarcity of research examining whether stigma in eating disorders is of concern either to professionals or to affected individuals. However, this topic is often discussed on many Pro-Ana (Anorexia) and Pro-Mia (Bulimia) blogs and websites. The influence of these blogs and websites will be discussed in more depth later in the literature review.

A British article, published in 2009, surveyed 250 female university students using a vignette of a 15-year-old female presenting with symptoms of Anorexia Nervosa, to elicit possible negative reactions. Although the results from this study are mixed, the vignette elicited mainly positive responses. However, the questions addressing self-centredness, and social distance, did elicit some negative responses. The authors describe several students who stated that they, '… had at some stage thought that it "might not be too bad" to have the problem described' (Mond et al., 2009, p.519) and express concern at this finding. They argue that, 'The fact that many participants recognised the severity of Anorexia Nervosa on the one hand, yet, on the other, attributed desirable properties to it, indicates the ambivalence towards eating disordered behaviour that exists among women in the community' (Mond et al., 2009, p.528).

Comparing the degree of stigma associated between Anorexia Nervosa, Bulimia Nervosa, and Depression, American researchers Roehrig and McLean (2010) used a questionnaire to elicit responses from 118 individuals. Similar to Mond et al. (2009), the participants were university students. Results revealed that Anorexia Nervosa elicited more stigma than Bulimia Nervosa, and both elicited more stigma than Depression. According to the authors, 'Roughly one-third of our sample held the attitude that individuals with eating disorders, especially those with Anorexia Nervosa, are responsible for their disorder' (Roehrig and McLean, 2010, p.673). The authors suggest that Anorexia Nervosa is perceived more negatively that Bulimia Nervosa because of the visibility of Anorexia Nervosa symptoms, such as

emaciation. They argue that the views of the participants, that those with eating disorders can control their weight, and hence, their appearance, and that Anorexia Nervosa merely represents attention-seeking, is linked to the belief that it is the duty of every individual to control his/her body and its appearance. The researchers conclude that, '... eating disorders are perceived as merely an extreme effort to influence these aspects of appearance' (Roehrig and McLean, 2010, p.673).

These findings echo those of Chiodo et al. (1984) who also found that the general public views Anorexia Nervosa as essentially attention-seeking (Chiodo et al., 1984). Other researchers have found that the public views Anorexia Nervosa as being, at least in part, due to Narcissism (Gowers and Shore, 1999). These findings highlight the general difficulty the public may have in understanding eating disorders and what causes them and although both studies are old, there is no evidence to suggest that the lack of public understanding of eating disorders has changed.

An Australian study by Star et al. (2015) investigated perceived discrimination and positive attitudes toward three types of eating disorder sufferers: a female sufferer of co-morbid obesity and BED; a female underweight sufferer of AN; and a male Normal Weight Eating Disorder (NWED) sufferer. Face to face interviews were carried out with over 3000 participants as part of a large, cross-sectional, single-stage general population survey larger conducted under the auspices of the South Australian Health Commission in 2005. Vignettes of an underweight female with Anorexia Nervosa (AN), a normal weight male with an atypical eating disorder (NWED) and an obese female with Binge Eating Disorder (BED) were presented to three randomly selected sub-samples of the larger survey population with n = 983, 1033 and 1030 respectively. The interview questions assessed participants' attitudes towards, and beliefs about, the person described in the vignette and their eating behaviours. Of the participants who responded to the BED vignette, 66% believed that the person described would experience discrimination because of her weight, 48% predicted that there would be discrimination against the person with AN because of the perception that it reflects self-absorption and that it is controllable. Thirty-five percent of respondents thought that the male with NWED

might face discrimination. However, conversely, ‘A positive regard for weight-loss or body-image-enhancing eating disorder behaviours was reported "occasionally", or more often, by 8.8% of respondents to the AN vignette and by 27.5% of respondents to the NWED vignette' (Star et al., 2015, p.1). This view was significantly more likely to be held by obese participants. The researchers argue that the findings of the study support the need for an integrated eating disorder and obesity prevention programs to address weight stigma and to ameliorate the social desirability of eating disorder behaviours in vulnerable individuals (Star et al., 2015). Comorbidity of obesity and eating disorders is discussed in more depth later in the literature review.

The feminist perspective

Although eating disorders affect men, in the current research, it is women who represent the majority of participants across all of the current studies. Considering the effect on women of structures of power and privilege inherent in Westernised society that favour men, it would be remiss not to explore how these illnesses are perceived and explained from a feminist viewpoint. To understand feminist theory, it is important to consider the recent history of feminism, and that the definition of this is not immutable. Carlson and Ray (2018) explain how the emphasis has changed following two primary shifts that have occurred since first wave feminism, ‘… from universalising to particularising and contextualising women’s experiences …’ and from, ‘… conceptualising men and women as categories and focusing on the category “women” to questioning the content of that category, and moving to the exploration of gendered practices’ (Carlson and Ray, 2018, para 1).

Many feminist writers have attempted to explain Anorexia within a feminist theoretical framework by exploring the aforementioned gendered practices. Generally speaking, these writers seek to understand Anorexia either as a disease that reflects a striving to conform to the classic feminine ideal of slenderness and restraint or as a form of rebellion against the roles commonly expected of women, that is, to be soft, compliant and nurturing. Historically, Anorexia has been considered to be a problem situated within the individual, however, more recent

feminist writers' question this and argue that eating disorders and body image difficulties are (mostly) peculiar to women and indeed the problem is located within society affecting whole populations, not just individuals. This pursuance of an epidemiological approach to Anorexia, especially with regard to prevention, is recent and in accordance with other disease approaches over the last 10-15 years. This will be discussed later in the section.

Eating disorders other than Anorexia are less represented in feminist literature, thus, from the perspective of the growing understanding of the complexity of modern-day eating disorders, the literature can appear a little lacking in relevance. However, the overall discussion on Anorexia by Bruch (1973), Orbach (2006; 1986; 1978) and Bordo (1993), whether it reflects super-compliance with, or rebellion against, the feminine ideal, is still highly relevant as a basis for considering the growing complexity of eating disorders today (Orbach, 2006, Orbach, 1986, Orbach, 1978, Bruch, 1973, Bordo, 1993).

Bruch (1973) wrote, 'No human society … deals rationally with food' (Bruch, 1973, p. 3), arguing that eating disorders begin early in life with a confused relationship with food. This may ultimately escalate to the using of food as non-biological currency to control someone (usually an emotionally vulnerable child or adolescent) in a family where achievement and perfection are paramount. In this way, power relations hold sway in the family with food the tool with which to barter and also to demonstrate resistance. Bruch explains that growing up in a pressurised environment of parental dominance, girls, in particular, may find that they have very little control over her own life choices, ultimately using food refusal as the one tool still under her control to resist family pressure and exert her independence. Thus, Bruch, while recognising critical external factors, such as family and societal expectations, considers Anorexia to be a problem located within the individual necessitating intervention at this level. The writer argues that, ' … obesity and Anorexia Nervosa are related to faulty hunger awareness; that "hunger" is not innate knowledge; learning is necessary for its organisation into recognisable patterns' (Bruch, 1973, p. 5). Although written in the early 1970s, this description resembles the current practice of intuitive eating, a skill taught to an individual in order to recognise and respond to body signals and, thus, avoid over-

eating or binge eating. Intuitive eating will be discussed in more detail later in the thesis.

Orbach (1978) also situates eating disorders within the individual. Indeed, the subtitle of her seminal book, 'Fat is a Feminist Issue', is 'The Anti-Diet Guide' and in its later iterations, from 2006 onwards, includes a lesser-known work, 'Conquering Compulsive Eating'. This is a diet book, clearly inferring that it is the individual who needs to change. Nevertheless, Orbach does recognises the outer, daily forces that impinge on a woman's sense of self and self-esteem, arguing for attitudinal change to the meanings associated with being fat or thin, rather than expecting women to comply with the narrow circumscription of what constitutes 'normal' at a particular point in time (Orbach, 1978).

In her later book, 'Hunger Strike: The Anorectic's Struggle as a Metaphor for Our Age', Orbach (1986) writes about Anorexia as a rebellion against, not only what is expected of a female in Western society, but also against her own needs to prove that she is strong enough to withstand her own hunger. Orbach explains that, 'In dominating her existence Anorexia negates the force of other needs' (Orbach, 1986, P. xvii). Her presented argument is that the anorexic's battle to be thin represents the complicated relationship between women and food and the battle for self-determination. Although appearing, at first glance, to conform in an extreme way to the demands of society in how a woman should be, that is, to be small and not take up too much space, Orbach writes that the woman with Anorexia is engaged in a battle of wills to control her hunger and her emotions. By battling for her autonomy, she rebels against the often contradictory societal demands placed on her, hence, 'In demanding a superhuman submission to denial, it provides a self-contained and reliable way of being' (Orbach, 1986, p. xvii).

In an updated introduction to 'Fat is a Feminist Issue' (2016), and in a departure from her earlier work where the focus was clearly on the individual woman with Anorexia and her internal rebellion, Orbach appears to have broadened her view on the topic believing that, 'Eating has become a psychological, moral, medical, aesthetic and cultural statement' (Orbach, 2006, p. xiii). One of Orbach's strengths

is her ability to adjust to the changing nature of eating disorders over time, thus ensuring that her knowledge and influence remain relevant. Writing about women's continuing struggle with body image, she argues that, 'As long as bodies are by proxy the standard for women's self-evaluation and the evaluation of others, women will have difficulty with their food and with their body-image' (Orbach, 1986, p. 174).

Taking a different approach, Malson (1997) in her book, 'The Thin Woman', explores Anorexia from a socio-cultural viewpoint, as a product of discursive practices over the last two centuries. Discussing the various ways in which Anorexia has been categorised, she describes the pathologising process that defines the social construction of Anorexia as a female disease. In doing so, she writes, woman embody Anorexia, petite, gentle (i.e. not strong), and restrained, pointing out that, 'This relationship between "woman" and "pathology" has been apparent both in the gender-bias of various clinical diagnoses and in cultural representations of insanity and sickness as feminine' (Malson, 1997, p. 47). Writing in 1997 and prior to the advent of social media, Malson argues for the need to research and theorise Anorexia, '.... within a framework that acknowledges the complexities of its socio-cultural locations and that does not conceptualise Anorexia simply as an individual pathology, as a problem that originates in some way from the individual woman' (Malson, 1997, p. 6). The writer argues that, rather than construing Anorexia as a clinical entity entirely separate from the eating practices of 'normal' girls, the categorical distinction may not be valid and women diagnosed as Anorexic may not represent a population different from that of 'normal' women. Malson believed in 1997 that eating disorders might form part of a continuum between dieting and 'normal' eating, Citing the high frequency of dieting and the preference for thinness in the general population, she argues that, 'Rather, medical discourse in dialogue with the wider culture was "inscribed" on the (female) body that could be diagnosed as Anorexic' (Malson, 1997, p. 48).

Continuing in this vein, Malson and Ussher (1997), in their analysis of discursive constructions of the dying body in relation to Anorexia Nervosa, explain that although, 'The pernicious effects of the diet and fashion industries on many women's lives (and deaths) cannot be under-estimated ... ' (Malson and Ussher,

1997, p.3), it is simplistic to attribute the sole cause of Anorexia to this theory. The authors argue that Anorexia must be explored for its multiple meanings, particularly the complexities relating to its, '... multiple socio-cultural and gender-specific locations' (Malson and Ussher, 1997, p.3). They believe that by theorising and researching meanings around self-starvation, death and dying, in addition to meanings around, ' ... normative prescriptions of feminine beauty as thinness' (Malson and Ussher, 1997, p.3), a more thorough understanding may be gained about the discursive practices that regulate the act of dying as an Anorexic and therefore provide insight into the process of a body that is fading away. The authors suggest that, using Foucauldian theory, 'This construction (of the body fading away) may be read as signifying an avoidance of this disciplining and individualising gaze' (Malson and Ussher, 1997, p. 9). In this construction, Anorexia is a rebellion against sociocultural surveillance and critique as the body becomes less available for observing and judging (Malson and Ussher, 1997).

Malson's views are in contrast to Orbach's beliefs that the trigger for Anorexia is situated within the individual woman. However, neither of these authors was writing this literature in the current climate of increasingly different, and arguably more complex, eating disorders that now appear to affect more men, older women, and children than previously (National Eating Disorders Collaboration, 2017d, Slevec and Tiggemann, 2011, McLean et al., 2011, Damiano et al., 2015, Daraganova, 2013).

Writing in the late 1980s and using Foucault's concept of the docile body (Foucault, 1975), Bordo (1989) considers how women discern what is acceptable behaviour in society and writes, 'We no longer are told what "a lady" is or of what femininity consists. Rather, we learn the rules directly through bodily discourse: through images which tell us what clothes, body shape, facial expressions, movements, and behaviour are required' (Bordo, 1989, p.17). Thus, the docile body of Foucault (Foucault, 1975) is contained. In her own words, Bordo "appropriates Foucault" and his description of docile bodies to explain how women self-regulate their bodies by using the body as a practical locus of social control, '... through seemingly trivial routines, rules, and practices, culture is "made body"' (Bordo, 1989, p.13). She argues that, in this way, women are kept busy, thus undermining

more important pursuits (Bordo, 1989). These beliefs accord with the views of Orbach (1986), who wrote about women negating their own needs as they use their strength of will to withstand eating (Orbach, 1986) Bordo writes, 'The young woman discovers what it feels like to crave and want and need and yet, through the exercise of her own will, to triumph over need' (Bordo, 1989, p.22).

In a similar vein, but from a novel perspective, Fukui (2014) compares Anorexic women of the 14th and 21st Centuries, noting that, among similarities, such as gender and age, women from both centuries share a reverence for the body that, they believe, is in touch with a higher calling. Thus, the writer theorises, 'What if we were to reframe Anorexia Nervosa as misplaced asceticism, rather than a clinical entity to be cured?' (Fukui, 2014, para 4).

It is this negating of bodily needs that sets the Anorexic apart from conventional dieters. Nevertheless, as Bordo points out, Anorexia emerges out of what has become conventional feminine practice; dieting (Bordo, 1989).

Feminism as prevention and treatment of eating disorders

Applying a feminist lens to eating disorder literature to identify risk factors for their development, Piran (2010) argues that eating disorder prevention, as with all prevention models, must address risk and approach prevention using an epidemiological model whereby the eating disorder population is studied rather than individual cases. In discussing the value of using causes of incidence model rather than causes of cases model, Piran proposes that gender is the most obvious risk factor considering women are more highly represented in the eating disorder population than men, pointing out, 'While almost all eating disorder prevention programs have been administered to/with girls, only a handful of these programs have addressed gender as a risk factor.... ' (Piran, 2010, p.185). The author suggests that risk factor research utilise a feminist-informed approach considering how gender relates to other social variables and, '... examine its relationship to individual-level risk factors, such as the internalisation of thinness or negative body image' (Piran, 2010, p. 183). Because a feminist-informed approach to the prevention of eating disorders must, by definition, be embedded in critical analysis of social structures that inform, and influence, the individual sense of self and

body knowledge, the author argues that higher social factors must be addressed. In contrast to most prevention programs that focus on individual change, the writer suggests that factors, such as gender and ethno-cultural group membership, are critical to changing aspects of female oppression and empowering the community to guide systemic changes (Piran, 2010). Other feminist writers on the subject also hold this view. (Bordo, 1993, Malson, 1997, Orbach, 1986).

Similarly, Peterson et al. (2008) set out to examine the relationship between empowerment, feminism, body image and eating disturbance. Considering self-objectification and the internalisation of cultural ideas of beauty, the authors theorised that empowerment may be a protective factor against self-objectification, body image difficulties and the provocation of disturbed eating. This US study used a variety of ratified questionnaires to determine scores for disturbed eating, empowerment, feminist self-identification, relationship to one's body, physical appearance anxiety scale and sociocultural attitudes toward appearance. Participants were 276 young women with an average BMI of 22.8 and a mean age of 20.6 years. Ethnicities included European American, Latino/Hispanic, African American, and Asian American. European American constituted the largest group with 70.3% of all participants. Results demonstrated that empowerment was more predictive for protection of body image and eating disturbance than was feminism. The authors acknowledge several limitations including the participant group characteristics, in particular, the fact that the women were college students of a healthy weight. As they point out, these results may differ for older or obese women. A recommendation for further evaluation of empowerment as a protective factor for eating disorders is made with the suggestion that this could result in the development of a specific empowerment tool to measure empowerment when assessing the success of an intervention (Peterson et al., 2008). Although the researchers used the Feminist Identity Composite (FIC) as one of their data collection tools and found that the Empowerment Scale (ES) reflected that empowerment was more predictive for protection against body image and eating disorder disturbance, it could be argued that the feminist tool, by its very nature, embodies empowerment as one of the major pillars of feminism. The five theorised stages of feminist identity that

constitute the FIC may all be considered aspirational to the acquisition of empowerment. Stages such as, 'Passive Acceptance', which represents the acceptance of traditional female roles, 'Revelation'' which is the questioning of traditional gender roles, and 'Active Commitment', which is the commitment to changing social norms for gender equality, may all be construed as a striving for empowerment. Thus, it may be more productive to consider the ES as supporting the principles that underpin the FIC rather than the FIC being relegated as inferior to the ES as a predictor of body image and eating disturbances. This intertwining of the two tools may provide stronger guidance and support for the use of feminist principles, all based on empowerment, for the prevention and treatment of a variety of body image and eating difficulties including from a sociocultural perspective.

In a small qualitative study that evaluated a 10-week closed group intervention based on feminist approaches to eating disorders in a residential eating disorder clinic in the UK, Holmes et al. (2017) collected data using one-to-one qualitative interviews, analysed using thematic discourse analysis. Seven inpatients (mean age = 26 years) were studied throughout the ten-week course that included other complementary interventions, such as psychiatry and dietetics. Because of the often-encountered ambivalence towards feminism that many women hold, the authors report that, treatment principles were not overtly presented as feminist, but stemmed from sociocultural perspectives on gender. In conclusion, they believe that one of the most important results reported by several of the participants was the notion that their eating disorder could be viewed as external rather than an integral part of their being (Holmes et al., 2017). The participants in this study also appeared to feel a sense of relief that the illness with which they are struggling may be considered to be external rather than a personal defect reporting that, '… the groups were helpful in enabling them to situate their problem within a broader cultural and group context, that they could operate as a form of "protection" from ideologies regarding femininity …' (Holmes et al., 2017, p.1).

From a service user's viewpoint, Kate Leaver, writing in The Guardian, Australia in November 2017, explains how feminist reading helped her overcome her eating

disorder. Recovering in a residential treatment facility in Sydney, Leaver began reading Hunger Strike (1986) by Susie Orbach (Orbach, 1986). She writes that, 'Reading that book in hospital affected me in a way that no group CBT session ever did' (Leaver, 2017, para 5). Leaver explains that the book allowed her to think that she was not to blame for her illness, 'That anorexia existed outside of who I, as a person, fundamentally was' (Leaver, 2017, para 5). Following this, Leaver was able to consider her illness as emanating from without, rather than within, viewing her recovery as an exorcism of sorts; an external force that must be overpowered (Leaver, 2017).

Malson et al. (2010) propose that internalising a diagnosis of an eating disorder may result in reduced treatment efficacy because many sufferers struggle to self-construct a future self that is free of the eating disorder. To test this theory the researchers used semi-structured interviews in the UK and Australia on 39 hospitalised Anorexia and Bulimia sufferers, to explore the patient's perspective on past and current treatment, and their views on recovery and the future. They found that individuals suffering from eating disorders tend to be extremely knowledgeable about their own condition, often forming strong opinions about various medical professionals and treatment approaches. In terms of the future, '… many, though not all, participants also talked about recovery as hard or impossible to imagine for themselves' (Malson et al., 2010, p.25). Having internalised their diagnosis for years it becomes part of the individual's essential being, hence, ridding themselves of the disorder can equate, for some, to annihilation. The authors point out that the difficulty in self-constructing a new self, '… appears compounded by others' views that they are essentially stuck with their "eating disordered" selves' (Malson et al., 2010, p. 30). Respecting the individual's perspective and recognising that they are not merely passive recipients of care, is critical to the success of treatment intervention (Malson et al., 2010).

In this section, a summary background to eating disorders and their complexities was presented and discussed. Statistics were provided, where available, and definitions and explanations of lesser-known disorders presented. More specifically, this section sought to emphasise the intricacies, and often secrecy,

that surrounds eating disorders, and the consequent difficulties faced by researchers working in the field.

Body image was examined, in some detail, because of its underlying role as the cornerstone in the formation of a positive, or negative, relationship with the body, thus, governing, to some extent, susceptibility to disordered eating. Literature was presented, and discussed, supporting the fact that this is valid for all genders.

Lastly, an overview of common feminist theories in eating disorders was presented. The differences in the theoretical construction of the disease were explored, particularly regarding the intricacies and complexities that complicate clarity around treatment. The use of feminist theory and principles in treatment was also examined.

4.5. The power of the media

Promoting the thin-ideal

The NEDC write that body dissatisfaction, although an internal process may be influenced by external factors, such as family, friends, teachers, and especially the media. Additionally, those living in, '… appearance oriented environments, or who receive negative feedback about their appearance, are at an increased risk of body dissatisfaction' (National Eating Disorders Collaboration, 2015, para 4).

In this section, the role of the media, including social media, is examined for its role in the perpetuation of the thin-ideal and the resultant effect on body image and disordered eating. Particular attention is paid to social media for its part in providing spaces for the promotion of restrictive eating practices that mostly remain hidden from general scrutiny. In addition, the use of social media to assert personal agency is discussed with reference to online Pro-Ana sites and blogs. Finally, the way in which eating disorders may be hidden by the adoption of specific diets, particularly vegan and vegetarian, is explored because of its ability to affect a large audience eager to lose weight, thus risking the provocation of harmful food restrictive practices and ill-health. This topic is included within this section about the power of the media as, although no studies were found that examine online sharing of the vegan diet to lose weight, it is the subject of one of the studies in this thesis.

In discussing the role of the mass media in triggering and worsening eating disorders, Gordon (2000) writes that behavioural modelling of eating disorders is, '… radically enhanced by the media' (Gordon, 2000, p.173). He argues that, although there has been an examination of the influence of fashion models and the media on body image, there has been less focus on the role of the media in the modelling of Anorexia Nervosa itself. He cites programs that feature Anorexia Nervosa, such as 'The Karen Carpenter Story' (1989) that may inadvertently glamorise the illness. Karen Carpenter, and her brother Richard, were a popular musical duo in the 1970s. Karen became concerned about her weight in her mid-teens and began dieting in high school. Receiving more attention and praise, she continued to restrict her intake until she progressed to Anorexia Nervosa in her

early 20s. She died in 1983 from cardiac complications of Anorexia Nervosa aged 32 years (Hoerburger, 1996). Gordon argues that documentaries, articles in women's magazines and the proliferation of autobiographical books about the illness, with the stated intention of educating the public, may be unintentionally idealising self-starvation, especially in those who are susceptible. Gordon states that anecdotal evidence suggests that these influences may be important in the shaping of Anorexic symptoms (Gordon, 2000).

The theory proposed by Gordon (2008) that those wishing to lose weight may imitate eating disordered behaviour is confirmed by the following two personal stories written by women suffering or recovering, from an eating disorder.

Autobiographical perspectives

In her autobiography 'Wasted', Hornbacher (2006), speculates; 'I cannot help but think that, had I lived in a culture where "thinness" was not regarded as a strange state of grace, I might have sought out another means of attaining that grace, perhaps one that would not have so seriously damaged my body, and so radically distorted my sense of who I am' (Hornbacher, 2006, p.151).

Likewise, Osgood (2015), in an autobiographical account of her own struggle with Anorexia, 'How to Disappear Completely: On Modern Anorexia', recounts her discussions with other sufferers while in hospital undergoing rehabilitation. She describes how they relished being Anorexic and would label patients, 'a real Anorexic', or, 'a fake Anorexic', depending on the patient's commitment to the disease. In addition, she discusses the level of competition, always present, to be the worst Anorexic of all time, which included learning how to be Anorexic by reading autobiographical accounts of girls suffering, or recovering, from Anorexia Nervosa. She clearly describes the instant that she became Anorexic at 13 years of age while eating lunch with friends. She remembers suddenly feeling out of place and fat, and years later, wonders, '…was it possible that I had actually developed this habit after I read Hornbacher's book, "Wasted"? (Osgood, 2015, p.775). Osgood also recounts how she used Pro-Ana (Pro-Anorexia) websites in order to

learn techniques and hone her craft (Osgood, 2015). Pro-Ana websites will be discussed in more detail later in this section.

With reference to the media and advertising, Sophia Hatzis (2016), writing for the Huffington Post about how she overcame her eating disorder, laments that, 'The hardest part about being in recovery from an eating disorder, without question, is having to gain weight and eat more when society is overwhelmingly encouraging you to do the opposite. I can't go one day without seeing an ad for a weight-loss product or a dieting regime' (Hatzis, 2016, para 16).

Discussing how she learned the techniques of food restriction, Chernik (1995), explains how she dieted successfully prior to the onset of her eating disorder, 'Magazine articles, television commercials, lunchroom conversations, gymnastic coaches and write-ups on models had saturated me with diet-savvy' (Chernik, 1995, p.76). Chernik, a self-described committed feminist and writing in the genre, explains that her feminist counterparts still use Anorexic ideals with which to measure and validate themselves (Chernik, 1995).

This need for validation is also apparent in the autobiography of an Australian woman, Fiona Wright. In her book, 'Small Acts of Disappearance' (2015), she writes about her struggle with eating, and seeking validation, stating, 'I want to begin on the Internet too because of an image that circulates, from time to time, within this community of illness – virally, as it were – an "affirmation card"…' (Wright, 2015, p.543-544). Wright refers to the validation that is often acquired when eating disorder sufferers share online experiences. This validation, however, is not usually achieved outside of the eating disorder community as the public mostly believe that eating disorders are a bid for attention and under the individual's control (Wright, 2015)≥

Media portrayal of bodies

Discussing how body-size acceptance has changed over the years, Bordo (1993), while watching a show documenting the reactions of a group of ten-year-old boys to pictures of famous 1980s models, is appalled by the boys' reaction of disgust to the smallest protuberance on a model's body, which they labelled as fat. She then

realises, to her surprise, that she too is reacting negatively to the images and ponders how much cultural change has altered our perception of fat bodies (Bordo, 1993). While the writer expresses surprise at her own subconscious feelings, she recognises that the cognitive dissonance between her conscious mind, with its willingness to accept all body-sizes, and her subconscious mind, with its often subliminally-acquired beliefs, is an inner conflict many women face daily. Bordo's observation on how the parameters of body acceptance have narrowed over the years is illustrated by an article that appeared in The Guardian's UK publication in November 2018, exposing the dangers of the messages promoted in the annual Victoria's Secret lingerie show. The show, an annual event held in the US, features tall, thin models dressed in lingerie designed by international designer Victoria's Secret. Jenny Stevens, a writer for the Guardian, exposes the acknowledged, and unacknowledged, truth about the annual event that began in 1995 and, since 2001, has been broadcast annually on prime-time US television amassing over 1 billion views worldwide in 2017. As Stevens points out, anyone with access to social media would find it difficult to avoid the annual event which is usually shared widely across many social media platforms. Furthermore, as the three top Victoria's Secret models, Stevens reveals, have more than 163 billion followers on Instagram, global influence is assured. In November 2018, the chief marketing manager of Victoria's Secret stated that, '… he didn't want transgender models in the show because it would spoil the "fantasy"', and, '… there was no interest in portraying a wider range of sizes and shapes' (Stevens, 2018, para 5). However, Stevens believes that, 'The show's uniformly tall and thin models seem an anachronism in a world that increasingly celebrates body diversity' (Stevens, 2018, para 4). The writer further explains that, not only are the models encouraged to embrace the type of athletic training usually reserved for competition but are also forced, because of strict weight limits, to drastically reduce food intake. What separates the Victoria's Secret show from other international fashion shows is the potential harm due to its global reach across all types of media, particularly to young women. This is, Stevens argues, what makes the problem so pernicious (Stevens, 2018).

An article in the Guardian in May 2019, described a survey conducted in the UK on the issue of body image. The Mental Health Foundation (UK) conducted the poll, which they state was one of the largest on the issue and found that, '… one in eight people aged 18 and above have been so distressed about their body image they have thought about killing themselves' (Siddique, 2019, para 3). Furthermore, 'Millions of British adults have experienced suicidal thoughts or emotions because of concerns about their body image …' (Siddique, 2019, para 2). The Foundation believes that the increased focus on external appearances have significantly influenced this increase and called for authorities to regulate 'idealised body representation' in the media. In response, the Department of Health (UK) has formed a partnership to connect social media companies and suicide prevention experts to address self-harm and suicide content online (Siddique, 2019).

Learning to starve online

The NEDC warn that, 'One of the most common external contributors to body dissatisfaction is the media' (National Eating Disorders Collaboration, 2015, para 11).

The use of all social media platforms is increasing rapidly with Statista, a provider of market and consumer data based in Hamburg, Germany, reporting that, 'In 2019, it is estimated that there will be around 2.77 billion social media users around the globe, up from 2.46 billion in 2017' (Statista, 2018). At the time of writing, no update on 2019 statistics had been published. According to Social Media News, an online public relations organisation that collates and publishes social media statistics, users of social media in Australia, '… are some of the most active in the world, with a total of around 60% of the country's population active users of Facebook and 50% of the country logging onto Facebook at least once a day' (Social Media News, 2018, para 2). Additionally, about 15 million Australians visit the YouTube platform every month. Released in May 2018, this report also states that 1 in 3 Australians use Instagram and 1 in 4 uses Snapchat (Social Media News, 2018).

Australian researchers, Pepin and Endresz (2015) explored the impacts of social media on body image of 300 students from a Victorian university in Australia.

Using a survey that included questions about their use of social media, and utilising The Objectified Body Consciousness tool and Attitudes towards Appearance Questionnaire, they found that, 'While using social media, they (the participants) felt pressure to lose weight, look more attractive or muscular, and to change their appearance' (Pepin and Endresz, 2015, p.1). The authors also demonstrated a correlation between Instagram and concerns with body image and surveillance, and between Pinterest and body shame and appearance. They conclude by suggesting that the increase in knowledge about social media and body image may be useful in the development of social media literacy programs that target negative body image (Pepin and Endresz, 2015).

Also from Australia, Holland and Tiggemann (2016) conducted a systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. Stating that a large body of evidence has already demonstrated the effect of the mass media on body image disorders and disordered eating, attention is now turning to the effect of SNSs on these conditions. The researchers report that twenty studies met the inclusion criteria for the review with the results suggesting that, in general, the use of SNSs was found to be associated with negative body image and disordered eating. In addition, 'Specific SNS activities, such as viewing and uploading photographs and seeking negative feedback via status updates, were identified as particularly problematic' (Holland and Tiggemann, 2016, p.100). In addition, they report that a small number of studies examining underlying reasons for the findings concluded that, '… appearance-based social comparison mediated the relationship between SNS use and body image and eating concerns' (Holland and Tiggemann, 2016, p.100), and that, '… social networking has become an increasingly common means of general communication for individuals in contemporary society' (Holland and Tiggemann, 2016, p.108).

Although most studies to date have focussed on Facebook and Instagram, Twitter is the focus of a study by Camussi et al (2015). Twitter is popular for its ability to engage users in real time on topics of interest, primarily news and politics. However, this social networking site may also be a vehicle for the promotion of restricted eating. The researchers investigated the presence of Pro-Ana sites on

Twitter, analysing the number of followers, tweets and the biographical information of the users. Using an Internet search, they found 341 Twitter accounts that promoted Anorexia, whose followers shared tips on how to restrict eating. The authors report that these Pro-Ana Twitter accounts are highly successful with the mean number of followers at 2360.9, mostly females at 97.9% with a mean age of 17.9 years. Moreover, only 6% of accounts provided a warning that the content could be potentially dangerous. The researchers followed the accounts for four weeks and found that there was an increase in followers and tweets; however, the rate of increase was not reported by the authors. In terms of hashtags, the most popular were, 'thinspo' at 47.9% and 'thinspiration' at 16.3%. The most common content was autobiographical at 86% and 'thinspiration' photographs at 67.9%. Inspirational quotes and tips for weight-loss were also shared. The authors raise concerns about the popularity of these accounts and call for mandatory, overarching rules to be put in place for these accounts to provide warnings about their content (Camussi et al., 2015).

Arseniev-Koehler et al. (2015) conducted a similar study investigating pro-ED accounts on Twitter. They analysed a purposeful sample of 45 pro-ED profiles coding profile information, all tweets, and 100 of their followers' profile information using Twitter Application Programming Interface, which is a developer program, and a codebook based on ED screening guidelines. The results revealed that of the total of 4,245 tweets analysed, a median of 36.4% contained ED references, each profile had a median of 173 followers and, of these, a median of 44.5% contained ED references. The authors express concern at the high number of pro-ED Twitter accounts and argue that, although these individuals may be regarded as providing social support to one another, the content promoting eating disorders is likely to reinforce the ED identity across the Twitter platform (Arseniev-Koehler et al., 2016).

An Australian study (Cohen et al., 2017), explored specific SNS features relating to body image concerns in young women. A total of 259 women (18-29 years) completed a questionnaire about Facebook and Instagram use and body image concerns. The researchers found that appearance-focused SNS use, specifically photo activities on Facebook, rather than overall SNS use, was related to body

image concerns in the participant group. Results also revealed a similar result for Instagram with appearance-focused accounts associated with thin-ideal internalisation, body surveillance and drive for thinness. Similar to Facebook, appearance-neutral accounts were not associated with any body image outcomes (Cohen et al., 2017).

In view of the international nature of the Internet, it is not generally possible to identify which country is the host of each Pro-Ana site. However, many forums within the Pro-Ana sites and comments found on SNSs include Australian followers and, on occasion, special Australian sections, that are actively involved in pro-ED discussions and promotion, can be identified.

The role of Pro-Ana websites

When referring to individual Pro-Ana sites, these are not named within the thesis. However, a table of all of the websites reviewed is included at Appendix 5. Individual sites will be referred to in numerical order according to the presentation order within the discussion.

Pro-Ana websites and blogs play an active role in the promotion of eating disorders as a lifestyle. Many of these sites claim to promote the notion of individual agency in being able to freely choose an Anorexic lifestyle, while others claim to support rehabilitation from an eating disorder. However, regardless of the stated aim of the website or blog, content continues to be published that can readily be interpreted as promoting drastic weight-loss, for instance, 'site one' and 'site two'. Contradicting the notion that eating disorder sites are the sole domains of teenage girls, 'site three' was developed by two mothers in their mid-twenties. This website, however, is now inactive.

Borzekowski et al. (2010) conducted a systematic content analysis of 180 active pro-eating disorder websites finding that 91% are open to the public, 84% provide Pro-Ana content, and 64% provide Pro-Mia content. In addition, 'thinspiration' material appeared on 85% of the sites and 83% of the sites provided overt suggestions on how to engage in eating-disordered behaviours. Concerned about the possible consequences on the health of those viewing these sites, the

researchers believe that, '… continued monitoring will offer a valuable foundation to build a better understanding of the effects of these sites on their users' (Borzekowski et al., 2010, p.1526), and inform further preventive action (Borzekowski et al., 2010). It should be noted that, because there are many pro-eating disorder sites that disguise their intent by masquerading as a different type of site (Boero and Pascoe, 2012), these findings may underestimate the true Pro-Ana activity on the Internet.

Similarly, Boero and Pascoe (2012) examined online communities and authentic embodiment in online environments, specifically the online Pro-Anorexia community. Discussing the tensions of the Anorexic online community regarding claims to authenticity, in particular, the threat of the 'wannarexic', the researchers found that Pro-Ana groups engage in rituals, and other actions, to ensure that only true Anorexics participate. The authors argue that, whereas Pro-Ana websites used to be individual sites offering tips and advice on being Anorexic, many have now gone underground and formed interactive communities promoting Anorexia as a valid alternative lifestyle (Boero and Pascoe, 2012).

The extent to which social support is shared between members of Pro-Ana websites has been examined by Brotsky and Giles (2007) and Tong et al. (2013) with differing results. One of the researchers, Brotsky, used covert participation to infiltrate 12 online Pro-Ana forums, chat-rooms, blogs and email groups posing as a new member to study the various interactions, particularly psychological support, between the members. She reports experiencing responses ranging from very supportive to extremely hostile, while still remaining undercover, and concludes that the different responses she received challenge the idea that a broad Pro-Ana philosophy exists. Rather, she suggests that, '… the sites are best understood as local cliques offering temporary relief from offline hostility …' (Brotsky and Giles, 2007, p. 93). The authors doubt whether the Pro-Ana sites visited offer any therapeutic value other than the immediate online support and point out that this can be terminated at any time by the click of a computer mouse and, '… can never be a substitute for the love and care of friends, partners or family members' (Brotsky and Giles, 2007, p 107).

In contrast, Tong et al (2013) found that Pro-Ana blogs provide emotional support, esteem support and informational support. The researchers sampled the content of 48 Pro-Ana blogs in order to document the types of support, and to discover how the socio-technical features of blogs, which they state as interactivity, self-disclosure and mass personal communication, work to, '... facilitate social support among members' (Tong et al., 2013, p. 408). Analysis of their coded data revealed that, in addition to the types of social support already mentioned, the blogs were also frequently observed to be a site for self-disclosure (Tong et al., 2013).

The difference in the findings of Brotsky and Giles (2007) and Tong et al (2013) may reflect the increased use of social media in 2013 and greater technical sophistication allowing easier access to online content via more powerful search engines. Or, it may reflect the maturation of the Pro-Ana sites into hubs of support as increased government and public scrutiny about obesity prevention focus the attention on bodies. Additionally, there were important differences in the method of approach with Brotsky and Giles (2007) using subterfuge to infiltrate Pro-Ana online conversation, and Tong et al. (2013) adopting an objective method of counting episodes of social support and coding these. It is possible that the first study, relying as it does on feelings, represents the researcher's personal reactions to hostility and discomfort, whereas the second study relies on objective evidence to form a conclusion rather than subjective, personal experience.

In an attempt to determine whether the eating behaviours of participants without a history of disordered eating change in response to exposure to pro-eating-disorder websites, Jett et al. (2010), conducted a study to observe any changes to the eating behaviour of participants (N=90), following exposure to either pro-ED websites, health/fitness websites, or tourist websites for 1.5 hours. The participants were assessed using qualitative and quantitative measures to define any changes to their eating behaviour. The results revealed that even modest exposure to pro-ED websites elicited a significant one-week decrease in caloric intake, from pre- to post-exposure, in the group designated to view the pro-ED websites, with the changes persisting for at least three weeks. Participants also reported strong emotional reactions to the websites. The authors concluded that, exposure to pro-ED websites, '... may encourage significant changes in caloric intake and increased

disordered eating behaviours. By extension, even greater exposures to these websites by at-risk females may contribute to the development of eating disorders' (Jett et al., 2010, p.410).

Osgood (2015) in the previously discussed autobiography of her Anorexia journey discusses visiting Pro-Ana websites and blogs for support, describing the widespread use of 'thinspiration'. She explains that photographs of thin female celebrities, particularly Edie Sedgwick (a model of the 1960s) and model Kate Moss and actor Mary-Kate Olsen, of the present day, are common. Osgood notes that participants in the various Pro-Ana forums admire these women, not for their beauty or accomplishments, but for their thinness alone (Osgood, 2015).

In the past, the majority of Pro-Ana spaces were blogs and websites, but according to Cobb (2016), these have become fragmented with many moving to social media platforms, reflecting a more general trend of the move of bloggers to social media (Cobb, 2016). Following this move, the social media platforms of YouTube, Instagram, and Tumblr, with their reliance on visual images, were utilised openly to promote Anorexia and Bulimia. However, in 2012, Tumblr announced its intention to ban eating disorder accounts (British Broadcasting Corporation, 2012). As Cobb (2016) explains, others have now followed suit with Internet moderators removing sites they deem dangerous. As a result, ' … Pro-Ana users have been forced to deploy mechanisms of denial and disguise, meaning that Pro-Ana spaces which self-identify are deemed problematic, yet those which are hidden in plain sight remain in existence' (Cobb, 2016, p. 4).

Instagram is a photo-sharing social network site where communities form around tags relating to the content of a photograph. Hence, the creation of tags is critically important in order to identify such content. In 2012, and in the wake of the Tumblr restrictions, Instagram instituted bans on tags that were Pro-ED. According to Chancellor et al. (2016), the ban on Pro-ED tags led to the adoption of, '… nonstandard lexical variations of moderated (hash) tags to circumvent these restrictions' (Chancellor et al., 2016, p. 1). The researchers conducted a large-scale quantitative study investigating pro-ED communities on Instagram in the aftermath of the banning of the ED tags to investigate whether the ban had been

successful in eliminating pro-ED tags. The large dataset of 2.5 million posts, collected by the researchers between 2011 and 2014, demonstrated that rather than decrease pro-ED tags, '… increasingly complex lexical variants have emerged over time' (Chancellor et al., 2016, p. 1). Words like 'Thyghgapp' and 'anatips' are typical, according to the authors, of lexical variants now used as tags. In addition, it was observed that, 'Communities that use lexical variants show increased participation and support of pro-ED (15-30%)' (Chancellor et al., 2016, p. 1). Tags were also found to be clustered according to their underlying theme with the most popular lexical variant clusters incorporating self-loathing and intent, such as 'deadness', 'suicide', 'self-harm' and 'cuts'. The writers believe that this stems from community members, '… constant dissatisfaction and discomfort with their objectified sense of physical appearance and attributes' (Chancellor et al., 2016, p.9). The authors conclude that the lexical variants, in contrast to the original self-identifying tags, appear to, ' … depict more vulnerable, toxic and "triggering" content' (Chancellor et al., 2016, p.9), demonstrating the ineffectiveness of content moderation, ' … as an intervention for communities of deviant behavior' (Chancellor et al., 2016, p.9).

Turner and Lefevre (2017) investigated a possible link between social media use and Orthorexia Nervosa. Participants (N=680) were recruited via an advertisement placed on Instagram, Facebook, and Twitter for those following food accounts. The participants chose which social media platforms to follow from Instagram, Facebook, Twitter, Pinterest, Google+, Tumblr and LinkedIn. The ORTO-15 inventory for detection of Orthorexia was used to assess possible symptoms of the disorder. Social media use and eating behaviours were also assessed as part of the survey. Higher Instagram use was associated with a greater tendency towards Orthorexia. No other social media channel demonstrated this effect. The prevalence of Orthorexia among the study population was 49%, much higher than the general population at <1% (Turner and Lefevre, 2017). YouTube was not included in their study although arguably it is the most visually dynamic platform of all of the social media sites.

Gerrard (2018) in her talk to media corporations about the banning of pro-eating disorder sites in 2012 and the future of content moderation, asks, 'Why did

platforms decide to intervene in the first place, given their hesitancy to remove other kinds of content despite public pressures?' (Gerrard, 2018, p. 2). The author argues that a blanket ban on #hashtags that pertain to eating disorders is a blunt instrument that not only moderates #hashtags, such as #pro-ana or #pro-ed, but also #anorexia and #bulimia, which may not be concerned with the target population at all. Gerrard suggests that observations of content moderation demonstrate that moderators make judgments based on the #hashtag without necessarily knowing what the content is about and cautions, ' … it's harder to straightforwardly categorise "other" (non-violent/non-threatening) kinds of content as "bad" and decide that they don't have a place on social media' (Gerrard, 2018, p. 1). Although Tumblr stated that it would not remove blogs that are 'pro-recovery', the writer argues that many users', feeds are, '… a tangled web of pro-eating disorder, pro-recovery and other positionalities' (Gerrard, 2018, p. 2). Gerrard points out that as users do not necessarily conform to a stereotypical 'pro' eating disorder identity and any attempt to moderate based on general criteria is fraught with difficulty. She argues that as social media has prided itself on offering 'safe' spaces for people who may be socially marginalised, platforms should exercise care when interpreting the content of social media posts. In closing, Gerrard suggests a more open dialogue between eating disorder researchers and platform policy-makers, '… might help social media companies to promote an alternative view of eating disorders than simply being "bad"' (Gerrard, 2018, p. 5).

There is little research investigating the effect of viewing Pro-Ana websites. Apart from the pilot study that formed the basis of the study by Bardone-Cone and Cass (2007), none were found that systematically assessed the impact of viewing Pro-Ana websites. The study by Bardone-Cone and Cass (2007) is the largest and most comprehensive to date and remains the only one to use experimental methodology to assess the impact. The researchers examined the effect of viewing Pro-Ana websites using their own construction of a Pro-Ana test website and assessed the effect of exposure to this website. Female undergraduates (N=235) were randomly assigned to either the constructed Pro-Ana site or one of two comparison websites, either a female fashion website that used average-sized models, or a home décor website. Various validated scales to assess self-esteem,

positive and negative effect, and appearance self-efficacy, were used together with questions relating to weight perception and behavioural expectations, to assess the impact for each domain. Using statistical analyses, particularly one-way ANOVA scores to compare the results of the three groups, the researchers found that participants exposed to the Pro-Ana website demonstrated, '… greater negative affect, lower social self-esteem, and lower appearance self-efficacy post-website than those who viewed a comparison website' (Bardone-Cone and Cass, 2007, p. 544). In addition, the participants who viewed the Pro-Ana website reported that they felt heavier in addition to reporting a greater likelihood of exercising and thinking about their weight in the near future. This group also engaged in more image comparison than the other groups. The fact that this effect occurred after only one viewing is notable, however, as the authors explain, it is difficult to predict whether repeated viewings would consolidate and worsen this effect or whether it would desensitise viewers to the content. The authors found that viewing the Pro-Ana website had a significantly more negative effect than viewing the fashion website with images of average-sized women. They suggest that, '… it is something about how the female image is depicted and discussed that is having the negative effects rather than merely a focus on the female image' (Bardone-Cone and Cass, 2007, p. 544). A strength of this work is the inclusion of 'potential moderators'. These are conditions that are present pre-test that may modify the effect of viewing the three test websites in some way and include such elements as the presence of an eating disorder, thin-ideal internalisation, recent attempts at food restriction and socially prescribed perfectionism (using the Eating Attitudes Test (EAT-26), the Sociocultural Attitudes Toward Appearance Scale-3, Eating Disorder Examination-Questionnaire and the Multidimensional Perfectionism Scale respectively). In addition to this, the BMI of each participant was measured pre-test. The researchers report that out of a potential of 70 interactions (five areas x 14 possible interactions), only five (7%) were significant and the same as that expected by chance. This is important knowledge for furthering the understanding of the influence of Pro-Ana website, the researchers note, finding that, '… so few moderators qualified the website main effect suggests that pro-anorexia websites have a "broad" reach and that their influence is felt not only by populations that

would be expected to be vulnerable (i.e., those with eating disorders, those high on thin-ideal internalisation)' (Bardone-Cone and Cass, 2007, p. 545).

It is notable that this has been the only empirical study to examine the effect of Pro-Ana sites on viewers to date. Since this study was published, there has been a rapid rise in the use of social media platforms, such as, Twitter, Snapchat, Facebook, Instagram and YouTube (Sensis Pty. Ltd., 2016), offering an opportunity to publish content that is potentially just as disturbing as the content of Pro-Ana websites. In particular, Instagram and YouTube provide a very dynamic medium for Pro-Ana content given that both are visual platforms. In particular, YouTube, as its medium is entirely video-based and thus encompasses not only the visual effect of the image but also the dynamism of person-to-person content. This is often produced in the form of vlogs (video blogs) that, not unlike traditional film, is capable of immersing viewers in the life of the YouTuber, a stranger in real life. This immersion may encourage the development of a perceived relationship with the YouTuber that encourages imitation. Using YouTube to encourage food restriction using a vegan diet and 'thinspo' images is the subject of one of the studies in this thesis.

Pro-Ana: a site of female agency and resistance?

Many researchers and social scientists have explored Pro-Ana websites from a controversially different perspective. Adopting a wider view of the participants and the sites, they consider the notion that feminine empowerment forms part of the desire for women to seek others who understand their reasons for adopting the Ana lifestyle. If this is true, the sites may be viewed as centres of female agency.

For example, Schott and Langan (2015) challenge the censoring of online, mainly female, forums and the insertion of Public Service Announcements, (PSAs) provided by NEDA, a non-profit eating disorder agency in the US, warning that eating disorders are serious mental health problems requiring care. As mentioned previously, in 2012 Tumblr introduced a policy to censor Pro-ED online communities, choosing to use PSAs to address what they perceived as a serious mental health problem. In response, Tumblr staff reported that the announcement of this policy, '… provoked more than 25,000 likes, re-blogs, and replies; and more

than 2,500 [Tumblr users] sent in comments …' (Schott and Langan, 2015, p. 1161). The authors analysed the online comments embracing contemporary ethnographic sensibilities, that is, the complexities and nuanced meanings that are particular to the Pro-Ana online communities. By adopting this approach, the writers were able to provide a critical feminist and sociological analysis of the online comments. They highlight the complexity of analysing Pro-Ana sites in terms of identity, not only as a theoretical issue but also methodologically, recognising that whichever identity conception is adopted will influence the social inquiry taken, whatever the subject studied. The writers explore three different notions of identity and how these emerge as Internet ethnography relating to Pro-Ana websites. In particular, the authors discuss the banning of Pro-Ana sites from a postmodern view and a feminist perspective. As in other socially constructed 'truths', knowledge about the dangers of Pro-Ana sites is assumed by those in power who affect to know what is right for others who do not share in this 'special' knowledge. In so doing, the writers believe that the staff that monitor and delete content and attach public PSAs effectively decide the fate of those who use the Pro-Ana sites. By framing these sites as dangerous and disgusting, the public, in much the same way as obesity is framed, also become activists in alliance with the authority who has claimed the 'special' knowledge, in this case, NEDA. Their analysis revealed that there was concern from those supporting the sites that a blanket policy will do more harm than good as it prevents, ' … 'blogs recommending safer techniques for self-harm and starvation [that] serve an important function', such as saving lives' (Schott and Langan, 2015, p. 1168). The authors also argue that, from a feminist perspective the action by Tumblr underscores the, ' … gendered nature of "truth" discourses', and that, 'Male-dominated power structures contribute to women's oppression through discourses that devalue women's experiences, perspectives, and knowledge' (Schott and Langan, 2015, p. 1165).

Adopting a similar stance, Karen Dias (2003), in her analysis of Pro-Ana websites conducted from 2001 to 2003, argues that Pro-Ana sites offer sanctuary from the public gaze, thus, allowing exploration of women's narratives in Pro-Ana sites in cyberspace. The author believes that these sites enable those with Anorexia to

share their lives and concerns when they may not be ready to do so with family and professionals, thereby serving an important function. Dias is well aware that, 'Taking seriously the voices of these women can be viewed as a transgressive act, in contrast to hegemonic biomedical and psychiatric discourses of Anorexia that portray women with eating disorders as "irrational" and "in denial" of their behaviour, and pathologise and medicalise their experiences' (Dias, 2003, p. 31). Dias also explains that as the public realm tends to banish that which is repugnant, deviant or abnormal, cyberspace may offer a sanctuary to those who wish to interact with like-minded others. Furthermore, attempts to close down such sites are commonly met with members finding other more creative ways to continue their dialogue and support. Referencing third wave feminism, whereby women focus on media and entertainment as their most visible oppressors in shaping their subjective experiences, Dias likens pro-Anorexics narratives to those of third-wave feminists, informed by, ' ... the dilemmas young women today face in negotiating culture's stifling emphasis on hegemonic feminine beauty ideals' (Dias, 2003, p. 32). Dias offers several incisive observations that still hold true today, 16 years after the publication of her study. The fact that women must negotiate conflicting public messages about what is acceptable in terms of appearance is reinforced by Dias' comment that, 'Most of the images of thinness and emaciation common on the sites are mainstream pictures of celebrities or fashion models, sometimes collages of both' (Dias, 2003, p. 35). She further notes that it is often very difficult to identify the 'deviant' body of the Anorexic from those of models and celebrities whose bodies, although similar, are considered 'normal' and 'acceptable'. Dias' analysis offers important insights into the Anorexic story in the form of the observed cyberspace conversations. She reports conversations that decry the criticism of Pro-Ana sites when Western society is highly and visibly intolerant to a variety of shapes and sizes. She argues that such intolerance, '... may drive women and girls to extreme behaviors to avoid discrimination' (Dias, 2003, p. 37). The fact that members of a Pro-Ana group acknowledge this, should perhaps be regarded as a critical warning about any health policy that appears to drive the acceptance of the thin-ideal as the only acceptable female human body. Dias further explains that, 'These women, unlike the portrayals of them as being in denial, are actually quite articulate and

seemingly aware of their circumstances' (Dias, 2003, p. 38). This observation is also made by Pollack (2003), who, in her study of Pro-Ana websites and the feminist response, discusses the different socially discursive practices around Anorexia and how these alone can dictate whether Anorexic women are regarded as victims, or as negotiating their own identity (Pollack, 2003). Arguably, one of the most important points made by Dias is that in order to qualify for a diagnosis, and thence treatment, women must meet rigid criteria regarding weight. They may be very ill but if their weight is not low enough a diagnosis is not made and, according to the experience of the author, many girls and women are aware of this and avoid seeking treatment for fear of rejection. In addition, Dias explains that, 'The success rate of treatment programs for Anorexia is very low – not solely as the result of the failure of specific treatment techniques, but largely because once Anorexia reaches a critical and chronic stage it is much harder to recover' (Dias, 2003, p. 39).

In a similar vein to Dias (2003), but ten years later, Crowe and Watts (2013) examined the online digital community of Pro-Ana and Pro-Mia websites, '… to illustrate and illuminate young women's perspectives (on Anorexia) and the extent to which this transgressive movement strives for voice' (Crowe and Watts, 2014, p. 379). Following online interviews with users, the writers report the sense of empowerment that participants feel due to their involvement in these digital communities. They remark on the quasi-religious zeal that drives these girls and young women and the various rituals employed in worshipping the gods 'ana' and 'mia', considered to be protectors. Accepted by mainstream clinicians to be serious mental illnesses and deviance, Anorexia and Bulimia can cause extreme disability or death. However, Pro-Ana participants believe their online spaces offer a chance to exercise control over, '… how their bodies (and associated narratives) are represented' (Crowe and Watts, 2014, p. 384). The sense of support and exclusivity often notable on Pro-Ana websites is strengthened by the need for secrecy and bonding that occurs to avoid closure of Pro-Ana websites. Crowe and Watts (2014) suggest that these sites, and their assertions, expressed through the transgressive, may be read as acts of resistance and therefore, '…represent important sites of agency and resistance' (Crowe and Watts, 2014, p.379). This is echoed in an essay

posted on the Grinnell College website, discussing Pro-Ana subculture. The author (unidentified) writes that committing to Anorexia is, '… a form of independence …' and that committed Anorexics claim that, '… Anorexia is empowering (Grinnell College, para 13). In this essay, committed Anorexics are described as strong-willed, committed, and resisting society's norms. In addition, two distinct groups are discussed; those who seek recovery and are ill, and another group who consider themselves volitional Anorexics. It is the latter group that the writer regards as essentially representing women's power (Grinnell College).

In contrast to the preceding literature, the Social Issues Research Centre (SIRC; author unknown), denounces Pro-Ana websites arguing that, 'Anorexia is not a lifestyle choice. It is an illness. The pro-Ana claims to political minority status are disturbing and delusional' (Social Issues Research Centre, para 25). In an undated article, the SIRC point to the so-called rebellion of many of these sites as an attempt to raise Anorexia to a rebellious, political statement by separating the 'ED-Anorexics' from the 'Rexies'; a group who consider themselves to be volitional Anorexics of extremely strong character, will, and determination who claim to manage their chosen lifestyle, consider themselves elite for successfully governing their bodies and emphasise that, unlike ED-Anorexics who are essentially ill, they will never die of their self-inflicted Anorexia. The SIRC author believes that, 'The websites also have a certain underground cachet. They allow the Anorexic to feel like a pro-active rebel rather than a walking disorder' (Social Issues Research Centre, para 16). The SIRC author also points out the seeming ambivalence of a society that condemns Pro-Ana sites while approving of the use of very underweight models, often used to illustrate weight-loss diets in the media, commenting on the irony that it is often these pictures that are used on Pro-Ana websites as 'thinspiration' for aspiring Anorexics (Social Issues Research Centre).

Hiding an eating disorder

Euromonitor International, a global market research organisation based in the UK, predicts that by 2020, Australian's packaged vegan food market will be worth $214 million. They also found that Australia was the third fastest-growing vegan market in the world after the United Arab Emirates and China (Euromonitor

International, 2018). In addition, although not measuring the market share for veganism, Roy Morgan, an Australian market research company, released a report about vegetarianism stating that, 'Between 2012 and 2016, the number of Australian adults whose diet is all or almost all vegetarian has risen from 1.7 million people (or 9.7% of the population) to almost 2.1 million (11.2%)' (Roy Morgan, 2018, para 1).

In this climate of increasing preference for plant-based diets, the co-option of the vegan diet provides an ideal way to restrict whole food groups without arousing suspicion, and, thus, is a legitimate disguise for the continuation of disordered eating. As Larbi (2017) remarks in her article on eating disorder survivors and veganism, ' … those who are intent on following a restrictive diet for weight purposes abuse the (vegan) movement as a way to justify their habits' (Larbi, 2017, p. 1). The writer examines why so many eating disorder survivors adopt a vegan eating style, commenting that, '… with so many former Orthorexics and Anorexics calling themselves vegans, it seems naive not to think there's something about the idea of cutting out food groups that appeal to the disordered eater' (Larbi, 2017, p. 2). Agreeing that a vegan diet can be health-promoting, Larbi does, however, point out that it is very restrictive if the intent is for it to be healthy. According to Julia Croakes, a UK-based psychologist who was among a number of professionals interviewed for the article, 'Anorexia Nervosa is characterised by restrictive eating, and these behaviours are too similar to enable veganism to be part of a psychologically healthy recovery' (Larbi, 2017, p. 2). In addition, Larbi explains, veganism, like vegetarianism legitimises food avoidance allowing foods to be labelled as 'bad' or 'not allowed'. It is important to note, however, as Larbi does, '… that veganism does not cause eating disorders. Poor mental health causes disordered eating, not an ethical stance on animal products' (Larbi, 2017, p. 1).

Although the main focus in this thesis is on veganism and eating disorders, it should be noted that recourse to the use of an established diet to hide an eating disorder is not confined to veganism. Because the link between veganism and eating disorders has not produced much scientific inquiry to date, although it has inspired writing in a general manner, for instance, media articles and personal stories, vegetarianism will also be included in this section as this too is

characterised by the restriction of food groups, particularly in its purest form that eliminates eggs, all dairy produce, and fish. In this vein, Zuromski et al. (2015) set out to examine the prevalence of vegetarianism in three samples of young women with varying degrees of eating pathology. All of the participants were drawn from a larger study on eating disorders at a university in the US. The first sample (non-clinical; n=73; mean age=19.41) denied any history of disordered eating. A subclinical sample (n=136; mean age=19.45) admitted having engaged in disordered eating over the past month formed the second sample. The third sample (clinical; n=69; mean age=26.83) consisted of young women who were all receiving residential treatment for a diagnosed eating disorder at an eating disorder centre. The participants in each group were administered a vegetarian questionnaire, developed for the study. After analysing the differences between the groups using Fisher's exact test to accommodate for the small sample sizes, the results revealed that the clinical group had the highest rate of lifetime self-identified vegetarianism, current self-identified vegetarianism and current derived vegetarianism and the subclinical group had higher lifetime but not current self-identified or derived vegetarianism compared to the non-clinical group which scored lowest on the vegetarian questionnaire. The researchers found that motivation for vegetarianism across the subclinical and non-clinical groups, most often related to health, ethical reasons and dislike of food types rather than a desire to lose weight. Nevertheless, as the writers point out, stated concerns for health, ethical reasons relating to the killing and eating of animals and dislike of food groups, '… may still functionally be related to eating pathology' (Zuromski et al., 2015, p. 26). However, the researchers used information on the inclusion of certain foods in the participants' diets, to infer vegetarianism or to augment information obtained from the questionnaires. In doing so, the data were possibly compromised by the inclusion of subjective, derivative material. Although it is accepted that this was done as an aid to the clarification of diagnostic groups, it may, nevertheless, have rendered the resultant data less robust on which to base results. In addition, the authors, in reporting that none of the women chose vegetarianism to lose weight, appear to have overlooked the possibility that they did not feel comfortable in disclosing this intention.

A comparable study by Bardone-Cone et al. (2012) produced similar results. The researchers studied females with and without an eating disorder and individuals at varying stages of recovery to identify past and present vegetarianism and their motivations for adopting this diet. Participants comprised those who had been treated for an eating disorder (n=93) and controls who had never been diagnosed with an eating disorder (n=67). Results demonstrated that, compared with controls, individuals with an eating disorder were more likely to ever have been vegetarian (52% vs 12%), to be currently vegetarian (24% vs 6%) and primarily motivated by weight-loss. The writers report that those in varying stages of recovery did not differ from the eating disorder cohort in endorsing a vegetarian diet, or the reason for doing so (weight-related). Of particular note, the researchers found that, 'Most perceived that their vegetarianism was related to their eating disorder (68%) and emerged after its onset' (Bardone-Cone et al., 2012, p. 1247). The authors recommend that health professionals treating individuals with eating disorders be aware of the possibility that a specific diet, such as vegetarianism, may be influencing the individual's rate of recovery and also, '… whether a vegetarian lifestyle is an avoidance strategy for food' (Bardone-Cone et al., 2012, p. 1251). The difference between the willingness to disclose motive for adoption of a vegetarian diet between the participants in the Zuromski et al. (2015) study where there was no admission of adopting a vegetarian diet for weight-related reasons, and the participants in the Bardone-Cone et al. (2012) study where 68% perceived that vegetarianism was associated with their eating disorder and had emerged after its onset, is notable. As both studies examined similar cohorts of non-clinical and clinical groups, it is unclear why the second study demonstrated individual insight into the link between their dietary restriction and eating disorder with, '… almost half of those with an eating disorder history and some experience with vegetarianism reporting being primarily motivated by wanting to lose or maintain weight' (Bardone-Cone et al., 2012, p. 1249). Possibly this is a function of the study design collection methods rather than an inherent difference in cohort characteristics.

Personal stories about veganism from differing perspectives provide important information that is not easily captured more formally. Heather Caplan, a

registered dietitian in the US shares her personal experience of navigating the pitfalls of regression to old habits as a recovering Anorexic. Having recovered from an eating disorder while studying nutrition, Caplan discusses how she began to change her exercise routine to incorporate a higher intensity regimen and to cut out food groups believing that they were not healthy for her. As she began to restrict further intake to comply with a 'clean-eating' agenda she realised that, 'This was my eating disorder hiding in healthism and diet culture' (Caplan, 2018, para 7).

Similarly, Kristen Pizzo (2016), also a recovering eating disorder sufferer, believes that adoption of a vegan diet after recovery, although popular among many, is fraught with danger. She explains that, after her own recovery, she adopted a vegan diet with the intention of improving her health and fitness but soon began to restrict her food intake while also craving the foods she was denying herself, in the name of veganism. Pizzo points out the difficulties faced when using veganism for recovery including a lack of understanding of motive and an inability to recognise when food denial triggers the return of the eating disorder. Following her experience, Pizzo speculates, 'Is a vegan diet just a guise that allows a recovering individual to perpetuate their disordered eating habits?' (Pizzo, 2016, para 3). However, such insight into one's own behaviour is probably unusual and is likely due to the fact that Caplan and Pizzo were both very aware of the importance of nutrition, especially when recovering from an eating disorder. Nonetheless, it demonstrates that even with such knowledge, the regression to disordered eating may be subtle and eventually harmful.

Dietary manipulation is not the only way to hide an eating disorder or restrict eating. Australian researchers, Musolino et al. (2015) explain how young women may use elements of the contemporary understanding of 'health' and 'care' as a model of logic with which to rationalise and justify their eating disorder practice. With the intention of investigating why women with disordered eating practices (not diagnosed eating disorders) do not seek help, the researchers conducted a survey using a 'snowball' technique to recruit participants, mainly from two Australian universities. Inclusion criteria included that the potential participants had not sought help for their disordered eating or had received a diagnosis but

delayed following this up. In order to capture this group, advertisements did not contain references to eating disorders, or similar words and phrases, that would convey a definitive disorder, instead asking a series of question, such as, 'Are you continually thinking about your food and your weight?' and 'Do you enjoy the feeling of not eating or excessive exercising?' (Musolino et al., 2015, p. 19). Using this approach, the researchers aimed to capture those who are ambivalent about recognising their eating practices as disordered, and ambivalent about seeking professional help. Twenty-five women were recruited (19-52) with most aged under 30 years. The Eating Disorder Examination (EDE) was administered in addition to semi-structured interviews. A Grounded Theory approach was adopted for data analysis. Arguing that disordered eating embodies, '… health practices of care and distinction' (Musolino et al., 2015, p. 18), the researchers demonstrated that, '… eating and bodily practices that entail "natural", medical and ethical concerns (in particular, the new food regime known as Orthorexia) are successfully incorporated into participants' eating disorder repertoires and embodied as a logic of care' (Musolino et al., 2015, p. 18).

It is worth noting that, in this instance, it appears that Orthorexia is presented as a chosen way of eating by the authors who explain it as a, '… new food regime with an explicit mantra for 'healthy', 'pure' and 'natural' eating (Musolino et al., 2015, p. 18). However, as Bratman (1997, 2016), who first described the disorder in 1997 explains, Orthorexia is a disorder (not an eating regime) that may follow the adoption of a diet restricted to pure foods (Bratman, 2016). Nevertheless, the Musolino et al. (2015) study offers valuable insights into how disordered eating may be manifested by the commitment to healthy eating and other bodily practices that, while seemingly restrictive and regimented, can be rationalised by a healthy lifestyle narrative. As the authors argue, 'Understanding how categories of health and care are tinkered with and practiced by people with disordered eating has important implications for health professionals, family members, and peers' (Musolino et al., 2015, p. 18).

By the end of 2015, YouTube had more than one billion users, generating billions of views per day, with about 300 hours of video uploaded every minute. In

addition, YouTube is available in 61 languages with half of all views accessed on mobile phones. (YouTube, 2019)

Despite the popularity of YouTube with its ability to gather millions of views in a very short time, the role of YouTube in promoting disordered eating has to date been under-explored with few studies located, and only one that was relevant, for this research.

Syed-Abdul et al. (2013) investigated misleading health information about Anorexia on YouTube, for example, promoting Anorexia as a healthy lifestyle. In 2011, 140 videos, retrieved from the YouTube platform using search the terms anorexia nervosa, Pro-Ana and 'thinspo', were reviewed by three doctors who classified the content as either informative, pro-Anorexia or others. In addition, the 40 most viewed videos (20 informative and 20 pro-Anorexia) were assessed for viewer behaviour. The results revealed that pro-Anorexic videos were less common than informative videos with 41 videos rated as pro-Anorexic, 78 as informative and 21 as others, however, the pro-Anorexia content was found to be more highly favoured and highly rated by its viewers. The researchers suggest that to combat this, efforts should focus on raising awareness, especially among teenagers, of, '… the trustworthiness of online information about beauty and healthy lifestyles' (Syed-Abdul et al., 2013, p. 1). In addition, the authors suggest that health authorities producing videos to combat Anorexia consider using celebrities to endorse their message and that algorithms be developed that will automatically detect and filter videos promoting Anorexia before they become popular. Although these recommendations appear logical, it is difficult to ignore the fact that those seeking pro-Anorexic content are unlikely to be influenced by health messages wherever they are placed. Such content moderation may have appeared useful in 2013, however, more recent attempts have not succeeded with social media platforms Instagram and Tumblr as users become more creative at hiding their content (Chancellor et al., 2016, Gerrard, 2018). There is no evidence to suggest that attempting to moderate content on YouTube would yield a different result.

The determination by the Pro-Ana community to pursue their lifestyle requires subterfuge. Such secrecy is necessary not only for the endorsement of the lifestyle itself but also to protect knowledge-sharing on how to succeed. Co-option of a vegan diet for the purposes of legitimately restricting food intake is easier in 2019 than in previous years as the growth of veganism worldwide, including Australia, is notable. Neither the ABS nor any other national data repository body collects statistics on veganism.

This section sought to illustrate how all types of media may be used to influence the behaviour of specific groups, in this case, those with disordered eating with, or without, a formal diagnosis of an eating disorder. It specifically explored the complex issue of female agency and eating disorders as a chosen lifestyle, together with the conflict this introduces when considering the putative effect of disordered eating on the female population, given that the users (females) dictate much of the content. Finally, the necessity to hide disordered eating was explored. There is little literature pertaining to this subject to date, possibly because it is a difficult population group to locate due to the elusive nature of disordered eating. In addition, there are no formal criteria that may be employed to identify disordered eating from otherwise healthy, but restricted, eating, for example, in the presence of food intolerance. However, the presence of this sub-group, once located and studied, may reflect that a large number of Australians restrict or binge on a daily basis. Given that it is not easy to obtain a formal diagnosis of an eating disorder, mainly because of its requirement of a very low body-weight, this sub-group may provide a more accurate picture of the state of disordered eating in Australia.

4.6. The obesity and eating disorder interface

One of the least discussed psychological aspects of disordered eating concerns eating disordered behaviour in obese individuals. This part of the thesis explores the interface between obesity and eating disorders, examines common risk and protective factors, and presents evidence to support a shared approach to the management of both conditions. The evidence demonstrating that the anti-obesity campaign has had a negative impact on eating disorders is examined. Finally, a variety of new approaches that seek to ameliorate the unintended, negative consequences of the anti-obesity campaign, are discussed.

Obesity and eating disorder comorbidity: two sides of the same coin?

The NEDC believe that, 'Obesity and eating disorders may be viewed as occurring at the same end of a spectrum with healthy beliefs, attitudes, and behaviours at one end and problematic beliefs, attitudes, and behaviours at the other end' (National Eating Disorders Collaboration, 2016, para 24). Although health promotion strategies for obesity and eating disorders tend to be conducted separately, the NEDC draw attention to the increasing evidence that supports a shared approach. They explain that genetic vulnerability and psychological factors, such as negative self-esteem and body image, are inherent in both obesity and eating disorders. In addition, socio-cultural influences affect emotional well-being, especially within the immediate environment of family and friends (National Eating Disorders Collaboration).

Writing about obesity as a risk factor for eating disorders, Hill (2007) states, 'One of the most frequently voiced concerns, especially by health professionals working with overweight and obese children, is that active engagement in weight loss may result in some children developing an eating disorder' (Hill, 2007, p.153). This is mitigated if weight-loss programs are administered professionally. However, as Hill points out, there are usually very few services available for this purpose so the majority of overweight and obese children tend to embark on unsupervised weight-loss endeavours. Hill discusses the antipathy that often exists between specialists in the fields of obesity and eating disorders, in addition to the

inequality of funding between the two groups with obesity attracting more funding, and sponsorships than eating disorders. The writer explains that this division is often mirrored in the media and argues that, 'Women in the media spotlight are alternately ridiculed for weight gain or weight loss, with accompanying commentaries either berating them on their lack of self-control or praising them for their dogged pursuit of thinness' (Hill, 2007, p.151). Moreover, the writer deplores the lack of mental health expertise employed in the management of obesity, whereas, eating disorder management is mostly psychologically based (Hill, 2007).

As Day et al. (2009) explain; eating disorders are traditionally regarded separately from obesity. With the emphasis on appearance and the cultural influences that dictate acceptance, psychological therapies are the mainstay of treatment for eating disorders. Obesity, however, is considered to be a medical illness with metabolic and genetic origins requiring clinical intervention in the form of diets, drugs and surgical intervention. The writers question this separation citing similarities in phenotype, such as excessive attempts at weight control, and binge eating. They state that the brain-derived neurotrophic factor BNDF gene is shared between the two groups with the valine allele of the Val66Met amino acid polymorphism predisposing to obesity, and the methionine allele predisposing to eating disorders. They also emphasise the importance of shared risk factors including low self-esteem, genetic susceptibility, and body image dissatisfaction, arguing that, '… research and treatment of both types of disorder would be better served by greater appreciation of the psychosocial components of obesity and the biological and genetic components of eating disorders' (Day et al., 2009, p.96).

Darby et al. (2007) examined levels of eating disorder behaviours and cognitions of 4891 young women aged 18 to 42 years of age with obesity in the Australian Capital Territory, Australia, and assessed the impact of these on the participants' psychological status. They found that women with obesity had, '… significantly higher levels of dietary restraint, eating concern, weight concern, shape concern, binge eating, misuse of diuretics, use of diet pills and fasting, compared to other women in the community' (Darby et al., 2007, p.876). In conclusion, the researchers urged caution in developing obesity prevention programs to avoid

inadvertently triggering these negative behaviours in young, obese women (Darby et al., 2007).

Researching adolescents, Sim et al. (2013), in a series of case studies, found examples of eating disorders that developed in obese adolescents while attempting to lose weight. The authors explain that, 'Although not widely known, individuals with a weight history in the overweight or obese range, as defined by the Centers for Disease Control and Prevention growth charts, represent a substantial portion of adolescents presenting for eating disorder treatment' (Sim et al., 2013, p.1). They urge diligence in identifying eating disorders promptly in adolescents with obesity, arguing that research indicates that early intervention promotes the best chance of recovery (Sim et al., 2013).

With the objective of measuring the co-occurrence of obesity and eating disorder behaviour in a broader demographic, Darby et al. (2009) conducted two large independent cross-sectional surveys, a decade apart, in South Australia. In 1995, 3001 people (60% female; mean age of 46 +/- 19 years) responded to the survey, and in 2005, 3047 responses (57.7% female; mean age of 49 +/- 8.7 years) were obtained. The results reveal that, between the survey years the population prevalence of comorbid obesity and eating disorder behaviours increased from 1% in 1995 to 3.5% in 2005. This surpassed the increase in either obesity at 1.6% or eating disorders at 3.1% alone. The researchers argue that this comorbidity should receive more attention from a research and clinical viewpoint (Darby et al., 2009). It should be noted that the demographic for this study is larger than is usual for studies examining the comorbidity of obesity and eating disorders. The spread of the age demographic, greater than 27 years of age in 1995, and greater than 40 years in 2005, demonstrates that the issue of obesity/eating disorder comorbidity is not confined to adolescents. In addition, male/female respondents were almost equal, indicating that this issue is not just the province of women.

An article by Gianini et al., published in 2017 as 'An Idea Worth Researching', discusses how long-term successful dieters and individuals with chronic Anorexia Nervosa maintain their weight-loss and how this knowledge can help obese individuals lose weight, and retain the loss long-term. The authors suggest that

knowledge gleaned from these groups could be useful to those with obesity by assisting with calorie restriction over the long-term. The researchers claim that, '...there are remarkable parallels between the behavioural patterns of successful weight loss maintainers from the NWCR (National Weight Control Registry) and individuals with chronic Anorexia Nervosa (AN)' (Gianini et al., 2016, p.341). The researchers examine mechanisms by which successful dieters and chronic Anorexia Nervosa sufferers train the relevant circuits in the brain to reject food based on taste and aesthetics, rather than on health. In this way, the individual trains the brain to view high-calorie food as unattractive, and low-calorie as aesthetically pleasing and attractive. The authors explain that this learned behavior would enable easier decision-making so that food-restriction is less effortful (Gianini et al., 2016). This article again highlights the general lack of understanding about Anorexia Nervosa. Furthermore, although the writers state that, 'Obesity is not an eating disorder... ' (Gianini et al., 2016, p.342), research shows that those who are obese are at a higher risk of developing an eating disorder than those who are of normal weight or underweight (National Eating Disorders Collaboration). The researchers do, however, acknowledge the often-poor outcomes of individuals with Anorexia Nervosa, commenting that, ' ... the disorder remains long-standing with high rates of relapse and mortality and resistant to treatment interventions ...' (Gianini et al., 2016, p.341). While acknowledging the researchers' positive intent, it is, nevertheless, difficult to understand how teaching obese individuals to restrict eating, in the manner of Anorexics, is beneficial, considering that many obese individuals are already at risk of an eating disorder.

This lack of understanding of the severity of eating disorders in general, and Anorexia Nervosa in particular, is a concern for those managing eating disorders and for future research (National Eating Disorders Collaboration, 2011). As an example, in June 2000, the Daily Telegraph (UK) published the following statement, 'Instead of pillorying skinny models and actresses we should be thanking them for performing a valuable public service. They are the inspiration for young women to be thin. They help maintain the social stigma that controls obesity. The odd Anorexic is a small price to pay' [Daily Telegraph, 12 June 2000,

cited by Evans et al, 2003](Evans et al., 2006, p.215). The motive for this writing is unclear as the original article is not available by searching, however, it is possible that the original media article was intended to be ironic, rather than a serious comment. Although the underlying intent is unknown, nevertheless, this casual disenfranchisement of Anorexia sufferers, and the severity of their disorder, further entrenches the notion that eating disorders are a lifestyle choice and those who embrace this choice can be discarded.

Supportive family and peer groups with a variety of interests that do not focus inordinately on appearance, buffer against negative self-esteem and body image and promote positivity in the approach to self-regard, reports the NEDC. They suggest that a unique opportunity exists for prevention of both obesity and eating disorders by the adoption of consistent messaging focusing on the risk, and protective factors, common to both conditions. The NEDC argue that, 'We should also adopt strategies that consider both eating disorders and obesity as a coupled illness and that seek to communicate joint messages that are relevant to both areas, such as negative body image and disordered eating behaviours' (National Eating Disorders Collaboration, para 6). Utilising health promotion to impart this knowledge will influence the understanding and behaviours of the public, the NEDC believe, thus, preventing disease and improving health in the long-term (National Eating Disorders Collaboration).

Unintended consequences of the anti-obesity campaign

This section is focused on the evidence supporting the hypothesis that the anti-obesity campaign has produced, or amplified, an array of unintended negative consequences. These intersect all ages and genders with particular emphasis on the negative influence of the anti-obesity campaign on body image.

The NEDC state that, 'Very little research has been done in the eating and weight fields to ascertain whether obesity prevention programs may be harmful in relation to eating disorders and vice versa' (National Eating Disorders Collaboration, para 3). They believe that obesity and eating disorders are not opposite ends of the same spectrum and while these two groups may differ in terms of weight status, eating disorders and obesity have more in common than is

generally understood. (National Eating Disorders Collaboration) The NEDC urge caution when conducting obesity prevention programs to avoid a 'boomerang effect', thus, triggering an increase in eating disorders (National Eating Disorders Collaboration).

Eating Disorders Victoria agree stating that, '… public health campaigns should consider the impact of messages on people who might be at risk of developing an eating disorder, or people who already have an eating disorder, in order to minimise the risk of harm to these groups' (Eating Disorders Victoria, 2017, para 16).

With women as the focus, Burns et al. (2004) argue that public health messages, that use a narrow range of body weights, and thus, link slenderness to health, contribute to the development, or continuation, of eating disorders. In their study on the discourse of weight control by women who practice Bulimia and the discourse on weight control in the public health arena, the authors found that the discourse by both the women, and public health websites, reflect slenderness as being synonymous with health. They conclude that, '… paradoxically "health" practices provide a rationality that supports the practices of binge eating and compensating' (Burns and Gavey, 2004, p.549). This theory is confirmed in a study, discussed in the previous section, by Musolini et al. (2015) investigating how young use the contemporary understanding of 'health' and 'care' as a logic model to rationalise eating disorder practice (Musolino et al., 2015).

Catling and Malson (2012), writing from a feminist, social constructionist perspective, used semi-structured interviews with eight women, aged 19-57, with a diagnosis of Anorexia or Bulimia, to explore how they made sense of the contemporary anti-obesity health promotion campaigns. Their findings indicate that, '… anti-obesity campaigns were often construed not only as health-promoting but also as "Anorexogenic'' and "Bulimogenic"' (Catling and Malson, 2012, p.2). The results also revealed that the discourse relating to the anti-obesity campaigns, '… exacerbated already-existing cultural denigrations of fatness and idealisations of thinness, justified fat-phobic bullying, and mobilised unhealthy eating practices …'' (Catling and Malson, 2012, p.2). In conclusion, the authors call for more

caution, and further research, to ensure that anti-obesity campaigns do not add to the problem of eating disorders (Catling and Malson, 2012). Although only eight women participated, and the age range was broad, this study provides a cautionary note for policy-makers and others planning anti-obesity interventions.

The negative effects of anti-obesity messages do not just affect adult women; an article, written by O'Connell (2012), and published in the Herald Sun, Melbourne, cites several paediatric specialists who express concern about current weight-loss messages. The doctors interviewed claim that the more aggressive anti-obesity campaigns are leading to drastic weight-loss of up to a third of body weight in otherwise healthy children who develop an obsessive desire to be thin. The Chair of Adolescent Health at the Royal Children's Hospital, Melbourne, Susan Sawyer, explains that this phenomenon is very new. Agreeing, the Medical Director of Mental Health at the Austin Hospital, Melbourne, Richard Newton, believes that, ' ...some of the nine and 10-year-olds being treated were becoming ill from "the panic" created by anti-obesity campaigns' (O'Connell, 2012, para 7) and encourages those responsible to consider emotional well-being as well as physical health. Likewise, the head of Adolescent Medicine at Monash Children's Health, Melbourne, Caroline Clarke, reports that children who develop an eating disorder in response to the distress caused by an anti-obesity campaign message can become very sick very quickly. She explains that the children they are treating tend to be at the upper end of the healthy weight range, rather than obese, lamenting that, '... there is so much pressure on kids to lose weight' (O'Connell, 2012, para 13).

In a similar vein, Pinhas et al. (2013), in a Canadian case study series of four adolescent students, documented clear changes in eating habits of all participants dating from interventions at school. Three had been exposed to talks about healthy eating, one delivered by a dietitian, prior to changing their behaviour and becoming eating disordered. The fourth had been assigned to complete a project on eating disorders, tried out several of the strategies researched, and consequently became eating disordered. The authors discuss the need to promote health, regardless of size, and argue for a more ecological approach that promotes resilience to eating disorders. Ensuring that health messages target all body types,

coupled with clear interventions to discourage weight-based teasing, would, the authors argue, reduce the risk of misinterpretation of health messages. 'The adoption of more ecological approaches, that acknowledge and honour the social determinants of health, leads one to broaden one's definition of health so that weight is not its primary determinant' (Pinhas et al., 2013, p.115). Although this was a case study series of four students only, the results of this case series, nevertheless, endorse the findings of others and include useful information detailing the course of events that led to the students becoming unwell. This information may assist in the identification of cardinal signs of change to a student's eating habits, and thus, enable early intervention.

Cohen et al. (2005), also call for the removal of the obsession with obesity and its reduction, and a refocus on the broader social and economic issues that influence people's lives. The authors argue that focusing solely on weight-loss encourages dieting, a recognised risk factor for the development of an eating disorder. They also argue that media images often equate a healthy weight with the thin-ideal, which further increases the risk of an eating disorder, and call on those responsible for developing anti-obesity policies and interventions to consider the impact of individual blame, and concentrate their efforts on assisting individuals, whatever their weight, to achieve a healthy lifestyle (Cohen et al., 2005).

In 2014, Star and Hay, concerned about the Australian dietary guidelines, published in 2013, wrote a letter to the editor of the Medical Journal of Australia (MJA). The authors noted two issues in particular that they believe may provoke the onset of disordered eating; overly restrictive diets, especially for children, and the provision, on the government website, of calculators intended to assist individuals to work out their energy requirements. However, these online calculators may also be used for calorie restriction. The writers, while agreeing about the need to reduce obesity, argue that, 'Despite the prevalence of obesity, it is our view that restrictive diets should not be encouraged at a general population level' (Star and Hay, 2014, para 3). By focusing specifically on the healthy eating guidelines, and the calculators on the government website, the authors were very precise about their concerns relating to dieting and food restriction. In so doing, they provided a clear and unambiguous request for review of the guidelines and

removal of the calculators, rather than postulating a general concern about a policy that is often easily dismissible. It is unclear whether the researchers' concerns were acknowledged but, as of September 2019, the calculators remain on the website of the Australian government.

The NEDC express concern about many aspects of the anti-obesity campaign, particularly, the routine collection of anthropometric measurements together with the over-reliance on these as indicators of individual health status. This is especially true for school settings. They also believe that the moralisation of eating, such as labelling foods 'good' or 'bad', and food choices as 'right' or 'wrong', is problematic, as is any nutritional advice that encourages food fears and unhealthy dieting. The NEDC argue that anti-obesity interventions should aim to do no harm, and should not increase the risk of disordered eating. Similarly, eating disorder interventions should not increase the risk of obesity (National Eating Disorders Collaboration, 2011).

Ethical issues in health promotion

The subject of ethics in health promotion was discussed earlier at Chapter 4.2, with a particular focus on the use of disgust and shame to encourage individual behavioural change. In this section, the limited research on the role of ethics in health promotion is explored.

Discussing who should determine 'good health', and empower individuals to achieve this state, Spencer (2015), challenges the notion of empowerment being determined by those occupying privileged positions without determining what empowerment means to the individual. He argues that, '… continuing to encourage people to act within or against contexts, not of their own choosing would seem ethically problematic …' (Spencer, 2015, p.209). Personal perspectives on what constitutes good health for the individual differ according to context, and beliefs and the individual may actively resist the dominant framings of health if it does not reflect the individual's own experience (Spencer, 2015). This is exemplified by the public refutations by individuals and groups who reject the health frames allocated to them by authorities, for instance, fat activists believe that it is their right to determine how they view themselves rather than accept

externally-derived labels. Likewise, many Anorexia sufferers reject the belief that they do not have control over their illness and will die without treatment, preferring to view their eating disorder as a lifestyle choice.

Fry (2012), examining health promotion in obesity prevention, suggests that, in addition to the usual technical and evidentiary aspects of health promotion programs, consideration be accorded to the justification of obesity interventions that produce population, rather than individual, gains. The researcher explains that, without such consideration, programs will continue to preference certain health identities over others, and grant the preferred identities permission to be part of society. In contrast, those who do not fit the preferred identity will be denied societal endorsement. For example, the Western cultural preference for the thin-ideal health identity degrades the overweight and obese health identities, thus denying them equal franchise in society. Fry argues that the prevalence of overweight and obesity in Australia renders consideration of the justification of public health policies paramount, proposing that, '… the Australian obesity prevention strategy could be evaluated using the Nuffield Council on Bioethics stewardship model of public health to assess whether any current approaches exceed recommended intervention constraints or limits' (Fry, 2012, p.116). The Nuffield Council on Bioethics stewardship model will be discussed in detail later in this section.

In an article discussing health promotion ethics, Carter (2012) asks, 'What does it mean to think about the ethics of health promotion?' (Carter, 2012, p.4) and, similar to Fry, believes there are ethical questions to be answered when engaging in health promotion practice, including 'Can we provide a moral justification for what we are doing in health promotion?, or, What is the right thing to do in health promotion, and how can we tell?' (Carter, 2012, p.4). In a separate article, Carter et al. (2012) offer a definition of health promotion ethics, stating, 'Health promotion ethics is moral deliberation about health promotion and its practice' (Carter et al., 2012, p.1). The commonly held belief that health promotion is concerned with equity of social arrangements, they argue, ' … imagines that social arrangements can be altered to make things better for everyone, whatever their health risks, and seeks to achieve this in collaboration with citizens' (Carter et al., 2012, p.1).

However, the writers point out, this raises the question of what is a better society? Moreover, what should health promotion contribute to this society? The potential for health promotion to limit the freedom of some individuals, while increasing that of others, is a risk that must be managed alongside the risk of triggering the stigmatisation of certain groups and individuals. The researchers question how to determine collective good, as opposed to individual freedoms, and draw attention to the fact that different people will make different moral evaluations depending on their vision of what a good society looks like (Carter et al., 2012).

Calling for a code of ethics to be developed for health promotion, Parker (2007) believes that, in order to avoid damaging things that people value, such as community networks and autonomy, 'Health promotion practitioners should be able to identify ethical dilemmas that are relevant to their practice and understand how to preclude and/or address such problems' (Parker et al., 2007, p.69). Reilly (2016) agrees, indicating that, in general, health promotion practice lacks evaluation of the broader impacts on the functioning of individuals and communities in the months, and years, after an intervention. Goals and objectives are usually evaluated on the impact of the intervention immediately after cessation rather than on broader and more long-term outcomes. However, as Reilly et al. (2016) argue, many long-term outcomes are unexpected and may have caused damage to other areas of the individual's life, or to the community. They believe that, 'Evidence-informed practice underpinned by ethics is fundamental to developing the science of health promotion' (Reilly et al., 2016, p.54).

Brauneck-Mayer and Carter (2015), in their discussion on the difficulties in determining an ethical model for health promotion in practice, identify the different views of researchers in this field and discuss the disparate ways in which authors seek to find an ethical solution. While many researchers seek to build ethical principles using practice-based evidence of case studies to ground their analysis, others use evidence-based practice to inform the development of a framework using recognised principles, applied to practice. The authors recognise this as the nature of ethical deliberation based on the search for what is right, or good, and why and they, ' … accept that this will result in multiple, often conflicting, reasons, but argue for the need to engage in respectful conversation

with clear and coherent reasoning, to seek a consensus for change' (Braunack-Mayer and Carter, 2015, p.166). Although Brauneck-Mayer and Carter present excellent points about the difficulties in developing ethical principles, there already exist several ethical guidelines developed in Australia, and overseas, that may be suitable for use, or modification, in a practice-based application. These resources are discussed in detail in the next section.

In their first official acknowledgement that obesity stigma may be caused by unintended consequences of public weight-loss messages, in 2017, the WHO released a report titled, 'Weight bias and obesity stigma: considerations for the WHO European Region' (World Health Organization, 2017). In addition to describing the damage that weight bias and obesity stigma may cause, they state, 'Popular narratives around obesity may contribute to weight bias by oversimplifying the causes of obesity and implying that easy solutions will lead to quick and sustainable results' (World Health Organization, 2017, p.2). They call on member nations to, 'Consider the unintended consequences of simplistic obesity narratives and address all the factors (social, environmental) that drive obesity' (World Health Organization, 2017, p.4). The report recommends, in part, to cease depiction of people with obesity in a negative light, particularly in all types of media, create supportive communities that empower people with obesity and monitor public health messages that simplify obesity and use stigmatising language. Given that the WHO were key stakeholders in the initial global obesity prevention campaign (World Health Organization, 2000a) and (World Health Organization, 2000b), it is difficult to overestimate the importance of this report in its acknowledgment of a situation that it helped to create.

In conclusion, the NEDC reiterate, in their discussion about the importance of being aware of the 'boomerang effect', that it should be remembered that, 'The concept of "do no harm" is paramount to contemporary medicine' (National Eating Disorders Collaboration, para 10).

A different way of doing business

There is limited research published, to date, on ways to ameliorate the undesired effects of the anti-obesity campaign. In this, the final section of the literature

review, the research on this topic is presented and discussed. This will encompass different approaches to policy, practice, and individual interventions which seek to reduce the possibility of unintended consequences arising from the anti-obesity campaign, an action ostensibly taken to improve health outcomes.

Policies

There appear to be no policies in Australia that consider the broader ramifications of the anti-obesity policy in terms of harm minimisation. However, in 2004, long before the instigation of the government's formal obesity policy in 2009, VicHealth, in their response to the Parliamentary Inquiry into the development of body image among young people and associated effects on their health and well-being (Victorian Government, 2003), did discuss this in part. As part of their response, VicHealth recommended that, 'An emphasis on the non-weight attributes of healthy eating and physical activity will more likely promote body image satisfaction, than one that infers weight-loss benefits' (VicHealth, 2004, p.6), and urged health planners and policy-makers to be sensitive to body image issues in children and young people and to consider the value of size-acceptance messages (VicHealth, 2004). This refers, in a general sense, to the HAES concept, which will be discussed in detail later in this section. However, no evidence could be located that indicated acceptance of this recommendation.

The Victorian eating disorder strategy (2014) is the current government policy driving the prevention and management of eating disorders in Victoria. Although there is scant mention of any possible undesirable effects of the government's anti-obesity strategy, the document does state that, 'By investing in a prevention focus, there are opportunities to embed and leverage strategies to prevent eating disorders within broader efforts, such as mental health promotion and obesity prevention' (Victorian Department of Health, 2014, p.22). In terms of prevention activities, the strategy recommends that building resilience and strengthening protective factors should form an integral part of health promotion for at-risk groups (Victorian Department of Health, 2014).

The Nuffield Council on Bio-ethics (UK) released its stewardship model on ethical issues in Public Health in 2007 (Nuffield Council on Bioethics, 2007a). Although the intention of the policy is to examine public health interventions from an ethical viewpoint, it does not comment on the prevention of the unintended effects of one policy, or action, on a group or population outside of the target group or population. It is included in this section because of its discussion on the principle of justification in regard to public health interventions, and the Council's development of The Intervention Ladder. This ladder is a hierarchy of factors deemed by the authors to be important for consideration when deciding whether to intervene in the first place, rather than reacting to unwanted outcomes after the intervention. For example, ' … whether a public health measure is acceptable depends on whether or not it is "proportionate"' (Nuffield Council on Bioethics, 2007b, p.4), and asks policy-makers to question if the benefits of the planned measure justify the interference in people's lives, and how likely it is to achieve its goal. The Council also clearly states its fundamental principle of not coercing adults to lead healthy lives (Nuffield Council on Bioethics, 2007a). Notwithstanding the lack of discussion about possible unintended effects of health policy in this publication, the inclusion of these basic fundamental questions, with a stated ethical principle, renders this document a valuable resource for the development of future policy focusing on the amelioration of harm in public health policy, for instance, the anti-obesity policy.

Frameworks and guidelines

In response to their concerns about the unwanted consequences of the anti-obesity campaign, the NEDC released their Communication Framework in 2010 offering ways to construct obesity-reduction health messages to avoid triggering and/or exacerbating eating disorders. They state that, 'A primary objective of the NEDC has been to develop an evidence-based communication framework to contribute to the promotion, prevention and early intervention of Eating Disorders' (National Eating Disorders Collaboration, 2010b, p.7). The communication framework was developed by incorporating high-level evidence with the opinions of experts, and grassroots consultations via forums and a national workshop. The NEDC argue that because of the high prevalence and

serious outcomes of eating disorders, it is imperative that evidence is used to inform the most effective approach. Recognition, by raising broad community awareness about eating disorders and ensuring that this becomes a priority mainstream health issue, are priorities of the NEDC's communication framework. Building resilience with young people to resist pressures to engage in high-risk behaviours that often lead to eating disorders is regarded as critical, as is the identification of risk factors at an early stage to reduce the impact of the illness by early intervention. The guidelines offer an holistic method in the prevention and treatment of all types of eating disorders by identifying key needs necessary to achieve success. Dissemination of information tailored to the audience (children, older women, health professionals) is critical. Moreover, ensuring environmental support for change (referral pathways, health professional training), communicating in a two-way manner through the appropriate channels in a familiar environment (home, school, sporting clubs), and facilitating individual action for change, are all necessary, the NEDC believe, to ensure effectiveness without worsening, or triggering, eating disorders either in the diagnosed group, or in any other population (National Eating Disorders Collaboration, 2010b).

In 2012, following the release of their Communication Framework, the NEDC published a National Framework targeting the prevention and management of eating disorders believing that, 'Integrated, coordinated messages targeting both obesity and eating disorders are possible' (National Eating Disorders Collaboration, 2012b, p.82). The successful management of shared risk and protective factors to avoid the development of specific problems, such as the stigmatisation of individuals, and the triggering of disordered eating, in addition to consistency of messaging, is a basic principle of the framework. However, as the NEDC acknowledge, collaboration across sectors is the single most critical element in the success of the framework (National Eating Disorders Collaboration, 2012b).

The NHMRC, under the auspices of the Australian Government, released the Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Adolescents and Children in Australia, in 2013 (National Health and Medical Research Council, 2013). This document not only guides the assessment

and management of overweight and obesity but also includes a risk profile for eating disorders at all levels of assessment. The importance of integrating this risk profile lies in the interweaving of this with the more common aspects of overweight and obesity assessment. In so doing, the document educates the reader on the importance of shared risk factors, a fact not widely known in the health community. However, when discussing the management of these comorbidities, the guidelines do not mention the opportunity of treating both conditions simultaneously. In addition, and included in one of the public submissions for the redrafting of the guidelines in 2012, Star (2012), suggests that, '… it is important to have the percentages of overweight and obese adults reported separately rather than grouped together as this gives clinicians a more accurate/truthful picture of the situation' (Star, 2012b, p.2). The importance of this comment cannot be overstated. The ABS routinely reports its data as a combined statistic of overweight and obese individuals but lacks detail about what differentiates the two groups. By relinquishing the opportunity to provide more meaningful information, the development of successful policies and interventions may be hindered. This suggestion by Star was not included in the final published guidelines by the NHMRC.

Practice-based

Possibly the most well-known paradigm to oppose the weight-centric management of health is the Health At Every Size (HAES) approach, '… which reinforces the importance of healthy lifestyle habits, intuitive eating by recognition of internal cues of hunger and satiety, and healthy attitudes and behaviours toward food intake' (Leblanc et al., 2012, p.486).

Originating in the US, the HAES approach, based in part, on 'intuitive eating', has now been adopted, to some degree, in several countries across the world. This approach, '… challenges the value of promoting weight-loss and dieting behavior and argues for a shift to weight-neutral outcomes (Bacon and Aphramor, 2011, p.1). Bacon et al. (2005) explain that participants in HAES programs are encouraged to rely on intuitive regulation of eating and to decrease restraint, rather than increasing restraint and dieting. In doing so, the risks of dieting and food

restriction, resulting in more weight-gain and disordered eating, are avoided. There has been criticism by professionals that decreasing restraint will result in increased weight gain and a worsening of health markers (Kratina, 2003), however, a study conducted by Bacon et al. (2005) found the opposite to be true. The study, involving 78 women (30-45 years) in a six-month randomised clinical trial compared the HAES program, with a standard food restriction diet program. The participants were divided into two groups. Results after six months revealed that the HAES group had maintained their weight and improved outcome measures of anthropometry, metabolic fitness, and psychological markers, and maintained this at the two-year follow-up. Those in the diet group lost weight initially but had regained it at the two-year follow-up (Bacon et al., 2005).

Other researchers have had similar results with the HAES approach. Leblanc et al. (2012) investigated whether a HAES approach could influence dietary intake and eating patterns in overweight and obese women. This is a deviation from the usual HAES paradigm which does not focus on weight-loss. The researchers recruited 140 overweight and obese women, randomised to three groups, a HAES group, a support group for losing weight and a control group that had no intervention. Although the results demonstrate that the HAES approach did not have any impact on dietary variables and eating patterns, decrease in hunger was associated with a decrease in overall energy intake in this group resulting in the largest weight-loss of the three groups at the four-month review. The social support group also resulted in weight-loss but smaller than the HAES group, however, the weight measures of the control group did not change. Because of this finding, the writers suggest that, although not the primary goal of the HAES approach, it may, nevertheless, be an efficient tool for healthy body-weight management (Leblanc et al., 2012). It is possible that studies such as this will positively influence researchers and clinicians who may be sceptical about the HAES method, given its lack of focus on reducing obesity, to reconsider the philosophy behind the approach. It is unfortunate that the overweight and obese participants were grouped together as, if considered separately, this may have provided important information about any differences in response to the HAES approach between the two groups.

Van Dyke and Drinkwater (2015), in a literature review of peer-reviewed research on the relationship between intuitive eating and health indicators, located 26 articles, 17 cross-sectional survey studies, and nine clinical studies, eight of which were randomised controlled trials. Analysis revealed that the cross-sectional studies indicated that intuitive eating is associated with lower BMI scores and increased psychological health. The clinical studies demonstrated definite weight maintenance, but not weight-loss, improved psychological health and improved physical health indicators, other than BMI. These indicators included blood pressure and cholesterol levels and evidence of improved dietary intake. None of the studies correlated, either negatively or positively, with higher levels of physical activity. The authors conclude, that, ' … extant research demonstrates substantial and consistent associations between intuitive eating and both lower BMI and better psychological health' (Van Dyke and Drinkwater, 2013, p.1), and argue for further research to be conducted on this approach to inform future directions for effective anti-obesity interventions (Van Dyke and Drinkwater, 2013).

A campaign to empower women by way of physical activity, This Girl Can – Victoria, aims to, '… celebrate and support Victorian women … ' (VicHealth, 2018, para 1) to embrace physical activity in a way that suits the individual regardless of age or size. It is based on the highly successful This Girl Can - UK campaign by Sport England (Sport England, 2015) that has reportedly motivated 3.9 million women in the UK to embrace sport in their own way. This health promotion activity does not focus on weight-loss or achieving a better, fitter body but encourages women and girls of all ages to enjoy physical activity at whatever level and type of activity that suits the individual. According to VicHealth, '…. twice as many women than men put off getting active because they're worried about what other people think … ' (VicHealth, 2018, para 3). Divorcing physical activity from appearance and competitiveness allows women to experiment with physical activity without pressure to either become fitter or to lose weight (VicHealth, 2018).

A different approach to harm minimisation is embraced by the Queen Victoria Women's Centre (QVWC) in Victoria, Australia. Aimed at increasing resilience in young women, their publication, 'Young women, body image and the digital age

QVWC women's capacity building kit', (2009) seeks to educate young women on the intricacies of the media and the, often subliminal, messages that may contribute to negative body image. The QVWHC argue that the promotion of the thin-ideal and the use of digitally enhanced images can lead to disordered eating, depression and other psychological problems. The QVWHC believe that the most effective way to counteract this is to build self-esteem and resilience. This program is based on understanding and interpreting the three most important media elements, the images and icons, the text and language and the context. By improving the media literacy of young women, the QVWHC endeavour to prevent problems associated with negative body image and the possible detrimental effects of psychological dysfunction (Queen Victoria Women's Centre, 2008). The capacity building kit, which includes worksheets and resources for further reading, may be a useful tool to target all adolescent school audiences, in addition to the usual population group of young women. Although media literacy may already be included in a school's own health program, the QVWC kit would provide a consistent model ensuring all adolescents receive the same media literacy training early in life. No literature addressing the efficacy of this kit could be located.

Neumark-Sztainer (2005) asks, '... can we simultaneously work toward the prevention of obesity and eating disorders?' (Neumark-Sztainer, 2005, p.220). Acknowledging the difficulties in bridging the two disorders, the researcher calls for communication between professionals, within both fields, to develop a common language and appreciation of the seriousness of all weight-related disorders. The author argues that if we can foster environments that promote healthy choices and the acceptance of diverse body shapes and sizes, '... we can work toward the development of messages and interventions that address the broad spectrum of eating and weight-related concerns' (Neumark-Sztainer, 2005, p.226).

In addition, Neumark-Sztainer wrote, in 2009, of the barriers that need to be overcome to enable professionals working in the eating disorders field and the obesity field to work together effectively. The writer discusses the importance of each group developing a mutual appreciation of the other's field, and the ability to collaborate and strategise, approaches. She suggests leveraging eating disorders of

the obesity prevention agenda as the latter not only enjoys a higher profile but also is better funded than the former. The author concludes by arguing that, as dieting is a risk factor for obesity, eating disorder programs, if effective at reducing unhealthy diet behaviours, could also be effective at preventing the onset of obesity (Neumark-Sztainer, 2009).

In a similar vein, Star et al. (2015), argue the need for integrated eating disorder and obesity prevention programs that address weight stigma and the social desirability of eating disorder behaviours in vulnerable individuals. This suggestion resulted from their study on perceived discrimination toward sufferers of different eating disorder types, which found, amongst other findings, that a proportion of obese participants had a positive regard for eating disorder behaviours and were, therefore, at risk of developing an eating disorder (Star et al., 2015).

In a bid to bring the two fields together, in 2014, Eating Disorders Australia began hosting an annual conference for health professionals+ titled, the Eating Disorders and Obesity Conference. This event focuses on issues that are common to eating disorders and obesity, the co-relationship in the context of mental health and the challenges facing public health in this area. Although only in its infancy, attendance numbers have been high, proving it to be a popular forum for discussing what links the two groups, as well as what divides them. The role of physical health in the maintenance of well-being is the focus, and the underlying theme, that informs collaborative actions for the future management of weight-related conditions (Eating Disorders Australia, 2018).

Indication of harm to the eating disorder community, by the anti-obesity campaign, does not infer that obesity prevention should not be pursued. As Ten Have et al. (2011) point out, 'The fact that objections are raised does not automatically imply that a program should not be implemented' (Ten Have et al., 2011, p. 676). However, to revisit Vartanian et al. (2013), 'Fundamentally, these campaigns should, first, do no harm' (Vartanian and Smyth, 2013, p.49).

4.7. Conclusions

This literature chapter sought to systematically provide information that explains why the Australian anti-obesity campaign may be harming individuals susceptible to either the triggering or development of an eating disorder. The central role of body image was explored among a variety of population groups to identify those most at risk for developing Body Dysmorphic Disorder, disordered eating, or a diagnosable eating disorder. This review also aimed to highlight the intricacies, complexity, and interdependence of obesity and eating disorders by discussing their similarities and the spectrum to which both disorders belong. Throughout, the fact that an eating disorder is a serious, sometimes fatal, illness is affirmed in order to emphasise that, if the Australian anti-obesity campaign is negatively affecting the prevalence of these illnesses, it is not a trivial consequence.

Additionally, several serious conditions, including BDD, Muscle Dysmorphia and Orthorexia, arising, at least in part, from negative body image, were examined in detail to understand the way in which these may co-exist with an eating disorder to demonstrate the complex nature of disordered eating. That an eating disorder may evade diagnosis in the presence of a more obvious illness, such as those mentioned above, highlights the often insidious nature of disordered eating and the difficulty in acquiring an eating disorder diagnosis and, thus, receiving appropriate assistance.

The power of the mass and social media was explored for its role in promoting the thin-ideal and as augmenters of fat stigma. Social media and its various platforms were investigated especially for its role in the provision of spaces for users to actively promote disordered eating, whether for aesthetic purposes or to assert a sense of individual agency.

This review also sought to describe the interface between obesity and eating disorders, the evidence for shared risk factors and the ethics of intervening, given the possible unintended effects. Following this, examples of policies, guidelines, and practice-based interventions were explored for ways to achieve a health promotion intervention, without causing unintended consequences.

Earlier, both Roehling (2011) and Saguy (2011) pointed out that fear of fat often pervades every aspect of a woman's life causing dissatisfaction and reduced quality of life (Roehling, 2011, Saguy, 2011). Thus, it could be argued that the Australian government, with its drive for weight-loss as the crux of their anti-obesity campaign, is unintentionally negatively affecting the quality of life in susceptible Australian women rather than increasing the quality of life by losing weight.

There appears to be a general lack of understanding of the potential seriousness of eating disorders and disordered eating in general, in Australia, given the relatively small investment by the Australian and state governments in this area unlike the investment in obesity prevention. Because there are no formal, centralised statistics gathered on eating disorders, disordered eating and other disorders of body image, it is not possible to objectively gauge their impact on individuals and the community. Because of this, even if the anti-obesity campaign is contributing to the increase in eating disorders, this may be dismissed, by many, as an unimportant side-effect.

Finally, although the precise impact of these conditions is unknowable, there are indicators, especially of disordered eating and disturbed body image, in the Australian community. While this does not provide a full picture of the problem, the fact that spaces exist where there are signs that these disorders abound, should, at least, raise the possibility of the existence of a significant problem in Australia.

The following four chapters detail the individual studies including aims, methods, descriptive results and limitations. Deeper consideration of the qualitative aspects of the combined studies forms part of the consolidated discussion in Chapter 9.

Current research studies

Analytical approach for studies one, two and three

Content analysis

In order to achieve the aims of the first three studies, media content analysis (a sub-section of content analysis) was employed. This entails, as Krippendorff (2004) explains, '… a systematic reading of a body of texts, images, and symbolic matter …' (Krippendorff, 2004, p. 1) and interpretation of this material. The value of this approach is endorsed by White and Marsh (2006) who believe that, 'Content analysis is a highly flexible research method …' (White and Marsh, 2006, p. 41) and of particular use in the analysis of very complex material and is particularly useful in media analysis (White and Marsh, 2006).

The benefit of this approach in the current research is that it harnesses information presented in cyberspace that might provide more impromptu, and possibly more authentic, responses than would occur if using a different method such as a survey. As such, it allows, not only analysis of manifest content (quantitative approach), but also latent (interpretive) content (qualitative approach) both important in understanding the material in context (Macnamara, 2005). In other words, it offers, ' … a way of understanding meanings of texts (that) integrate qualitative and quantitative message analysis' (Macnamara, 2005, p. 4).

Although studies one and three are considered quantitative, Krippendorff (2004) observes that, 'Ultimately, all reading of texts is qualitative ….' (Krippendorff, 2004, p. 12). Mayring (2013) agrees, noting that, because content analyses requires the interpretation of background context, it is always qualitative (Mayring, 2014).

Chapter 5: Study one: Fat stigma on show

Fat stigma can be a critical component of negative body image and disordered eating but may go unnoticed by those unaffected personally. In order to demonstrate what fat stigma looks like in the public domain, and add to the knowledge base specifically relating to fat stigma, this study highlights an instance

of fat stigma on Australian television that has, at its core, the criticism of three fat women appearing on a panel to discuss whether it is possible to be fat and fit. It also considers whether the results vary according to sex which, given that the three invited guests were all women, might further the understanding about gendered fat stigma.

Aim

The aim of this study was to determine whether fat stigma comments in the public domain and, thus, easily accessible, are weight-focused; if these are personal or general; whether the content and tone of these comments vary depending on sex, and if any comments focused on health rather than weight (reflecting an understanding of a health-based approach such as the Health At Every Size (HAES) concept.

To analyse the content of the comments left on the 'have your say' forum located on the Insight page on the SBS website to highlight the presence of stigma in a public forum, and to discover if the responses differed according to sex. This may add to the understanding of stigma and how it may be found in different spaces across Australian society.

Research design

A quantitative study was designed to analyse comments on the SBS Australia's Insight program titled 'Fat Fighters' which featured three self-described fat activists debating with a forum of health, fitness, and other experts, whether it was possible to be fat and still be fit.

Methods

Data were captured on 17th February 2014 and categorised into variables according to the following criteria that were informed by the aim of the study which was to identify whether the responses to the program differed according to the sex of the commenter:

1. **Sex of commenter:** Male/female: this was determined by name.

2. **Positive or negative comment:** This was determined by the general tone of the comment and that it was non-personal. For instance if the overall tone was generally encouraging, even if a minor negative comment was embedded, this was identified as a positive comment. Likewise, for negative comments, it was the overall tone of the comment that determined the category.

3. **Negative personal comment about an individual's weight:** Comments deemed to be derogatory in tone or content, intended to shame, bully or disparage either the fat individuals or the panel, were designated as negative.

4. **Weight-focused comment (non-personal):** If the comment was centred on weight and/or weight-loss only then this was designated as a weight-focused comment. If health was mentioned but not health improvement, and was not part of the main comment, it was designated a weight-focused comment. For example, '…. I have other health issues (not related to weight)' when discussing weight-loss methods.

5. **Health focused comment (neutral tone):** If the comment was centred on health improvement as the main focus, even if weight-loss was included as a minor part of the comment, it was designated a health improvement-focused comment. For example; '…. to maintain body weight, sustain a healthy diet and MOVE', when discussing health improvement.

The examples above are drawn from the data collected for the study.

All of the criteria, with the exception of the 'sex of commenter' criterion, contained an option to select either 'not known' or 'not answered' if relevant. The 'sex of commenter' criterion only contained the option to select 'not known'.

Scoring was carried out independently by two researchers. The Kappa Coefficient score for internal validity was .86, indicating very good interpreter reliability. Discrepancies were discussed and resolved.

Analytic methods

To determine whether any differences in response according to sex was a chance event or represented a statistical difference, relative risk analysis was calculated. Descriptive statistics including frequency counts, 2 x 2 tables and relative risks to seek significant differences between males and females, were carried out. Data collected were entered and analysed using EpiData Software (EpiData Software).

Further cross-tab analysis had been planned, for instance, investigating whether the quotes that were classified as negative personal also focused only on weight rather than on health as a solution to obesity. This, however, proved pointless as the comments that were classified as negative were, by definition, about weight, for example, 'I work in a hospital that seems to be populated with fat workers. Every day, I go to the staff canteen and see the enormous portions of the most disgusting food these fat people choose to eat.' While this comment could be classified as both negative (fat workers and the reference to enormous portions of disgusting food eaten) and weight-related rather than health-related (focusing on reduced eating and weight-loss rather than improving health) there was a lack of delineation of subject matter. Because of this, it was decided to classify each comment according to the overall tone and intent, rather than attempt to split comments into different categories. In this instance, the negative tone was present throughout the comment thus it was classified as a negative personal comment. Therefore the 2x2 tables were irrelevant.

Descriptive results

In this study, the content of online responses to a program broadcast by SBS Australia's Insight program titled 'Fat Fighters' on 28th may 2013, was analysed.

Eighty-nine responses were collected. Four commenters were unable to be classified by sex and were excluded. A total of 85 commenters' responses (63 women and 22 men) were analysed for all four variables by sex (Table 2). Commenters' names and institutions/addresses were self-published on the forum, so anonymity was not established.

Table 2 Results by sex of commenter

Variable	Response	Women (63)	Men (22)	Relative risk (95% CIs), significance test	Total (85)
Tone of comment	Negative Neutral Positive	24 (38%) 22 (35%) 17 (27%)	11 (50%) 4 (18%) 7 (32%)	(Chi 2.19) p .33	35 (41%) 26 (31%) 24 (28%)
Negative personal comments about an individual's weight	No Yes Missing	42 (67%) 17 (27%) 4 (6%)	11 (50%) 11 (50%) 0	1.31 (0.94-1.81) p .07	53 (65%) 28 (35%) 4 (5%)
Comment focusses only on weight (non-personal)	No Yes Missing	13 (21%) 40 (63%) 10 (16%)	3 (14%) 18 (82%) 1 (5%)	1.18 (0.88-1.58) p .13	16 (19%) 58 (65%) 11 (13%)
Comment mentions improving health	No Yes Missing	41 (65%) 17 (27%) 5 (8%)	17 (77%) 4 (18%) 1 (5%)	0.87 (0.67-1.14) P .36	58 (68%) 21 (25%) 6 (7%)

Results revealed that the overall tone of non-personal comments was more negative (41%) than positive (28%) or neutral (31%). Over one third of the total comments included negative personal comments, with men, at 50%, almost twice

as likely as women, at 27%, to make negative personal comments. Sixty-five percent of all commenters focused on weight and weight-loss, while 25% mentioned health, or health-improvement. The following are two examples of comments retrieved from the SBS website forum for the study:

- Female contributor: 'I think the 3 big girls r lying to us & themselves.'
- Male contributor: 'Fat is ugly, fat is disgusting, fat is unhealthy.'
- Female contributor: 'Fat people are now starting to go through the same persecution that smokers' have been going through for many years! No empathy or understanding from people who think they know better!'

Discussion

Only twenty-five percent of commenters discussed health or health-improvement, rather than weight-loss, and these comments were commonly made by women. Overall, comments were more negative than positive, men were found to make more negative personal comments than women and almost two thirds of comments focused on weight and weight-loss rather than on health improvement. It should be noted that the comments were left on a high profile web domain (SBS TV) with commenters freely including their name, and often their address, thus, suggesting that they consider the criticism of fat women to be acceptable. It is of note that the conversations between commenters were robust appearing to be without constraint and with very little dialogue involving commenters challenging one another about the negativity and personal tone of comments. This is possibly a reflection of the program itself which was openly confrontational about fatness. The general nonchalance observed by the commenters in response to this program might ultimately indicate the public's acceptance of fat-shaming in Australia.

It is more difficult to clearly determine if the sex of the panellists influenced the comments as no men were included. This in itself may indicate the program producers' bias, or the their belief that the program would trigger a stronger reaction if it featured three strong, independent fat women challenging the accepted role of female subservience to conventional mores about appearance.

This study illustrates a space where fat stigma was identified in an open forum on the comments section of a television channel's website in Australia. However, there are limitations to its generalisability. The sample group was an opportunistic sample that may not be representative of the wider society in Australia. The personalised comments in particular, may be a reaction to the program itself, or the usual banter that often occurs in comments sections online rather than an indication of how the commenters would behave if engaged personally with the fat women in the show. The perceived ease with which the commenters negatively addressed three women may not reflect a sex-related response but may be the type of comment that would have been left if the panel members were men, or a mixture of women and men. As there was no comparison group with which to compare responses, and although many of the responses mentioned fatness related to femaleness, the conclusion cannot be drawn that this behaviour reflects a pattern in Australian society.

Chapter 6: Study two: Pro-Ana websites: content analysis

As discussed in Chapter 4, Pro-Ana websites can provoke strong reactions. From the wish for eradication, to their acceptance as a valid feminist space, they are often considered confronting and challenging. In terms of influencing eating disorders by glorifying thinness and denigrating fat, it could be suggested that their continued and elusive existence reflects a desperate attempt by girls and women to embrace the Pro-Ana lifestyle in response to ongoing anti-obesity campaigns. However these spaces may also be viewed as sites of female agency where women have space to escape scrutiny for their lifestyle choices and find power in the presence of like-minded individuals. The results of this study may add to the existing knowledge by identifying if Pro-Ana activities are a reactive response to structure (anti-obesity campaigns) or a proactive response to the perceived reductionist view that all bodies, especially female, cannot be too fat or too thin.

This study examined the promotion of eating disorders via Pro-Ana websites to identify the sites' main features and how they operate to encourage and empower their visitors to adopt the Pro-Ana lifestyle. Styles of communication and the promotion of specific diets for the purposes of restriction were of particular note. In addition, the environment of exclusivity and the monitoring of website visitors to ensure the authenticity of potential members were explored for their role in ensuring that all conversations and activities support 'Pro-Ana' as a valid lifestyle. The view held by some writers that opposition to these sites disempowers the members' personal agency is also examined, and, because the members of eating disorder sites are predominantly female, the roles that feminism and female agency play are also explored.

Aim

To explore a collection of Pro-Ana websites, either currently active, or still active in 2016, and investigate how these sites operate from the standpoint of female

agency and whether the sites demonstrate a place of power and resistance or operate solely as support mechanisms.

Research design

A qualitative study designed to analyse the content of Pro-Ana blogs and Internet websites and gather information relating to aspects of exclusivity, overt Pro-Ana content, such as the use of 'thinspo' images and, the culture of the site in terms of rebellion or persecution.

Methods

To acquire authentic information from primary sources, 32 Pro-Ana blogs and Internet websites were visited in September 2016, August 2017 and November 2018 to observe direct conversations and access information. Active sites were prioritised but inactive sites were included if ceased since 2015.

Suitable sites were located using an Internet search to identify as many active (or recently active) Pro-Ana websites as possible.

Search strategy

The following search engines and search terms were used:

Search engines: Google, Safari, Bing and Yahoo.

Search terms: Eating disorder blogs; Pro-Ana blogs and websites; Anorexia blogs and websites, and the phrases 'learning to be Anorexic' and 'Anorexia tips and tricks' and 'thinspo'.

The study was limited to content from people identifying as female.

Content analysis was conducted to determine:

1. Whether the site welcomed new members or maintained an exclusivity thus discouraging new members by treating them with suspicion.

2. The presence of Pro-Ana illustrations, pictures or photographs not protected by membership. In addition, the presence of the Ana Creed (also known as the Letter From Ana) or similar writing that may influence a casual visitor and is also not protected by membership. For more information about the Ana Creed refer to Appendix 2.

3. The overall culture of the site. Did it appear to project strength and resistance in terms of a cohesive and informed group of individuals pursuing their right to choose their preferred lifestyle? Or, did it project a feeling of persecution and a need to bond with like-minded others for protection?

Analytic methods

The content of the websites was analysed by identifying the following:

1. The presence of a warning that content may be triggering for those in recovery

2. Easily accessible Pro-Ana images

3. A culture of independence

4. A culture of persecution.

Descriptive results

The 32 sites found are all based in America. No specific Australian sites were found, however, as many eating disorder sites do not openly advertise that they are Pro-Ana, there may be sites that eluded detection by general online searching. A list of websites visited for this study may be found at Appendix 5.

During observation of the Pro-Ana sites no men were observed to be involved in discussion; however, this is not to infer that men do not visit these sites.

Main findings:

Five out of a possible 32 sites offered a warning not to enter unless the visitor was currently suffering from an eating disorder.

Thirty-one of the sites visited displayed Pro-Ana images clearly visible to the casual visitor. Only one site explained that in order to proceed to more images, membership was essential. One site displayed the Ana Creed, a highly aspirational document promoting devotion to the god Ana prominently on page 2. Three others incorporated this document with other information on their websites.

Twenty-six sites clearly projected a sense of independence and a determination to maintain a Pro-Ana lifestyle. There was a strong sense of camaraderie and an unwillingness to allow new users to part of this society. Potential members were treated with caution until they had proven themselves to be genuine eating disorder sufferers and not 'wannarexics'. Conversations were observed indicating that, although members were concerned about being closed down, they were determined to continue by other means, including starting another website. The remaining six sites operate as an information exchange rather than as a vehicle to share philosophical views or a discussion on broader issues, such as the closure of Pro-Ana websites. Nevertheless, none of these sites projected a culture of persecution or fear.

No websites were found that projected a culture of persecution.

Table 3 Content analysis of 32 Pro-Ana websites

	Warning present	Easily accessible images	Culture of independence	Culture neutral	Culture of persecution
Yes	5 (16%)	31 (97%)	26 (81%)	6 (19%)	0
No	27 (84%)	1 (3%)	6 (19%)	26 (81%)	32 (100%)

Detailed findings:

The most active site found, Site 1, has 300,000 members, and the statistical counter, within the website, reveals that 14,635,602 posts have been processed since commencement (the commencement date is not identifiable) and 225,475 'thinspiration' images have been posted on the gallery wall.

This site includes many discussion forums and organises meetings for members, manages a buddy system and incorporates an online shop. There is information on a variety of diets that are generally considered 'healthy', such as vegan. However, the overall motive, to lose weight, and how to hide this, is inherent in the manner in which these are presented. This site is described on the home page thus, 'MPA is a site dedicated to the support or recovery of those suffering from eating disorders or body dysmorphic disorders.' However, no discussions about recovery or assistance with this could be located despite intense scrutiny. Furthermore, all of the material analysed on this site focused on weight-loss with photographs uploaded by members who, identified by their conversation, are mostly average-sized women rather than underweight women. This appears to indicate that this site (which is a well-known and popular Pro-Ana site) is not targeted to an audience of recovering Anorexics, but rather, to those who want to be thin or even, as several members were observed to admit, Anorexic. Nevertheless, this observation does not imply that these women are not suffering, nor that those women who do have a diagnosis of Anorexia do not post on this site, however, if this is the case, the conversations reflect recovery but a desire to maintain body-size. No discussions of a political nature, such as women's rights, were observed and while a clear sense of rebellion was observed, this was limited to rebellion against society for its disdain of the Anorexic body.

One sub-forum featured on this site is titled, 'What type of Orthorexic are you?' confirming the members' knowledge of Orthorexia, and its link to Anorexia, while still validating it as a way of eating. 'Thinspiration' photographs of models and celebrities, in addition to advice on how to refrain from eating, can also be found on this site, as on others visited. Although it is a US site, it is popular with Australians seeking advice on conducting an Anorexic life and connecting with

other like-minded Australians. The words of a Queensland member, 'I just want to be thin. So if it takes dying to get there so be it,' (Site 1) illustrates the general tone of many of the blog posts in portraying a determination to become, not just slim, but thin. Another participant on a sub-forum dedicated to a discussion on veganism, confesses, 'I find myself hiding behind veganism lately as a method of rejecting food because "I'm vegan" not because "I'm restricting and I'm terrified of the calories". It seems easier to tell myself that and obviously easier for other people to digest it too haha' (Site 1)

Furthermore, although there is some discussion about preventing those who do not suffer from Anorexia from joining, this is limited to one discussion forum only. The overall culture is welcoming with a strong theme of independence reflected in the moderator's strict use of rules and regulations and their determination to control the content. This site also self-reports participation in a research study by Harvard University in 2014 to investigate self-harm as a result of viewing 'thinspo' images. The moderator appears to have fulfilled a team role in this research further reinforcing the image of a community with a strong sense of purpose and self-respect. Unfortunately, this study could not be located using the search criteria described in Chapter 4.1, nor by a generic Internet search using a variety of key words and phrases.

This site is well moderated with preventive action against bullying and fat-shaming by members, clearly stated. Similar to other sites, the content is ambiguous with an expressed role in supporting sufferers through recovery while also displaying triggering visual and written material. The site maintains its own rules and regulations and hosts a variety of popular forums to discuss topical issues, such as the right that they perceive to be theirs, to live their chosen lifestyle. Not all topics discussed pertain to eating disorders; political and social issues are also discussed.

Site 2 is a similar website to Site 1, with 'thinspiration' photographs and aspirational quotes on the home page and throughout the blog. One member, writing on this site explains how she responds to concerned family members about the amount she eats, stating, 'I do eat: only what is needed for. I can't help it that

we live in a piggish society where gluttony is the Norm, and everyone else is constantly stuffing themselves.' (Site 2)

The Ana Creed is prominently featured on sites 3 and 11. This document is well known throughout the Pro-Ana community as a persuasive missive from the anthropomorphised illness. While many Pro-Ana sites publish this letter, this is the only one found to have it published on the home page.

A different type of site, site 4, claims not to be a Pro-Ana site at all, declaring its intention to helping sufferers recover and includes suicide-hotline details and other similar recovery resources. However, this site also includes personal stories, sharing photographs and information that may be triggering to those susceptible to disordered eating. It also features a post titled 'Tips from an Ana website' allegedly to emphasise the danger of these tips, although the content is highly provocative. This particular post triggered angry retorts from members arguing that true Anorexics do not need tips. This was followed by a discussion about whether there should be a need for advice on how to be a good Anorexic. The site also features very graphic content about eating disorder sufferers who are morbidly thin and post-mortem pictures of sufferers who have died.

Site 5 claims to exist for overweight people and provides Pro-Ana tips and tricks to assist with weight-loss. However, like many others, this site appears to operate mainly as a repository for the personal stories of visitors and members, either of personal recovery, or the deaths of others. These are often accompanied by graphic images. The fact that visitors, other than those suffering from disordered eating, visit Pro-Ana sites, is illustrated by a visitor discussing her immediate need to lose weight to fit into an article of clothing, 'Thanks for all your information …… I'm getting extremely frustrated …… I feel so ugly and want to get into size 4 pants … before the end of this month'. (Site 5)

The owner of Site 6 states, 'This blog will be triggering; this blog is Pro-Ana. Pro MY anorexia, not anyone else's; this blog is for me and anyone else who embraces their eating disorder. I want to be here to support others, and to be supported. I want to be here to let others know they are not alone, and to feel less alone myself. Some of you will understand, and most of you will not.' (Site 6) The owner also

writes, 'I have severe body issues and a very low sense of self-worth. I choose to embrace anorexia; bones are the closest I will get to perfection.' (Site 6) This site is new with few members at the present time.

Site 7 features many 'thinspiration' images and quotes that are presented and begin on page one. This particular site also includes a large number of quotes, such as, 'Get Strong. Stay Strong. Get Skinny. Stay Skinny', 'Food feels good for 3 minutes. Skinny feels good forever' (Site 7) and 'The struggle tonight will be worth the results in the morning'. (Site 7) The site owner reacts strongly if challenged. In response to criticism of Pro-Ana sites in general, and hers in particular, she responds, 'Why would you want to take that (the sites) away from them? Why would you want to shame them for using these safe spaces? I hope people will start to consider how many are no longer suffering in silence because these communities/support systems are available before they criticize.' (Site 7) With these comments, the site owner reflects what many were observed to discuss – the lack of support. Not lack of support to recover, although this is mentioned, particularly the barrier to accessing help due to the very low BMI score required to access treatment, but lack of support systems for those suffering from an eating disorder.

Site 8 operates mainly as a forum without an obvious owner. Girls as young as 11 years old were observed asking for tips, '... to be Anorexic'. (Site 8) Furthermore, the established Anorexics (Anas) were observed arguing with the 'wannarexics' (wannas) over authority and behaviour. With reference to the provision of tips to very young girls, the Anas argued that this was against the rules, however, the wannas defended the right of a girl of any age to obtain information that would help her to adopt the Ana lifestyle. This clearly demonstrated the lack of respect the Anorexics held for the 'wannarexics' who were viewed as unwanted interlopers. To a varying extent this tension between the established Anas and those who would like to be, was observed across 25 of the 32 sites and the discussion that this topic elicited usually persisted for several pages. This appeared to reflect the desire for exclusivity by the site members. Also observed were heated discussions between members about how to detect a true Anorexic from the 'wannarexic', with the stated aim of ensuring that only Anorexics that had proven

their authenticity, could participate in discussion forums. In addition, the members spoke openly about their dislike for Bulimics, describing them as weak and pitiful. The sense of superiority by the Anorexics taking part in the forum conversations was clearly stated, and observable.

Site 9 is a discussion forum which forms part of a broader website catering to women's interests. Topics are wide-ranging and feature articles and forums on subjects such as fashion, politics and celebrities. Part of the forum includes a sub-forum that discusses Pro-Ana subjects with users sharing tips and providing support to one another

Site 10 is linked to a Tumblr[4] account and includes 'fitspo'and 'thinspo' images and also openly teaches visitors how to use an 'Anorexic diet' to lose weight. This site has no comments or commenters and there are no chat forums on this site so two-way discussion is limited to blog posts and responses.

Site 11 is very similar to site 10 with the Ana Creed accessible by using a link. 'Thinspo' images can be observed in the form of images of celebrities and models taken from the Internet. There are no forums but blog posts and responses.

The owner of Site 12 states it is for overweight people who want to use the 'Pro-Ana lifestyle to lose weight and get fit'. (Site 12) It features the popular 'thinspo' images and quotes observed on the earlier sites.

Site 13 is in the form of an online journal with the owner providing tips and tricks to lose weight. Communication is via responses. There are no forums or 'thinspo' images.

Sites 14 – 32 are less-developed Pro-Ana sites. Although inspirational images, aspirational quotes and personal stories may be observed, communication is generally limited to responses to individual blog posts rather than group forums.

Members of 19 of the 32 sites discussed utilising a healthy diet as a smokescreen to allay suspicion, while restricting intake.

[4] Tumblr is a microblogging site that allows users create and post original content, such as blog posts, photographs, text, links, music and other content.

Discussion

The major limitation of this type of study is the reliance on the algorithms of search engines to locate the relevant information. As Gillespie (2014) writes, 'Algorithms (particularly those embedded in search engines, social media platforms, recommendation systems, and information databases) play an increasingly important role in selecting what information is considered most relevant to us …' (Gillespie et al., 2014, p. 166). In particular, searching for Pro-Ana websites is complicated by the fact that these have systematically been deleted over the years rendering any search incomplete. Many website hosts now fashion their digital offering using metaphor and word substitution, known to Pro-Ana followers, to attempt to avoid detection, thereby escaping exposure and ultimate removal of the website. Furthermore, no two individuals conducting an Internet search, whatever the search engine, will achieve the same results. This is due to the continuous filtering of information to present that which suits the individual's profile which itself is created by Internet search engines utilising past search results, cached preferences and websites chosen, amongst others, to create a digital personality. Gillespie (2014) explains, 'With contemporary search engines, the results two users get to the same query can be quite different' (Gillespie et al., 2014, p. 168). To counteract this, different search engines were used, including: Google, Bing, Yahoo and Safari. In addition, the search was repeated on family and friends' computers and other devices, such as iPhone and iPad, where the user's profile differed from the researcher's profile, thereby ensuring that the search was as thorough as possible.

Because this study considered areas not well researched, hence little previous work with which to inform opinions and interpretations, any study of this subject appears to determine its own boundaries, points of discussion, issues of relevance and others, thus generalisation about the findings and interpretation of such, is not possible to other Pro-Ana websites or communities.

The finding that the Pro-Ana websites reflect a sense of collective support is not surprising given that this was also found in the following study of YouTube content. Additionally, regardless of the prevailing social distaste of extreme

thinness with its connotations of starvation and Anorexia and links to the Pro-Ana community, the site users and visitors regard extreme thinness as a condition for which to strive. The lack of any indication of a sense of persecution on the sites studied also speaks to the collective culture of strong female agency found in this study; notwithstanding the physical and emotional toll that Anorexia can take on the individual and their family. Moreover, although fear was a finding, it was linked to a fear of fatness rather than a fear of persecution for being part of the Pro-Ana community. Overall, the wish to maintain exclusivity was apparent, therefore enabling the many individuals who find these sites to communicate Pro-Ana messages of support and advice with one another, in a social space that is largely undetectable.

Chapter 7: Study three: The influence of YouTube on eating and appearance mediated behaviour

Veganism is a legitimate diet practised across the world, often for religious, cultural and ethical reasons. However, it may also be used as a way to hide restricted eating practices under the guise of healthy eating (Larbi, 2017) and the social media platform YouTube is identified as a popular way in which to accomplish this. YouTube enables individuals, mostly women, to share the promotion and adoption of a vegan diet, with its inherent removal of several main food groups, often accompanied by 'thinspo' images, to hide restrictive eating. In this way, the intent of the practices surrounding disordered eating are transmitted and shared. It should be noted that this practice aligns with the behaviour often found on Pro-Ana websites; the use of seemingly healthy eating practices to hide disordered eating and the wish to encourage and support others to do so in a culture of exclusivity.

Aim

To identify the number of YouTube videos found in a single search that provide advice on weight-loss using veganism and 'thinspo' inspired images, if there is viewer support for this, and whether there any comments highlight the potential danger of this approach.

This study analyses videos found on the YouTube social media platform that portray 'thinspo' images and references to weight-loss and a vegan diet. The aim of the analysis was to:

1. Determine how many YouTube videos could be located by a single search on the YouTube platform, which incorporated the 'thinspo', weight-loss and vegan components within the individual video thumbnail.

2. Investigate the reach of the identified videos by aggregating the total number of views per video into a single total of views.

3. In a sample of 37 videos (25%), ascertain the type of viewer comment left underneath each video, whether supportive, and whether the use of 'thinspo', and the inherent danger of promoting restricted eating, had been recognised.

Research design

A quantitative media content analysis study designed to investigate YouTube accounts featuring the promotion of a vegan diet explicitly for the practice of food restriction.

Methods

In June 2018, an audit was conducted on the YouTube platform to determine the number of videos published, by women that could be identified as promoting veganism as a way to lose weight. To qualify for inclusion each video was required to include 'thinspo' images within its thumbnail advertisement, thus, clearly denoting the importance of appearance and promoting the thin-ideal. Numbers of posts and the total views per post were collected. In addition, a sample was analysed in detail to ascertain whether there was viewer support for this approach and whether any viewers commented on the use of 'thinspo' images to advertise content. The decision to conduct only a single search was taken to emulate the nature of a simple search that a general viewer might undertake about how to use veganism as a weight-loss tool.

Inclusion criteria:

1. The video was required to include, in the thumbnail, the words, vegan and weight-loss. In addition, the video was required to include a 'thinspo' image. Males featuring 'thinspo' were accepted.

2. The video host was required to be female as 'thinspo' refers to thin images of women.

Exclusion criteria:

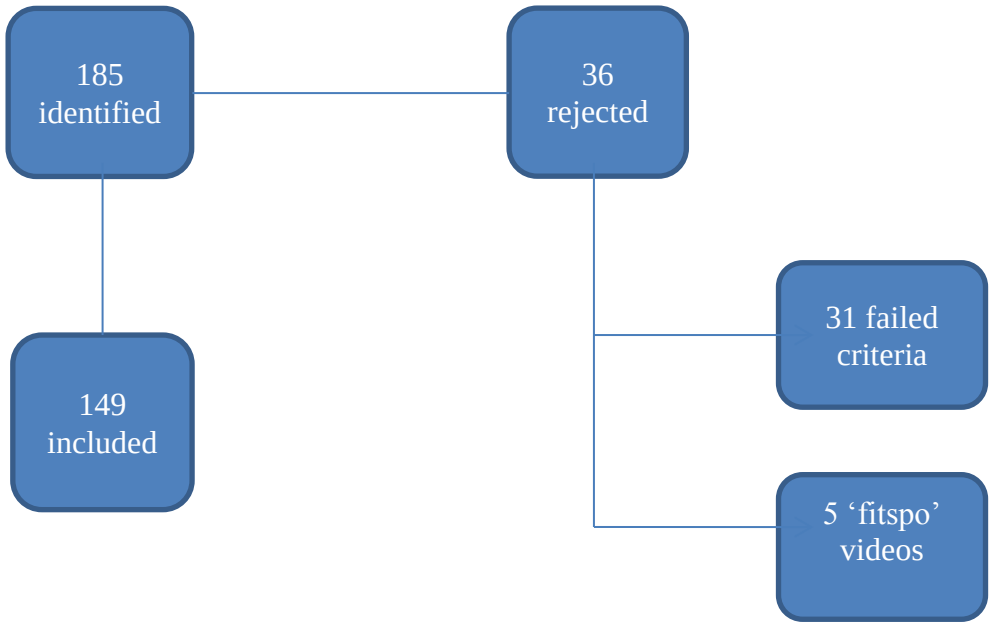
1. Videos that promoted veganism that did not include 'thinspo' images in their thumbnail, even if promoting this for weight-loss.

2. Videos posted featuring 'fitspo'.

3. Total views were collected for each video, rather than a count of subscribers, as this provides a more accurate measurement of content exposure.

The views from all of the videos were combined to produce an overall total to demonstrate the reach of these videos and their content.

Figure 4 Flowchart of YouTube search strategy



Method for sample analysis

Finally, a sample of the videos was investigated more deeply to explore the nature of the comments to determine whether there was support for this approach, and if any viewers pointed out the presence of 'thinspo' and its potential danger. The

sample consisted of 37 (25%) of the total videos and was conducted by counting through the videos and selecting every fourth video to analyse:

1. Whether viewers who left comments supported the content.

2. If any viewer identified the 'thinspo' element as potentially dangerous.

Descriptive results

The YouTube search took less than two seconds to locate 185 videos. Of the 185 videos, 36 were rejected because they did not fulfil the inclusion criteria. Thirty-one videos either included the words vegan and weight-loss without 'thinspo', or included vegan with 'thinspo' images but without weight-loss. There were no videos that included vegan and 'thinspo' only. The remaining five videos were hosted by males who featured "fitspo' rather than 'thinspo'. There were no videos located by males who featured 'thinspo'.

Of the remaining 149 videos, all were published by young women with an approximate age-range of 16 years to 30 years. All of the 149 videos featured the hosts posing in 'thinspo' positions within the thumbnail preview.

The total view count for the 149 videos was 32.8 million. This ranged from 383 views for the least viewed video to 9.2 million for the most viewed video. The latter consisted of a YouTube account, with over 600,000 subscribers that routinely attracts over 300,000 views per video. The only noticeable difference between this video and the others was the presence of both highly relevant content in the thumbnail in the form of statistics of weight-loss, and graphic, realistic images of the host in her underwear posing for 'before' and 'after' photographs. Given that many such images in social media are reputedly digitally altered, the nature of these particular images suggests a genuine weight-loss.

The sample analysis

The sample was drawn by including every fourth video to form 25% of the total videos. The resultant sample of thirty-seven (25%) of the total videos (N=149) was analysed in more depth to identify:

1. Whether viewers who left comments supported the content.

2. If any viewer identified the 'thinspo' element as potentially dangerous.

A total of 5829 comments were left across the 37 YouTube accounts. Of this, only five comments (< .01%) raised concern about using 'thinspo' images to attract viewers, commenting that the host did not need to use these in order to attract views. None of the five commenters mentioned eating disorders as a possible risk of viewing 'thinspo' material.

The remainder of the comments consisted mainly of admiring comments, congratulatory remarks, such as, 'I think you look better thin', and, 'OMG that waist is perfect', and details of the commenter's own aspirations regarding personal weight-loss, for instance, 'Thank you … I'm on a vegan weight-loss journey myself'. Many of the comments across the 37 accounts asked for advice on how to lose weight quickly, while others considered the merits of the various vegan diets, such as raw vegan and 'raw till 4' (refraining from eating cooked food until after 4 pm). Eating for the purpose of reducing caloric intake, was generally not discussed despite the fact that weight-loss was overtly acknowledged as the goal of the video content. YouTube hosts mainly discussed eating healthily despite the fact that the types and amounts of food were noticeably very restrictive, such as eating small amounts of only one food group. One commenter, after discussing her own difficulties with food acknowledged the link between eating disorders and veganism observing that, '… most of us who have suffered from eating disorders end up vegan'.

Discussion

The search for the YouTube content could be considered less subject to algorithmic interference than the Pro-Ana website search as it was conducted within its own platform. Nevertheless, the choice of search terms and the interpretation of the thumbnail images may be subject to individual assumptions about their meanings. In addition, although the data were large enough to detect a trend in users' intent (to discover ways to use veganism to restrict intake), it is possible that many of the viewers watched these videos for other reasons, such as

enjoyment, ideas for meal-planning and other non-disordered eating reasons. The personal comments potentially indicate a more specific interest in restricting eating due to their willingness to engage with other viewers in discussion of this subject. The finding that over 32 million views were garnered by 149 videos confirms the popularity of YouTube as a communication tool for recruitment, and as a solid support base from which to influence behaviour. The key principles of sharing restricted eating practices, advocating for exclusivity and the provision of support, may also be found on the Pro-Ana websites in Chapter 6

Because this study, like the previous study of Pro-Ana websites, considered an area not well researched, hence little previous work with which to inform opinions and interpretations, the results of the YouTube study are not able to be generalised to other YouTube communities, even if the interest in veganism and food restriction are the same.

Chapter 8: The views of eating disorder experts

8.1. Study four: The views of eating disorder experts on the effect of the Australian anti-obesity campaign on ED and BDD

While the previous three studies focused on analysing web and social media content which, by its nature, is international, it is also important to understand the issues in question from an Australian perspective, in particular any effect of anti-obesity policy on eating behaviour. As there is little research on this topic in Australia and globally, the findings may contribute to furthering the knowledge in this field. This study gathered the views of a group of Australian eating disorder professionals about whether the Australia anti-obesity campaign is provoking ED and BDD. A qualitative, interpretive approach was adopted incorporating thematic analysis. This approach ensures that, not only are the data and information collected, but interpreted in context, that is, within the Australian setting. This interpretive approach allows the consideration of contextual cues and beliefs to make sense of the data and, in this way, a more comprehensive understanding of the issues is achieved. As Pelz notes, the adoption of an interpretive research paradigm is, '... well-suited for exploring' (Pelz, 2020, para 10).

This approach is, however, subject to the researcher's understanding and experience of the issues which, although adding richness to the material and providing a more holistic view, is sensitive to shifting perceptions over time (Henderson, 2005).

Aim

The aim of this study was to examine the expert experience of the effects of the current Australian anti-obesity campaign on:

1. Increasing BDD and eating disorders in populations that are recognised as having the greatest prevalence of the disorder such as adolescent girls and young women.

2. Triggering BDD and eating disorders in new populations such as children, older women and men.

Research design

A qualitative study using semi-structured questions was designed to explore the opinions of those working in the field of eating disorders on whether the Australian anti-obesity campaign has caused an increase in BDD or eating disorders.

Methods

A qualitative study using semi-structured questions was designed to explore the opinions of those working in the field of eating disorders on whether the Australian anti-obesity campaign has caused an increase in BDD or eating disorders.

All questions referred specifically to the Australian anti-obesity campaign, and responses were restricted to this.

In order to accurately define the issues, collect appropriate data, and analyse these for future usability, a qualitative, interpretive approach was adopted. This data collection method enabled a thematic analysis of the free text responses of participants.

A list of possible participants was developed from an Internet search[5] conducted to identify major Australian hospitals, universities, and eating disorder clinics and organisations, public and private, in all Australian states and territories. Following this, the websites of the identified organisations were searched to locate email addresses of relevant clinicians, academics, and other staff, in the general eating disorder field. Conference speaker lists and private eating disorder clinics were also explored to identify email addresses of appropriate staff. The goal of the search was to locate as broad a range of responses as possible, therefore no individual was excluded if their email address indicated that they were part of the clinical or academic staff of the identified organisation and appeared to be

[5] Search engines used: Google, Google Scholar, Safari, Bing, Yelp Australia, StartLocal, Academia.edu, ResearchGate.
Search terms: Australia and eating disorders; clinics, hospitals, universities, practitioners, organisations, and Anorexia Nervosa, Bulimia Nervosa, Body Dysmorphic Disorder, Muscle Dysmorphia.

connected to the research or management of eating disorders. Ninety-four eligible email addresses were located. This list was termed the general list.

A key informants list was also developed with the details and email addresses of individuals who had, at the time of recruitment, a public profile within the academic or clinical fields of eating disorders, such as a peer-reviewed researcher, media spokesperson for an eating disorder organisation/clinic, or senior medical role in a hospital. This was determined by the writer following discussion with academic and clinical colleagues. A total of twenty eligible email addresses were located for this list.

Inclusion criteria: any email address that belonged to an individual working for an identifiable eating disorder organisation in either a clinical, academic or senior management role.

Exclusion criteria: email addresses were not included if they indicated that the individual was employed in an administrative position unless they occupied a senior management role in the organisation. Email addresses of students were not included.

The questions and consent tick box formed part of the email which was sent to the email addresses on both lists (See Appendix 3).

Any email that was undeliverable according to the host server was removed from the email list.

After an interval of two weeks the email was sent a second time to all email addresses, on both lists, where the first email had failed to elicit a response.

Recruitment strategy

Due to the small numbers of eating disorder experts in Australia, a set of semi-structured questions was designed to obtain information that would assist in answering the study questions. The questions were piloted in April/May 2015 with academic colleagues and amended following feedback and discussion. The questions were sent to the possible participants to collect their opinions on

whether the anti-obesity campaign in Australia has had a negative effect on the prevalence of BDD and ED since its formal inception in 2009.

The specific questions asked were:

1. In your opinion, has the current anti-obesity campaign from 2004 onwards had any negative effect on:

    a. The numbers of individuals with BDD and eating disorders within the usually expected population group, for instance, adolescent girls and young women?

    b. The emergence of individuals presenting with BDD and eating disorders in new population groups, for instance, children, older women, and men?

Although this question consisted of two parts, all participants provided one response that included both parts of the question. The relevant information was extracted from this response.

2. Do you have any objective evidence to support your view?

3. In your view does this warrant attention by policy-makers? In what way?

4. Do you have any suggestions that would lessen any impact of the anti-obesity campaign on BDD and eating disorders?

5. What is your opinion on the adoption by the Australian and state governments of adopting the Health At Every Size (HAES) approach that shifts the emphasis from weight-loss to health-gain?

Data handling and analysis methods

Responses from participants were collated by question, and by emergent themes for thematic analysis.

Thematic analysis

Thematic analysis was adopted for Studies four and five in order to identify the key issues that concern health professionals in the field of eating disorders. This approach requires the ability of the researcher to interpret the findings and to group and code these into themes (Braun et al., 2019, Guest et al., 2012). Braun and Clarke (2019) explain that it is useful to, '… view themes as reflecting a pattern of shared meaning, organised around a core concept or idea' (Braun and Clarke, 2019, p. 845). This method of analysis enables the researcher to clarify the main issues presented by the participants.

NVivo 10 (QSR International), was used to organise data and enable data codes to identify emergent themes (nodes) and to summarise the responses by individual questions.

The responses were further analysed using an excel spreadsheet to collate and present the data into a visual representation.

The La Trobe University Human Ethics Committee approved the study on June 5, 2015. Approval No.: 15/54. Recruitment began in mid 2015.

Descriptive results

This research project set out to explore the opinions of those working in the field of eating disorders on whether the Australian anti-obesity campaign has caused an increase in BDD or eating disorders. To achieve this, a qualitative interpretative approach was adopted using emailed questions or a telephone interview using the same questions. Participants were encouraged to provide as much information as possible. The study sought to answer the following questions:

1. Is there any evidence that the anti-obesity campaign in Australia has caused, or has the potential to cause, an increase in BDD and eating disorders?

2. What is the quality of the evidence?

Response rate

Ninety-four emails were sent to individuals identified on the general list. Twenty emails were sent to individuals on the key informants list (N=114).

The host server returned twenty-two as undeliverable following the reminder sent according to protocol, with a remaining 92 eligible to respond. Of the 92 possible responses, 12 responses were received. Ten of the 12 responses received were from key informants which was a 50% response rate for this group (n=20). One of the key informants elected to answer the questions by telephone interview.

Demographic characteristics of participants

Of a possible 81 female participants, 12 completed the questionnaire. Of a possible 11 male participants, no responses were received (Table 4). The unequal spread of gender in email invitees is a function of the higher number of females located for this study working in the field of eating disorders.

Half of the responses were returned from individuals working in universities. Although several participants who worked for a university also worked in a clinical role, the individual was allocated to the demographic group corresponding to the majority of the participant's work (Table 4).

Nine of the 12 responses were received from New South Wales and Victoria, possibly reflecting the greater population of these two states, thus, a greater need for services. There are no data that provide a breakdown of eating disorder statistics by state. (Table 4)

Table 4 Demographic characteristics of participants

Gender				
Gender	Number of possible participants (non-key informants)	Number of possible key informants	Number of actual (non-key informants) % of possible non-key informants	Number of actual key informants % of total key informants
Female	61	20	2 (11%)	10 (50%)
Male	11	0	0	0

Total	72	20	2 (11%)	10 (50%)
Work location (primary and secondary)				
Organisation type		Primary role		Secondary role
University		6		3 - private practice
Private practice		2		1 - University
Public sector health		2		0
Not for profit		1		0
Community health		1		1 – private practice
State				
State or Territory				Number
Queensland				0
New South Wales				5
Australian Capital Territory				2
Victoria				4
Tasmania				0
South Australia				0
Western Australia				1
Northern Territory				0

Summary of responses to the following questions:

1. In your opinion, has the current anti-obesity campaign from 2004 onwards had any negative effect on:

    a. The numbers of individuals with BDD and eating disorders within the usually expected population group, for instance, adolescent girls and young women?

    b. The emergence of individuals presenting with BDD and eating disorders in new population groups, for instance, children, older women, and men?

2. Although this question consisted of two parts, all participants provided one response that included both parts of the question. The relevant information was extracted from this response.

3. Do you have any objective evidence to support your view?

4. In your view does this warrant attention by policy-makers? In what way?

5. Do you have any suggestions that would lessen any impact of the anti-obesity campaign on BDD and eating disorders?

6. What is your opinion on the adoption by the Australian and state governments of adopting the Health At Every Size (HAES) approach that shifts the emphasis from weight-loss to health-gain?

Five participants believed that the Australian anti-obesity campaign had negatively affected individuals with BDD and eating disorders and a further seven thought that this was possible. No-one suggested that the campaign had definitely not had a negative effect.

The majority of participants did not differentiate in their answer between eating disorders and BDD but broadly discussed the effect of the campaign on eating disorders and body image rather than on eating disorders and BDD. However, two

participants did comment on BDD in particular with one stating that she believed that BDD, because it was a subset of OCD, was not influenced by external factors, such as the anti-obesity campaign. The other participant replied that she had not given BDD much thought with reference to the influence of the anti-obesity campaign.

Only one had objective evidence to support her view about the relationship of obesity to eating disorders and obesity stigma referring to her own collaborative research in this area. A research 'Letter to the Editor: The impact of the NHMRC obesity treatment and dietary guidelines on eating disorders' (Star and Hay, 2014) was provided as evidence. The authors argue that the provision of online calculators, intended for calculation of energy requirements for individuals as an aid to weight-loss, also offer an easily available way for others to use the calculators to plan calorie restriction. This is especially dangerous for children and adolescents, the authors warn, particularly as the government's website also discusses dieting in a way that may be construed as condoning restriction. (Star and Hay, 2014)

No participants provided evidence that demonstrated that the anti-obesity campaign itself had resulted in an increase in BDD or eating disorders.

Another participant, although answering negatively to this question, offered evidence that pressure to diet and lose weight is a risk factor for Bulimia and BED in obese individuals and conjectures that this implicates the anti-obesity campaign by its sole focus on weight reduction. Dieting as a risk for developing an eating disorder was discussed in Chapter 1 and 2.1 and 2.3.

All participants said that the issue of possible negative effects flowing from the Australian anti-obesity campaign warrants attention by policy-makers.

Eight participants suggested that the HAES approach be adopted to guide the Australian government's obesity policy. The remaining four participants suggested broad interventions and strategies, such as:

> 'Emphasis (should be) on health behaviours and not weight. It would be helpful to have other structural changes – reductions in food advertising on TV, for example.' **Academic**

> 'The more the focus can be on health and remove any element of judgement the lesser the impact on BDD and ED.' **Senior administrator**

> 'Focus less on education as the main strategy, or taxing food, or big picture interventions and strategies. Promote interventions and strategies that are useful for those with obesity and eating disorders …' **Academic and clinical**

Nine participants thought that it would be useful for the Australian and state governments to adopt the HAES approach, two were unsure. One participant was not in favour of this idea citing the need for further research on this approach, but did, however, point out that there was no research that supported the current approach either. Comments included:

> '(HAES) together with strategies for obesity and eating disorders that work together to reduce the unintended consequences. Need to adopt an approach for policy development that considers any possible unintended consequences to any part of the community. **Public Sector Health Professional**

> 'I support many aspects of HAES especially positive body image and anti-discrimination aspects and on healthy behaviour.' **Academic**

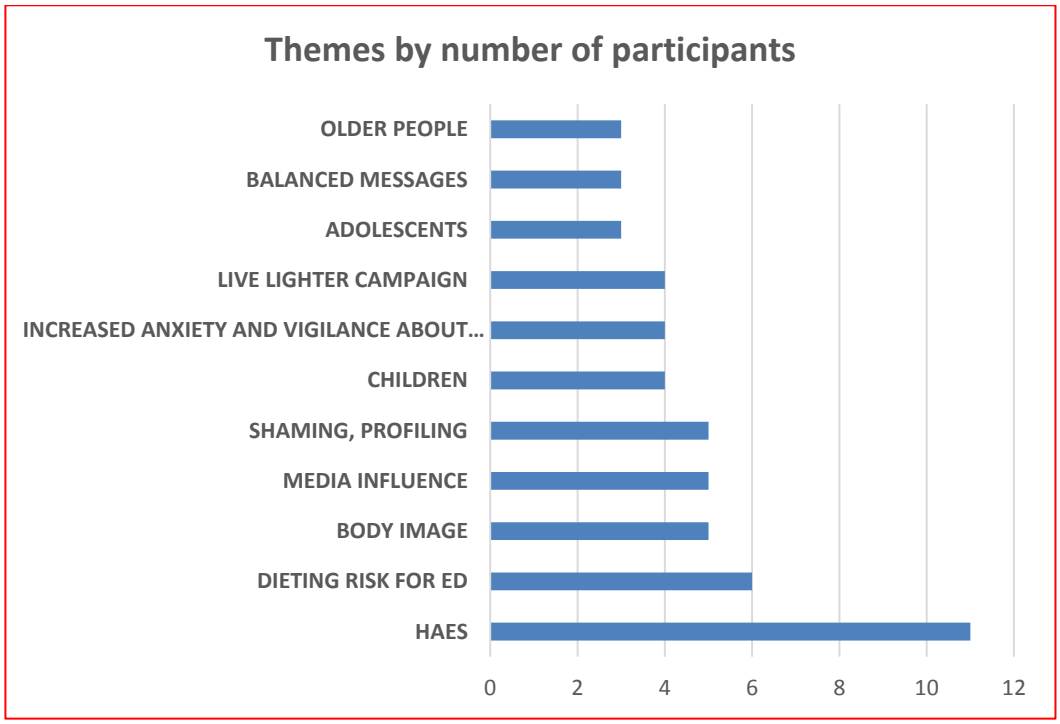
Thematic analysis

Although not specifically requested, all participants added further information when answering each question to elaborate and explain their particular response. This enabled the major themes of their contributions to be established, adding to the overall understanding of the participants' viewpoints.

NVivo 10 (QSR International, Cambridge, MA) (QSR International), was used to sort and collate the most frequent responses by number of participants engaging in discussion of the question into general themes. (Figure 8)

In this section, the themes that emerged from the responses received are presented.

Figure 5 Emerging themes



HAES is added as a theme because, in addition to the specific question about HAES, the majority of participants also included a reference to HAES in comments to other questions.

The value of the HAES approach was mentioned by the majority of the participants as being a direction to consider when managing obesity and other chronic illnesses. Interestingly, this included the two participants who were unsure about this in answer to question 5. The responses from these two participants indicate that their main concern is the lack of focus on weight-loss, while simultaneously recognising that focusing on weight-loss risks triggering dieting which has its own risks in terms of disordered eating. They commented:

> 'I disagree strongly that these is no room for any focus on weight loss (as HAES seems to suggest). There is need to address those suffering from morbid obesity particularly class 1 and class 2 obesity.' **Academic**

> 'I would like to see a lot more research evaluating outcomes of HAES approach. That being said, there is certainly no research that supports fat shaming as a useful approach.' **Academic**

These participants' dilemma appears to have been resolved with both deciding to support HAES, with reservations in terms of improved research.

It is noteworthy that the only responses that urged caution in adopting the HAES paradigm were received from academics. It could be argued that the remaining participants, who are all clinicians or working as academics and clinicians, and in favour of the HAES approach, deal with the consequences of the anti-obesity campaign daily on a practical level, whereas most academics generally do not. It is also possible that the academics, by virtue of their access to up to date research, have a greater understanding of the possible pitfalls of the HAES paradigm, whereas those working solely in the clinical field may not.

Half of the total participants discussed their concerns about dieting and the risks inherent once food restriction begins. Several also talked specifically of their concerns about commercial diet plans that include drinks that replace food, and restrictive diets that remove whole food groups, as interfering with what a normal diet should look like. Furthermore, although still retaining the majority of their concern for young women all of the participants who mentioned their concern about dieting, also disclosed that their clientele had changed over the past 10 years. They report that they are now seeing an increase in older women and men seeking to lose weight, often with a view to improving appearance rather than health:

> 'My client group has changed over this 10-year period to include men and women over 30 and up to 65 with an onset of Binge Eating Disorder and Bulimia after a period of dieting. As these

campaigns are advocating weight loss dieting, I directly link this increase to the campaigns.' **Clinician/private practitioner**

'Exercise and 'healthy eating' are often starting points for disordered eating behaviours.' **Academic/clinician**

'Factors that increase vulnerability to dieting are the most significant environmental (non-genetic) risk factors for Bulimia Nervosa and binge eating. Given the nature of current anti-obesity campaigns (which criticise overweight and suggest losing weight), it seems reasonable to expect these messages will increase risk for BM/binge eating.' **Academic/clinician**

'Current evidence shows that weight-focused diet approach has failed to reduce or stop increase. Important to realise that we are continuing to discover that previously accepted 'facts' are not necessarily facts. Significant lack of understanding of the issues involved.' **Public Sector Health Professional**

'I feel confident that these campaigns are influencing previously normal eaters to have increased anxiety and fear around food and body weight.' **Community Health**

Body image, shaming and the media influence also stated concerns of almost half of the total participants, although not necessarily the same five participants were concerned about each of these topics. However, those who mentioned their concern about any one of the three topics, for instance, body image, also mentioned, media influence, shaming, profiling or a mixture of all three. Their stated concerns centred on the damage that shaming and profiling can do, especially by the media, to individuals who are overweight, or perceive themselves to be so. All participants believed that the media, particularly social media, is a powerful conduit for the widespread dissemination of messages, including the negative stereotyping and profiling of fat people. They reported:

> ‘A clear increase in eating disorders/disordered eating and body image distress in the (usual population) and also in newer ones, such as middle-aged women etc.’ Academic/**clinician**

> ‘I am also seeing more pregnant women with BDD and eating disorders.’ **Academic/clinician**

> ‘I am seeing more children who are younger. Decreased age of onset. An increase in boys who often present to A&E and are pretty sick. Also, seeing a lot more adults who have eating disorders but are over a healthy weight.’ **Public Health professional**

> ‘There is evidence linking thin-ideal media image exposure to the emergence of body image concerns and eating disorder symptomatology. So, it is possible that media messages could trigger these behaviours in vulnerable individuals.’ **Academic**

Several participants voiced their concern about how the LiveLighter Campaign, had increased anxiety and vigilance, especially amongst children. They also discussed their concern about the promotion of the thin-ideal in the media and how they had observed the resultant anxiety in children. The LiveLighter Campaign was deplored for its graphic effects broadcast on television at times when children are likely to be watching. However, their concerns were also about the increase in appearance vigilance in women, including older women and those that are not actually overweight.

> ‘People are coming in with a high level of distress about ‘the obesity epidemic’ and most recently “toxic fat” or “grabbable gut”[6].’ **Clinician/private practitioner**

> ‘Patients of all ages and sexes about going back to dieting for their health after the onset of the LiveLighter Campaign. This has

[6] ‘Grabbable gut’ is a reference to the “LiveLighter” Campaign discussed previously.

resulted in a full or partial relapse and in some cases a cessation of treatment (for eating disorders).' **Clinician/private practitioner**

'Current shaming style campaigns e.g. live lighter campaign do nothing to assist development of healthy body image and a positive approach to improving health.' **Public sector health Professional**

Discussion

The need for balanced messages, they argued, was vital to prevent the promotion of unhealthy dieting and to encourage healthy action. To this end, they all recommended the HAES approach, or similar, such as intuitive eating. Furthermore, participants were eager to point out that the concerns they shared did not just refer to young women, but to all women, including female children.

The majority of the themes that arose from the participants' responses reaffirm issues that others have raised, and discussed in the literature review. In particular, eating disorders emerging in new groups, such as children and older women, and the danger of the LiveLighter Campaign, that many believed had caused serious damage to many individuals, including children, were mentioned by many participants. The use of body-shaming by government agencies and advertisers resulting in negative body image was also a concern with several participants worried about this triggering the uptake of dieting and restricted eating. As they pointed out, this so often ends in disordered eating or a serious eating disorder.

Three participants provided a significant amount of information relating to their own views on how to engage those who are obese in healthy behaviours rather than weight-loss pointing out correctly that the current strategy of shaming has not worked to reduce the rate of obesity either in Australia or anywhere else. The possibility of a plausible pathway from the Australian anti-obesity campaign to eating disorders was confirmed by the results of this study.

Limitations

Low response rate

The major limitation of this study was the lack of response. The overall response rate was 13% although the rate of completion by the key informant group was 50%.

The method used to gather as many views as possible, and over as large a population group as practicable, proved difficult, as, apart from host server undelivered emails, it was not possible to determine with any degree of accuracy, how many invitees actually received the invitation email. Many email addresses, while valid for delivery purposes, are abandoned as individuals move to other organisations or change email addresses due to a change of server. In addition, because of the broad inclusion criteria, the appropriateness of the invitee targeted could not be fully established. Thus, an accurate non-responsive rate is unable to be confirmed.

Diversity of response

Although 50% of the invited key informants responded, a diversity of responses was not achieved, possibly because of the key informants' own participation in eating disorder research and/or a commitment to this issue because of a connection with an eating disorder organisation or a vulnerable population group. However, the richness of the information provided by the key informants who did respond suggests that a better approach may have been to confine the survey to this group but include more detailed questioning about key points, such as body image and gender. This could have allowed exploration of the issues in greater depth and may have resulted in greater response detail of several subjects, such as BDD.

Method of contact and terminology

Several emails were received in response to the mail-out by invitees doubting their ability to be of assistance, as they didn't consider themselves experts. The use of the term 'expert' may have suggested a delineation of experience and authority that invitees perceived as a disqualification of their own opinions and views. As the intention of the broad inclusion criteria was to gather as many views of the issue as possible, a term such as 'those in the eating disorder field', may have resulted in a higher rate of participation. Morton et al. (2012) discusses the general

decrease in locating and engaging eligible participants across the research community citing a number of factors contributing to this such as disillusionment, increased frequency of requests to participate and a generally more complex life in the 21st Century. Moreover, the writers point out that contemporary studies often demand more time and commitment (Morton et al., 2012). In light of this, it might have been more fruitful for the first contact to have been a short email gauging interest and requiring a simple yes/no answer followed by the questionnaire.

In addition, because the subject is not one that has received much attention either in the research field or the media, it is possible that only those who had been exposed to the potential issues felt strongly enough that the Australian anti-obesity campaign is harming individuals and population groups, responded to the survey. Perhaps, approaching the research question from another standpoint may have prompted more responses, for example, asking more general questions about the Australian anti-obesity campaign, and soliciting open-ended responses, rather than the direct approach adopted in this study, may have encouraged greater participation. However, this may have compromised the value of the data and presented difficulties in identifying clear trends and themes in analysis, thus, reducing the usefulness of the information gathered. Because of these limitations, it is not possible to generalise the results of this study to the broader population of eating disorder experts and their clients and this affects the rigour of this study, although not necessarily its value as a means to raise awareness of the issues.

8.2. Study five: The views of eating disorder experts on weight-loss inspiration, social media, and the use of specific diets to hide disordered eating

Three years after the first survey (discussed in the previous chapter) was conducted in 2015, it became evident to the researcher that social media was becoming increasingly popular as a way of sharing advice on methods to hide restricted eating. This was particularly notable on the social media platform, YouTube. Moreover, the interest in sharing 'healthy' eating as a way to reduce weight was also increasing especially the promotion of vegan eating on blogs, and later, on social media. This initiated the previously-described YouTube study, the results of which prompted the current survey to investigate health and academic professionals' experiences and views on this newly-emerging phenomenon in order to contribute to the knowledge-base about disordered eating and initiate interest in this complex field.

Aim

The aim of this study was to gather the participants' views and understanding of recent issues regarding fat stigma, how individuals become motivated to lose weight, and the function of social media as a gateway to disordered eating. This includes the use of specific eating practices, especially veganism, to hide an eating disorder.

Research design

A qualitative study was designed, following up the 12 participants from the first study. The questions and consent tick box formed part of the email which was sent to the 12 participants from the first study (See Appendix 4).

Methods

Any email that was undeliverable according to the host server was removed from the email list.

After an interval of two weeks, the email was sent a second time to all email addresses, on both lists, where the first email had failed to elicit a response.

A set of semi-structured questions was designed by the writer to obtain information that would assist in answering the research questions. Due to the small number of experts in the eating disorder field in Australia, these questions were piloted in April/May 2015 with academic colleagues and amended following feedback and discussion.

The questions were sent to the possible participants to collect their views on disordered eating with specific emphasis on predicting unhealthy eating practices. Questions also explored the possible role that social media plays in inspiring practices of weight-loss by promoting the thin-ideal of beauty, in particular, the use of specific eating regimens, especially veganism, to hide restricted eating.

The specific questions asked were:

1. Apart from those diagnosed with an eating disorder, do you consider disordered eating, such as, restrictive eating, bingeing, purging, and other unhealthy eating practices, to be a problem in the general population?

    a) If so, do you think this more problematic in females? Why?

    b) In your experience, is there an age group where you consider this is to be more prevalent? Why?

2) The Australian anti-obesity campaign and its associated public health messages urge weight-loss for anyone with a BMI of 26 or greater. Do you believe that this singular focus on weight-loss rather than health-gain contributes to obesity stigma and negative body image?

3) What, in your opinion, is the strongest predictor for the development of disordered eating in those wanting to lose weight? (For example, negative body image, feeling shamed and stigmatised, wanting to fit in with the thin-ideal of beauty etc.?)

4) Where do you think that most people get their weight-loss inspiration from? For example, social media platforms? (Facebook, You Tube and Instagram), television, print media, social networks?

a) Do you believe that this is a problem mainly for women? Why?

5) How much influence do you consider social media to have on body image?

a) In your experience do 'thinspo' images, commonly found on YouTube and Instagram, influence the decision of some to adopt unhealthy eating practices?

b) In your experience are women more susceptible to this type of influence than men? What about older women?

6) Although a well-planned vegan diet can be extremely healthy, there is some evidence to suggest that, because of its total elimination of many food groups, veganism is sometimes co-opted to disguise an eating disorder or to lose weight quickly.

a) Have you observed this, or the use of any other legitimate diets, for example: paleo, vegetarian, ketogenic that you believe are being used to hide eating disorders.

Data handling and analysis methods

Responses from participants were collated by question.

The La Trobe University Human Ethics Committee approved request to conduct follow-up contact with original participants on May 3, 2018. Original approval No.: 15/54.

Descriptive results

This study sought to gather the participants' views and understanding of recent issues regarding fat stigma, how individuals become motivated to lose weight, and

the function of social media as a gateway to disordered eating. This includes the use of specific eating practices, especially veganism, to hide an eating disorder.

Response rate

Twelve emails were sent to the participants who had responded to the first study email in 2015. The host server returned six as undeliverable. An Internet search was conducted, using the participants' names and the term, 'eating disorder', to attempt to locate the six invitees whose emails had been returned. This search revealed possible alternative email addresses for three of the invitees and the study email was sent to these three email addresses. Two of these were returned as undeliverable. In total, out of twelve invites to participate, five were uncontactable with seven deemed to be eligible (on the basis that their emails had not been returned). Out of this seven, three responses were received.

Demographics of participants

All three participants were female academics, one each from the ACT, Victoria and Western Australia. Two out of the three also have a clinical role.

Summary of responses

Question 1 asked if disordered eating was, in their opinion, problematic in the general Australian population.

All three participants answered yes to question one. One participant believed that the high rates of overweight and obesity indicated that many are struggling with eating difficulties. All thought that it to be more prevalent in females although one commented that this sex difference may be less than it appears because disordered eating is manifested in different ways in males (drive for muscularity) and females (drive for thinness). In answer to the question relating to the most common age for eating problems, all suggested late adolescence to early adulthood as the age of highest prevalence. However, one participant revealed that, in her experience, unhealthy eating practices are starting earlier, with very young children exhibiting an awareness of foods that they should and should not eat. She recounted her

personal experience of children as young as nine and ten who have already formed restrictive eating practices. Another participant explained that, in her experience, disordered eating frequently persists into midlife and beyond, commenting that, '… the types of eating problems might differ by age group given that eating disorders peak in early adulthood whereas obesity peaks between 55-64 years of age'.

Question 2 explored the participants' views on the Australian anti-obesity campaign's focus on weight-loss rather than health-gain.

The first participant stated that, 'Weight-loss is an essential outcome for people with obesity …', but, she believes, this should be coupled with the message of health-gains in order to mitigate the individual blame that the campaign otherwise infers. The remaining two participants believe that the focus on BMI and weight-loss has contributed to obesity stigma and negative body image, with one responding that, 'People are more likely to engage in healthy eating and physical activity if motivated by health rather than weight …' and the other stating that, '… a more rounded approach needs to be taken and the focus does need to be on health-gains …'.

Question three asked about the participants' opinion on the strongest predictor for the development of disordered eating in those wanting to lose weight.

Two of the participants suggested body shame and dissatisfaction with one participant naming social factors, such as, '… stigma and appearance pressure from the media, peers and family'. Furthermore, the need to 'fit in' to the social ideal of a thin body, was believed to be of importance by the remaining participant who also mentioned the shame and stigmatisation of not 'fitting in' which, she believes, '… leads to low self-esteem and thus influences the development of disordered eating'. Overall, the participants considered body shame, negative body image and stigmatisation to be the strongest predictors of the development of disordered eating.

Question four explored beliefs about where individuals seek weight-loss inspiration.

All three participants believed that the Internet and the various social media networks together with the mass media were the major sources of weight-loss inspiration for those seeking to lose weight. In addition, one participant thought that perhaps the individual's General Practitioner and other medical personnel may also provide inspiration. Two of the participants suggested that the influence of peers, particularly regarding young people, was important, as were family, friends and work colleagues for older people. All of the participants agreed that women were more influenced by outside sources than men. As one participant put it, '... weight-loss for appearance, rather than health, still appears to be more heavily directed at women than men.' Nevertheless, one participant argued that, '... there is an increasing amount of men who are becoming more body conscious and wanting to adhere to the images portrayed on social media.' The consensus of the participants' opinion appears to indicate that they believe that people take their inspiration to lose weight from many sources including, all types of media, family, peers and colleagues.

Question five enquired about the influence of social media on body image.

All of the participants agreed that 'thinspo', images on social media have a major influence on how individuals perceive themselves, particularly women, although, as one participant pointed out, '... women are more likely to be susceptible to this type of image than men are, (but) where that person is situated psychologically at the time of viewing those images can also influence the response of those people'. Another participant agreed and commented that, '... there is experimental evidence indicating that exposure to 'thinspo' material (e.g., on Pro-Ana websites) results in increased body image disturbance, negative mood, and low self-esteem'. This participant also believes that body image improves with age so that older women may be protected from imagery portraying the thin-ideal. Although she did not elaborate on how this may occur other than the accepted view that older

individuals spend less time on the Internet and social media. Another participant also mentioned the growing research regarding the influence of 'thinspo' and 'fitspo" but was unable to say to what extent, '... in light of the range of other sources of appearance pressure and information about weight loss practices'. This participant also shared her belief that men are susceptible to messages about body image but this is related to weight-gain for muscularity rather than weight-loss in pursuit of thinness.

Concerns about the growing awareness of children and how their body should be are one of the major concerns of a participant. She shares her abhorrence of the current practice of photo-shopping yearly school photos. She explains that nowadays schools often, '... ask parents if they would like their children's moles, freckles, missing teeth or any other blemishes covered over and the images perfected'. This concern about the increase in the range of age groups becoming affected by the drive for physical perfection was shared by all of the participants. As one participant commented, 'I have seen older women who have gained weight at menopause become quite conscious of their altered body image, and become susceptible to the messages being portrayed in social media. That is why I believe the increase in Bulimia in menopausal women is occurring.'

Question six investigated the use of a vegan diet to hide an eating disorder.

The response to this question was unequivocal with all participants agreeing that in their experience specific eating practices are used to mask eating disorders. One participant, who is an academic, stated that clinicians have confirmed with her that this is a legitimate concern for them, although to what extent was not reported. Another participant explained that, '... so called 'healthy eating' patterns can mask the presence of an eating disorder'. This participant also reiterated the published literature that, '... excessive focus on healthy eating is in itself an eating disorder – Othorexia Nervosa'.

The third participant explained that it is more socially acceptable, if wishing to lose weight, '... to portray the image that one is endeavouring to improve their

health through selected eating, rather than to say that they are trying to lose weight or that they are restricting their eating'. Furthermore, she adds that as many specific diets have well-known media personalities endorsing them, it may confer status from peers for undertaking the diet. As the participant continues, 'This, then has the capacity to reinforce the unhealthy eating practices … thus perpetuating disordered eating as a good choice rather than a negative one.'

Discussion

The responses to this questionnaire demonstrate that disordered eating is problematic in Australia, especially among women of all ages. Social media, in particular, was considered a critical factor in the development of negative body image with the use of 'thinspo' and 'fitspo' images designed to inspire weight-loss via shaming and dissatisfaction. The Internet, in general, was considered to be the major source of weight-loss inspiration and the belief that the adoption of a vegan diet to hide disordered eating is occurring, was unanimous.

Limitations of the study

The major limitation of this study was the low response rate. In part, this may be due to the time lapse of three years between the first contact and the second contact. In that time, many of the original participants had moved on and become uncontactable. In addition, the second study was not planned at the outset but became a consideration as this research moved forward over time, to examine the increasing use of social media as a conduit for disordered eating. Because of the original participants' experience and knowledge of current issues in the field, it was considered important to attempt contact with this group even if this resulted in a low response rate. In light of the lack of research on this specific subject, it was decided that whatever information could be gained would further the understanding of this topic.

Because of the low response rate, the findings cannot be assumed to be reproducible in a similar group of professionals with the same background. However, the intention of this study was not to gather a representative sample of responses as a means to understand what all experienced eating disorder clinicians

and academics believe, but to broach the subject with professionals in the field who had already responded to this subject in 2015, about the thin-ideal, its influence on restricted eating and the practice of hiding an eating disorder.

Summary of findings of all five studies

The following table sets out in summary form the findings of each study (Table 3)

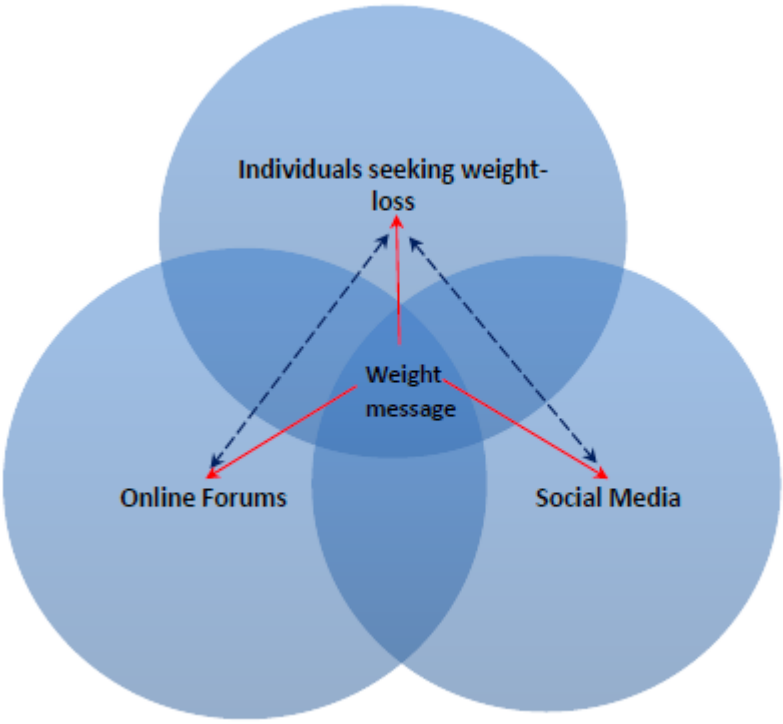
Table 5 Synopsis of all study findings

Study	Research aim	Brief description of findings
Fat stigma on show: analysis of comments	To analyse the content of the comments left on the 'have your say' forum located on the Insight page on the SBS website	• The overall tone of comment was more negative than positive or neutral. • More negative comments were made by men compared to women. • Thirty-five percent of the total comments included negative personal comments, with men almost twice as likely as women to make these comments. • The majority of all commenters focused only on weight and weight-loss, only 26% mentioned health, or health-improvement
Pro-Ana websites: content analysis	To explore a collection of Pro-Ana websites to investigate how these sites operate from the standpoint of female agency, and whether the sites demonstrate a place of power and resistance or operate solely as support mechanisms	• Five out of a possible 32 sites offered a warning not to enter unless the visitor was currently suffering from an eating disorder. • Thirty-one of the sites visited displayed Pro-Ana images clearly visible to the casual visitor. • Only one site explained that in order to proceed to more images, membership was essential. • Twenty-six 26 sites clearly projected a sense of independence and a strong will to maintain a Pro-Ana lifestyle. • There was a strong sense of camaraderie and an unwillingness to allow new users to part of this society.

The influence of YouTube on eating and appearance mediated behaviour	To identify the number of YouTube videos found in a single search that provide advice on weight-loss using veganism and 'thinspo' inspired images, if there is viewer support for this, and whether there any comments highlight the potential danger of this approach	• The YouTube search located 185 videos and took less than two seconds to load. Thirty-six videos were rejected because they did not fulfil the inclusion criteria. • Of the remaining 149 videos, all were published by young women with an approximate age-range of 16 years to 30 years. • The total view count for the 149 videos was 32.8 million. This ranged from 383 views for the least viewed video to 9.2 million for the most viewed video. • A total of 5829 comments were left across a sample of 37 YouTube accounts. • Only five comments (< 1% of the sample) raised concerns about the use of 'thinspo' images, however, none mentioned restricted eating as a possible consequence.
The views of eating disorder experts on the effect of the Australian anti-obesity campaign on ED and BDD	To examine the effects of the current Australian anti-obesity campaign on: • Increasing BDD and eating disorders in populations that are recognised as having the greatest prevalence of the disorder, such as adolescent girls and young women. • Triggering BDD and eating disorders in new populations, such as children, older women and men.	• Five out of a possible 12 participants believed that the Australian anti-obesity campaign had negatively affected individuals with BDD and eating disorders and a further seven thought that this was likely. No-one suggested that the campaign had definitely not had a negative effect. • Nine participants thought that it would be useful for the Australian and state governments to adopt the HAES approach. Emergent themes ❖ HAES ❖ Dieting risk for ED ❖ Body image ❖ Media influence ❖ Shaming, profiling ❖ Children ❖ Increased vigilance about appearance ❖ LiveLighter Campaign ❖ Adolescents ❖ Balanced messages ❖ Older people

The views of eating disorder experts on weight-loss inspiration, social media, and the use of specific diets to hide disordered eating	To gather the participants' views and understanding of recent issues regarding fat stigma, how individuals become motivated to lose weight, and the function of social media as a gateway to disordered eating.	• All participants indicated their belief that disordered eating was, in their opinion, problematic in the general Australian population and that the focus on BMI and weight-loss has contributed to obesity stigma and negative body image. They indicated a preference for a model focusing on the acquisition of health rather than weight-loss. The participants considered body shame, negative body image and stigmatisation to be the strongest predictors for the development of disordered eating. • All of the participants believe that the Internet and the various social media networks together, with the mass media, are the major sources of weight-loss inspiration for those seeking to lose weight, and agreed that 'thinspo', images on social media have a major influence on how individuals perceive themselves, particularly women. • All participants agreed unequivocally that, in their experience, specific eating practices are used to mask disordered eating.

Figure 6 Diagrammatic representation of potential communication lines between the Australian government's weight-loss message and identified disordered eating locations.



This chapter presented the descriptive findings of the individual studies. Tabular and diagrammatic representations of the overall findings and communication information were also included.

Chapter 9: Analysis and discussion

The aim of this research was to demonstrate the different ways by which the Australian anti-obesity campaign with its promotion of weight-loss, might be inadvertently promoting fat stigma and eating disorders.

This chapter explores the results in detail and how these are interpreted using the methodological theories explained in Chapter 3.1 to achieve the following research objectives:

1. Contribute to the knowledge base pertaining to the anti-obesity campaign and eating disorders and the various interlinking issues, such as body image, stigma and disordered eating in order to demonstrate how these can work together to trigger disordered eating.

2. Discover how the dynamics of these spaces enable eating disorders to grow and thrive in order to increase understanding about their importance in sharing information.

3. Explain how the Australian anti-obesity campaign might be inadvertently endorsing these restrictive eating practices, and encouraging disordered eating in order to highlight the inherent danger in pursuing a campaign to reduce obesity that focusses mainly on weight-loss.

4. Identify the potential consequences in order to signal the need for policy change relating to reducing obesity.

A quick reference to the studies

1.	Fat stigma on show. Analysis of the content of the comments left on the 'have your say' forum located on the Insight page on the SBS website.
2.	Pro-Ana websites: a content analysis
3.	The influence of YouTube on eating and appearance mediated behaviour

4. The views of eating disorder experts on the effect of the Australian anti-obesity campaign on ED and BDD

5. The views of eating disorder experts on weight-loss inspiration, social media, and the use of specific diets to hide disordered eating

For context, each study is linked to the objective(s) for which it has relevance. (Table 5)

Table 6 Individual studies and relevant objective(s)

Individual studies and links to the objectives					
Objectives	Study 1	Study 2	Study 3	Study 4	Study 5
One	√	√	√	√	√
Two	√	√	√	√	
Three				√	√
Four				√	√

To discuss the interpretation of the studies in light of the objectives and overall research aim, and in keeping with the research design, an integrated approach is adopted that allows links to be made between the individual studies, the objectives and the overall research aim. Other approaches risk discussing the findings as separate studies each linked to the anti-obesity campaign.

Although the writer acknowledges men's difficulties with body image and disordered eating, especially gay men, the data and information gathered for this research essentially reflects a woman's narrative. Because of this, and the findings of this research, the role of gender, and the loss of personal agency feature throughout the narrative.

Prior to the discussion of findings, it should be noted that only two participants in study 4 separated BDD from eating disorders in their responses, possibly due to the lack publicity given to BDD compared to eating disorders. Nevertheless,

evidence exists to suggest that many individuals with BDD share similar concerns as individuals with Anorexia Nervosa, particularly relating to body image and weight concerns (Kittler et al., 2007). Likewise, BDD is a frequent comorbidity in individuals with eating disorders (Kollei et al., 2013). Because of this, no conclusion could be drawn about the importance of recognising BDD as a risk factor for the development of disordered eating.

To date, comprehensive eating disorder statistics are not collected in Australia. Perhaps because of this, government policy-makers do not appear to have considered the possibility that a disordered eating problem exists in Australia, and that the Australian anti-obesity campaign may be exacerbating this through its focus on weight-loss. If it can be determined that disordered eating exists in Australia, and is neither rare nor isolated, the government's anti-obesity campaign is called into question for its potential to trigger difficulties with body image, promote dieting, and contribute to disordered eating. Furthermore, considering the esteem with which the thin-ideal is held in Westernised, and increasingly non-Westernised, countries, the anti-obesity message may also be misconstrued as endorsing this rather than advocating a healthy weight.

By examining the activities within identified spaces, and exploring the weight-loss narrative of both the eating disorder community, and the Australian government, a possible link is described that has the capacity, by its promotion of weight-loss, to encourage fat stigma, cause distress for those who are obese, and many who are not, and trigger dieting which is the strongest risk factor for development of an eating disorder. Because the potential for negative side effects of the campaign does not appear to have been considered by the government, no clear strategy for harm minimisation exists to protect those vulnerable to developing difficult relationships with food.

One of the objectives of this research was to contribute to the knowledge base about the relationship between the Australian anti-obesity campaign and eating disorders and the interlinking issues of body image, stigma and disordered eating. This thesis presents knowledge gained from the systematic literature review and five studies that adds to this understanding. The systematic literature review that

was conducted, although modified due to the design of the research and contemporaneous nature of the subject matter, provides an overview of the important factors that contribute to the complex nature of eating disorder and an investigation into issues that are inextricably linked with these. By utilising an eclectic approach, using bricolage, five studies resulted in evidence that converged to a point that identifies factors and associations that contribute to the understanding of the relationship between anti-obesity messages and eating disorders. This information may assist in the broader understanding of why women, in particular, are vulnerable to the messages inherent in anti-obesity campaigns and the collateral damage that may occur as a consequence.

Overall, the findings from all of the studies indicate that many women of various ages, from pre-teens, to late middle-age, are distressed about their weight and are prepared to adopt quite drastic measures to lose weight and fit in. Many are visiting Pro-Ana websites and using social media platforms to learn how to restrict their eating and how to use an acceptable diet, usually vegan, to hide this from family and friends. Desperation is causing many women to devote significant amounts of time to the quest for thinness, possibly to the detriment of other choices in their lives. Females of all ages are engaging in food restriction and site 1 (in study 2), in particular, was observed to have at least one woman aged 58, and an 11-year-old girl, active on one of the sub- forums, seeking help to restrict their intake. Given this, it is conceivable that there are many more women and girls involved outside of the expected age-range who remain undetected.

Discussions about hiding an eating disorder using veganism were observed in studies 2, 3 and 5. Study 2 features websites that include sub-forums where participants freely share advice on how to hide food restriction from their families and friends by using veganism. Study 3 provides evidence that this is common practice and, although the response was very low, the participants in study 5 provided valuable insights into their experience of patients and clients with disordered eating (mostly women), and all supported the view that many Anorexia sufferers, and others who are having difficult relationships with food, adopt a vegan diet in order to hide this. It should be noted that, although the participation

rate was low for study 5, at least two of the respondents canvassed the views of other clinicians, and colleagues, prior to responding.

All of the Pro-Ana websites visited emanate a sense of superiority and exclusivity, which has also been noted by others (Boero and Pascoe, 2012, Brotsky and Giles, 2007, Social Issues Research Centre). This was demonstrated particularly by members of the larger sites actively discouraging 'wannarexics', and engaging in heated challenges with individuals who are suspected of not being truly Anorexic.

The high number of women observed on the Pro-Ana websites was not an unexpected finding but the prodigious number of views found on the YouTube channels that were investigated was unexpected. The level of despair and distress observed together with the numbers involved (almost 33 million views in the YouTube study alone) may indicate that disordered eating is affecting more women than is commonly thought. Thus, the sheer reach of YouTube with its rapid growth of more than one billion users by 2015 (YouTube, 2019) offers an effective way to share information in ways that remain largely undetected.

NEDC believe that negative body image is the trigger for the development of disordered eating (National Eating Disorders Collaboration, 2015) and the use of shame and stigma as a deliberate social marketing strategy to change behavior, with respect to anti-obesity campaigns, is well documented (Lupton, 2014b, Pause, 2017, Hartlev, 2017, Arnold, 2013, Couch et al., 2017). However, shaming obese individuals as an effective way to lose weight is not supported by research (Puhl and Heuer, 2010) and in fact, may lead to the development of BED and harm to emotional wellbeing (Puhl et al., 2006).

In terms of a journey, fat stigma is often the trigger for dieting and disordered eating (Ashmore et al., 2007, O'Brien et al., 2016, Jendrzyca and Warschburger, 2016, Berge et al., 2018, World Health Organization, 2017, Schvey and White, 2015) and this is supported by the current evidence. Studies 2, 3 and 4 all reveal fat stigma to be the strongest driver of dieting and disordered eating. The Pro-Ana websites and YouTube channels that were visited for this research reflect a strong culture of fat stigma and this is also one of the strongest themes to emerge from Study 4. If there are concerns that the Australian anti-obesity campaign is

contributing to negative body image and disordered eating by its use of fat stigma then the progression to dieting and disordered eating is arguably, at least partially, driven by the Australian government's anti-obesity health policies. This viewpoint is supported by Catling and Malson (2012), who studied women with a diagnosis of Anorexia, Bulimia or both, and found, '… anti-obesity campaigns were often construed not only as health-promoting but also as "anorexogenic" and "bulimogenic"' (Catling and Malson, 2012, p.2). The authors further claim that, '… prominence and authority are lent to anti-obesity campaigns by government endorsement' (Catling and Malson, 2012, p.4).

This research also sought to explore how food restriction behaviours are shared. This proved difficult because of the inherent requirement that the spaces where these behaviours occur, must, by necessity, remain difficult to detect. Approaching this task using an eclectic approach with bricolage, enabled this, allowing a dynamic understanding of how disordered eating practices interact with other social practices, such as social media, and how they intersect with, and are often triggered by, stigma.

9.1. Stigma redefined – deliberate and 'weaponised'

In seeking to explain how anti-obesity campaigns can inadvertently encourage a woman's journey from fatness to disordered eating, the recent stigma theory work of Tyler (2018), Tyler and Slater (2018) and Scambler (2018) is more helpful than the more traditional concept of stigma popularised by Goffman (Tyler, 2018, Tyler and Slater, 2018, Goffman, 1963).

Stigma has been redefined by Tyler (2018), Tyler and Slater (2018) and Scambler (2018) as a potential weapon with which to change behaviour. This interpretation of stigma as a tool of control supports Foucault's description of governmentality as a way in which authorities control the behaviour of society (Foucault, 1975). Evidence of fat stigma is central to the current research and can be identified as a factor in all of the studies, leading to distress and a driving force for change. Study 1 demonstrates the deliberate stigmatising of fat women due to the design and the underlying theme of the show, and the comments by viewers posted on the SBS website. The stereotyping of fat people, in this case, three women, as lacking in

control, is central to casting this demographic as 'other' or 'less than' and, as such, the show may be interpreted as endorsing the denigration of fatness. The manner in which this particular show was designed resonates with Foucault's spectacle by its fundamental message that the appearance of the three women was undesirable (Foucault, 1975). In keeping with this intimation, the majority of commenters only focused on weight and weight-loss, rather than health or health-improvement.

Likewise, studies 2 and 3, although not focused on fat stigma, nevertheless, reflect the drive for thinness, and evidence of fat hatred was found in conversations and artwork observed in both studies, thus, signifying fat stigma to be an intrinsic, underlying principle of these spaces.

The degree to which fat stigma is affecting Australian women is confirmed in studies 4 and 5. Several of the participants in study 4, in response to many of the questions (whether about stigma or not) reported their concerns about the effect that the Australian anti-obesity campaign is having on already vulnerable patients and clients, in particular, the effect of the LiveLighter Campaign (discussed more fully in Chapter 2.1), with one participant remarking, 'People are coming in with a high level of distress about the "obesity epidemic" and most recently "toxic fat" or "grabbable gut"'[7]. This echoes the work of Catling and Malson (2012) who argue that the discourse relating to anti-obesity campaigns exacerbates the already-existing denigration of fatness and contributes to the justification of bullying (Catling and Malson, 2012).

Many of the participants in studies 4 and 5 reported that one of their major concerns about the Australian anti-obesity campaign is the effect it is having on normal-weight, healthy women. This is consistent with the view of Malson (1997) who believes that those diagnosed as Anorexic may not represent a different from that of 'normal' women but rather form part of a continuum between eating disorders and 'normal' eating (Malson, 1997). Participants in study 4 believe that this, together with media messages promoting the thin-ideal, is where the real damage is being caused with many suggesting that body image disturbance is the

[7] 'Grabbable gut' is a reference to the "LiveLighter" Campaign discussed previously.

catalyst for the cascade of behaviours leading to the development of disordered eating and diagnosable eating disorders in women. This view of negative body image as the genesis of eating disorders is supported by Stice and Shaw (2002) whose research found that sociocultural processes tend to foster body dissatisfaction, and, consequently eating disorder pathology and that this relationship is mediated by dieting and negative body image (Stice and Shaw, 2002). Similarly, the work of Neumark-Sztainer et al. (2006) also demonstrated that body dissatisfaction predicts the use of unhealthy behaviours, thus, increasing the risk of an eating disorder (Neumark-Sztainer et al., 2006b). It is reasonable, therefore, to suggest that the factors contributing to negative body image may be augmented and strengthened by the Australian government's anti-obesity campaign strategy to promote weight-loss. Unfortunately, this appears to affect mainly women and may further entrench the view of the media that a woman's prime concern should be her appearance, thus, influencing gendered embodiment and possibly strengthening gender inequality.

9.2. Female agency, rebellion and choice

Several researchers have described anti-obesity campaigns as a means of social control (Couch et al., 2017, Harjunen, 2016, Malson and Ussher, 1997) with Harjunen (2016) writing, 'Our bodies become objects of measuring and monitoring from early on. Newborn babies are routinely measured and weighed right from birth and measuring has usually already started while in utero' (Harjunen, 2016, p. 37). As a result, it is unsurprising that eventually many individuals, particularly women, take over this self-monitoring activity at some stage in their lives. In Australia, the LiveLighter Campaign is described by Couch et al. (2017) as a prime example of social control in public health that does not exist in isolation but, '… is part of a wider system of media messages that act as forms of governmentality of bodyweight' (Couch et al., 2017, p. 11). Thus, bodyweight becomes central to the 21st Century woman's narrative and virtually inextricable from the thin ideal. It is a contentious point whether progression to Anorexia reflects ultimate conformance with governmental directives to lose weight, or rebellion in line with the views of Malson and Ussher (1997) who believe that Anorexia is a rebellion against sociocultural surveillance (Malson and Ussher, 1997).

In the current research, whether women who restrict do so as conformance or as rebellion depended on the study. In study 4, the desire to restrict appears to be powered by desperation to conform, whereas, studies 2 and 3 project a clear sense of rebellion, especially study 2. Although, in the current research, this is limited to a quiet rebellion against society for its disdain of the Anorexic body, power is realised by resisting societal demands not to embrace Anorexia. While this rebellion is seemingly unpolitical in nature, the websites, in particular, provide safe spaces that can influence feminist discursive practices about body politics, objectification and individual agency. By occupying these spaces and contributing to the discourse that validates Anorexia, the Anorexic body becomes the norm and societal views on the Anorexic body are rejected. Studies 2 and 3 convey the availability of safe spaces and provide support mechanisms. Indeed, many conversations observed, particularly relating to dying, are unlikely to be shared if safety is questionable. Acknowledging the importance of this connection, and the need for support for women who are distressed about their weight, it is possible that many of the women in the clinical space (study 4), will eventually migrate to Pro-Ana websites (study 2) at some stage.

A different interpretation of rebellion is suggested by Pollack (2003) who speculates that Anorexic women are capable of reversing the flow of oppressive medicalised terminology around Anorexia, to recontextualise this as agentic. Thus, by embracing the label of 'Anorexic' en masse, Pro-ED groups may be seen as politically active (Pollack, 2003).

Continuing with the issue of rebellion, an essay published on the Grinnell University website (author unidentified), states that the Pro-Ana subculture is, '… inherently resistive and anti-society' (Grinnell College, para 16). The author argues that, 'Pro-Ana communities are empowering,' and that the, 'Collective decision and movement of people (into committed Anorexia) is powerful for (this group of) oppressed people, who finally have a chance to express themselves' (Grinnell College, para 12). It should be noted that this group of 'oppressed people' is, in all probability, comprised mainly of women. This view of Anorexic women as a well-organised, well-informed group, with a shared agenda and exercising independent choice, is somewhat consistent with the findings of the current research. There is

some evidence in study 2 for the existence of a distinct group of staunch, committed Anorexics, demonstrated by the exclusive nature of the websites and the monitoring of 'wannarexics'. Furthermore, the commitment to the god 'Ana', and the inference that Anorexia is a religion, projects a strong sense of rebellion towards society; nevertheless, this is limited to the two largest sites (sites 1 and 2) in study 2. However, all of the larger sites (Sites 1-8) in study 2 demonstrate a strong sense of purpose, defiance, and camaraderie with many of these sites displaying collections of quotes, Pro-Ana pictures, and poetry that is confronting for its unspoken narrative of women and death. Notwithstanding these findings, the type of powerful political intent, that the Grinnell Essay describes, was not noted to a degree that would suggest an organised group intent on societal disruption.

In a similar type of essay on the SIRC website (author unidentified), the author believes that Pro-Ana websites are targeted to those who have chosen Anorexia as, '… the right lifestyle choice for them that will allow them to achieve happiness and perfection' (Social Issues Research Centre, para 5), and that the fear of fat, and the resultant distress, drives self-starvation. The adoption of Anorexia as a lifestyle choice on a background of acute distress resonates closely with the current research with the results of all studies demonstrating, to varying degrees, that fat stigma and desperation is a motivating force for unhealthy eating behaviour. The anguish observed due to fat stigma appears to promote a sense of solidarity and women on the larger sites, especially sites 1-8 in study 2, were noted to offer support to one another, often by confirming their exclusionary status. These findings also accord with the findings of Tong et al. (2013) who suggest that Pro-Ana blogs provide emotional support, esteem support, and informational support (Tong et al., 2013). Further to this, Branley and Covey (2017) suggest that many Pro-Ana sites assist and support one another through recovery (Branley and Covey, 2017), but this was not evident to any great degree on the sites visited for the current research. Although many of these sites include a reference to recovery on their homepage, graphic 'thinspiration' photographs and illustrations continue to be displayed.

Orbach (1986) discusses Anorexia as a rebellion against what is expected of a woman in Western society (Orbach, 1986). Likewise, Malson and Ussher (1997) write that Anorexia is a rebellion against sociocultural surveillance (Malson and Ussher, 1997, p. 9). Observations from site 1 in study 2 support this theory with discussions evident about the distress of being watched and judged and the desperation to be free of this. The intent of these conversations centres on being thin and either free of surveillance, or, to project a sense of defiance by achieving Anorexia. Furthermore, many of the members identified on this site appear to be of average weight, suggesting that weight-loss messages may affect women of any size which raises the question of government culpability and ethical responsibility in relation to the any collateral damage caused by the Australian anti-obesity campaign.

In 1986, Orbach wrote, 'As long as bodies are by proxy the standard for women's self-evaluation and the evaluation of others, women will have difficulty with their food and with their body-image' (Orbach, 1986, p. 174). By focusing on weight-loss, government bodies inadvertently reinforce this narrative, hence, prompting the analytic public gaze and self-surveillance that may trigger anxiety, difficulties with body image and a fear of fat. In the current research, this fear of fat is reflected as distress and desperation, and, because this was a common finding across all of the five studies, the question of how this affects women's lives is relevant. Roehling (2011) and Saguy (2011) argue that fear of fat can invade every aspect of a woman's life causing reduced quality of life (Roehling, 2011, Saguy, 2011) and avoidance of the public gaze. As Malson and Ussher (1997) explain, '… (this) disciplining and individualizing gaze …' (Malson and Ussher, 1997, p. 9) can precipitate the need to 'fade away' or become 'less than' to escape. The power of this disciplining gaze to trigger self-surveillance, body image difficulties and distress is, arguably, the strongest driver for dieting; a known risk for disordered eating (Ashmore et al., 2007, O'Brien et al., 2016, Jendrzyca and Warschburger, 2016, Berge et al., 2018, World Health Organization, 2017, Schvey and White, 2015).

Feminist writers Malson and Burns (2009) believe that the distress and damaging body management practices of girls and women is only understandable in the context of the, '… oppressive gender ideologies and inequalities in gender power-

relations operating in (western/ ised) patriarchal cultures' (Malson and Burns, 2009, p. 1). This view offers a plausible account of how authorities, such as the Australian government, appear to have deliberately used stigma to drive a fear of fat and promote dieting and self-surveillance to essentially dictate how women behave in relation to their own bodies. While this may be unintentional, the push for weight-loss has continued despite the lack of success since the campaign began in 2009 (Australian Bureau of Statistics, 2015). This renders the campaign open to criticism as ethically unsound and economically questionable and is supported by Catling and Malson (2012). In their study of women with a diagnosis of Anorexia, Bulimia or both, they found that, '… anti-obesity campaigns were often construed not only as health-promoting but also as "anorexogenic" and "bulimogenic"' (Catling and Malson, 2012, p.2) and that, '… prominence and authority are lent to anti-obesity campaigns by government endorsement' (Catling and Malson, 2012, p.4). The amount of energy, time, emotional and mental capacity that many women expend in pursuing thinness comes with an opportunity cost, that is, at the expense of other choices. As Bordo (1989) argues, '… women are kept busy, thus undermining more important pursuits' (Bordo, 1989). The findings from all of the studies reflect this to be true with ostensibly significant amounts of time and energy spent by women on pursuing thinness and curating their appearance.

9.3. The consequences: collateral damage

The consequences of the Australian anti-obesity campaign include increased anxiety and misery, especially for women, as a result of the seemingly unstoppable drive for thinness that is now an inherent part of Australian culture. While the government cannot be held totally accountable for this, the unwavering message from the Australian government for the last 10-15 years has consisted of policies, programs and health messages to encourage weight-loss, thus, unintentionally mirroring the cultural aesthetic of thinness. By examining the activities within identified spaces and exploring the weight-loss narrative of both the eating disorder community and the Australian government, a plausible link is described suggesting that the Australian anti-obesity campaign has the capacity, by its promotion of weight-loss, to encourage fat stigma, cause distress for those who are obese (and many who are not) and trigger dieting which is the strongest risk factor

for the development of an eating disorder. Because the potential for such negative side effects flowing from the campaign does not appear to have been considered by the government, no clear strategy for harm minimisation exists to protect those vulnerable to developing difficult relationships with food. For all of the reasons documented and described in the current research, the Australian anti-obesity campaign is called into question for its unrelenting focus on weight-loss that has conceivably led many women, including those who are not overweight or obese, to experience fear of fat, anxiety about social exclusion, shame and distress, with a resultant reduced mental and physical health and quality of life.

9.4. Implications

The most important implication of this research concerns the physical and mental health of Australian women, of all ages. The findings of fat stigma, desperation and distress are concerning for the effect they can have on individual choice and quality of life. Moreover, given the higher than expected number of women found in this research to be restricting, or attempting to restrict, food intake, it is likely that this behaviour is more widespread than commonly thought.

The findings suggest that a coherent, plausible argument can be constructed to support the proposition that the Australian government's anti-obesity campaign is contributing to negative body image and possibly triggering disordered eating in susceptible individuals. This raises the question of the suitability of the anti-obesity campaign, in its current form, in a world that values thinness. This has implications for policy development and public health messaging about overweight and obesity.

The results, particularly of desperation, distress, and unhappiness, are consistent with work that has been undertaken previously, mainly on women who are obese, or struggling with an eating disorder, frequently both (O'Brien et al., 2016, Alberga et al., 2016, World Health Organization, 2017, Pause, 2017). No research was located that explores the issue of disordered eating in Australia by identifying spaces where they thrive, examining the activities that occur within these spaces and linking the Australian anti-obesity campaign's message of weight-loss as a subtle enhancer of these practices. It is hoped that the findings of this research can

contribute to future research, in particular, health policy development relating to obesity and disordered eating thereby improving the physical and mental health of Australian women. This is discussed more fully in Chapter 10.

9.5. Limitations

There are several limitations to this research, many of which have been addressed earlier in the context of the individual studies. The limitations discussed here pertain to the overall research.

A major limitation lies in the design and the adoption of an eclectic approach. This approach required identification of locations in Australian life that would provide enough appropriate information to answer the research questions. Undeniably, the choice of locations is a limitation as these were chosen by the writer and informed by personal knowledge and experience of the Internet and social media. The aim was to choose spaces that had the potential to provide useful information, while also operating at a distance from one another. So, although the Internet and social media were chosen and, it could be argued, that these reflect a similar location, there are differences between these. Unlike the Internet, social media is conducted within platforms that limit activity to those who join. In this way, this space is more controlled and user-specific. Unlike a website, social media visitors require some understanding of the different platforms, whereas, the Internet has no such requirement.

The reliance on Internet search engines to source potential spaces to study may also be considered a limitation; however, this is becoming increasingly common across many research areas. Nevertheless, there are limitations, many of which have been described in Chapters 6 and 7. As mentioned previously, any Internet search is subject to the algorithmic model for that particular search engine. It is shaped, to an extent, by the search history of the user and, therefore, is at risk of missing important information that is not presented in the search results. To counteract this, the writer conducted searches on many devices, several of which belonged to another person, so was not subject to the writer's search history influence. It was, however, subject to the search history of the owner. This was overcome, as much as possible, by using friends' devices that had never been used

to search for information relating to the current research issues. It is hoped that the care that governed the choice of devices and the number of devices used to check searches worked to lessen missed data. Consequently, the studies draw on data that any user would expect to find.

It is also possible that the locations studied are not representative of similar locations elsewhere although the use of an eclectic approach mitigates this somewhat. If this is the case, the information from this research will have limited applicability. Furthermore, the qualitative information gathered is subject to the writer's analysis and interpretation, however, the choice of a mixed methods approach, that includes the gathering of quantitative data, may balance this to present a more comprehensive result than either design would alone.

As mentioned in Chapter 3, a major drawback to the eclectic approach is that it relies on the convergence of triangulated data, that is, the results reflect similar findings across the studies such that it is unlikely that further work would significantly change these. Furthermore, because data interpretation relies largely on the researcher, it is subjective. To try to minimise this as much as practicable, the author was careful to interpret the data based on whatever previous research was available and by constant reference to the goal of the overall research. However, due to the nature of the issues researched, and the lack of existing data, a degree of subjectivity was necessary when attempting to triangulate the different datasets to ensure that no information was lost.

The use of bricolage may also attract criticism for its lack of a verifiable structure and the inclusion of many aspects of the issues that, while conferring a richer and more meaningful end result, may also reduce accuracy in the detail. Although bricolage is designed to weave a story about a phenomenon using whatever is to hand, critics may suggest that the creative part of this is too subjective, or not reproducible. However, in attempting to investigate a topic that has no previous data to build upon, and given the large-scale issues to explore, bricolage allowed a freedom for informed speculation that was necessary in order to move forward to a conclusion.

Another major limitation was the low response rate for study 4, which also affected the follow-up; study 5. This has been addressed in some detail in Chapters 8.1 and 8.2, particularly with reference to recruitment strategy. However, although this was a disappointment, it may also reflect the fact that the research topic is not widely known. This in itself is an important finding given the potentially widespread distress about body image which so often culminates in unhealthy dieting and disordered eating together with the mental health issues that may ensue because of this.

This chapter sought to analyse the results of the studies and to describe the ways in which the Australian anti-obesity campaign may be contributing to the pursuit of the thin-ideal particularly by using fat-shaming to promote fat stigma. With a particular emphasis on women, the ways in which this may cause distress and damage quality of life were explored, particularly for the effect this often has on the capacity of individuals to act independently and exercise free choice.

Chapter 10: Conclusion

The aim of this research was to demonstrate the different ways by which the Australian anti-obesity campaign with its promotion of weight-loss, might be inadvertently promoting fat stigma and eating disorders.

Three social spaces were identified for investigation (the Internet, social media and the eating disorder clinical field). These were chosen as representing different locations, consistent with the eclectic approach adopted.

Five separate studies were conducted within these spaces, exploring: fat stigma in online responses to a television program; the activities of Pro-Ana websites in sharing tips to restrict eating; YouTube for its role in promoting a vegan diet to hide disordered eating, and the views of experts in the clinical field about the Australian anti-obesity campaign and its use of stigma to drive weight-loss.

The results demonstrate that spaces exist where women, in particular, gather to share advice on becoming thin; not a low but healthy weight, but as thin as possible, and although these spaces are all different, many findings were common to all. That distress, self-hate and a willingness to try anything to become thin were universal findings is concerning given that the time, money and energy spent pursuing thinness may rob many women of the opportunity to pursue other activities.

The rationale for weight-loss health promotion has as its genesis an economic motive; the Australian government's desire to reduce costs related to chronic disease, including obesity. The subsequent anti-obesity campaigns conducted in Australia over the past 10 or so years have resulted in fatness being considered as disgusting and deviant, rather than as a normal variant of bodyweight; in other words, it has been stigmatised. This fat stigma has been reinforced with the harnessing of the fat narrative (lazy, greedy, lacking in self-control) in many Australian social marketing initiatives such as the LiveLighter Campaign (Government of Western Australia, 2015), discussed at length throughout this thesis. This type of social marketing ignores the individual, and cultural, nuances around fatness, instead adopting a universal and 'weaponised' approach resulting

in casualties, especially women. Nevertheless, any collateral damage flowing from the Australian anti-obesity campaign must be considered in light of the current societal glorification of the thin ideal. Augmented by the rise in the prominence of social media as a serious influencer, the thin ideal has become, not just an aspiration (as for many women, this is completely unattainable), but iconic. Unfortunately, the Australian anti-obesity campaign of weight-loss appears to have been subsumed into this narrative rather than retaining the health narrative. As a result, many individuals, especially women, have become collateral damage as victims of serial dieting, weight-cycling, biochemical imbalances, psychological misery, disordered eating, and often, weight increase. Regardless of body-size, the pressure of the combined weight-loss messages of the media and the Australian government has the power to trigger the development of an eating disorder.

10.1. The contribution of this research to the literature

Currently, there is very little research about disordered eating in Australia, what the disorder looks like and why it is triggered in some people but not in others. While it is beyond the scope of the current research to answer these questions fully, the current research may help to raise the profile of this topic for further consideration and investigation. Because spaces where disordered eating thrives in Australia are described and discussed, the data and information provided may contribute to the understanding of the dangers of using stigma to drive weight-loss, in particular, the effect on body image. This has particular importance for the development of obesity prevention policy and the necessity to militate against possible unintended negative consequences,

10.2. Future research

Future research may be most helpful if concentrated on the individual locations identified in the current research. Contacting users of sites may prove useful to investigate the journey that women take to disordered eating. However, this approach, unless conducted with a degree of empathy and experience, may prove fruitless due to the need for Pro-Ana members to maintain a degree of anonymity. It may be more beneficial if research is focused on the larger female Australian population found within spaces that are less elusive than those featured in the

current research. Locations such as workplaces, female gyms and other everyday locations may provide information to enable recognition of patterns of behaviour that occur before conscious restriction happens. For instance, a workplace culture of dieting and appearance-checking may stimulate progression to disordered eating. It is likely that women who have not started serious restriction but are contemplating how to drastically reduce intake will be more amenable to contact than those already seriously restricting. Considering the large numbers of women identified in the current research who seek advice on how to restrict intake, connection with this group may also result in a greater understanding of the motives that drive this behaviour, further informing the future direction of this topic.

Connecting with health workers, and other professionals, in the field of eating disorders, particularly psychosocially, may be more successful if face to face meetings, and/or, focus groups are pursued. This allows for greater discussion about disordered eating, its triggers, and possible avenues for addressing this before it escalates into a fully-developed eating disorder.

Social media, rather than online or mass media, deserves specific focus because of the sheer numbers of people who use this every day.

10.3. Recommendations

Acknowledging the role that body image plays in the development of disordered eating is of prime importance and a greater understanding and awareness of the role of BDD in its formation is warranted. Australian research exists that explores the nuances of BDD and its link to eating disorders, but, according to the research findings presented in this thesis, eating disorder professionals in the field are unaware of this.

There is a need for engagement between those in the eating disorder field and policy-makers and this is reinforced by US researchers Buchianeri and Neumark-Sztainer (2014) who argue that, 'Body dissatisfaction is implicated in a range of public health concerns, including impaired psychological health (for example, depression) and eating and weight-related problems (for example, eating

disorders, obesity)' (Bucchianeri and Neumark-Sztainer, 2014, p.64). As these writers assert, in contrast to other fields of research, there has been very little primary research on body image within the field of Public Health. Similar to Paxton (2011), they believe that because of the associations between body dissatisfaction and impaired psychological health, there is a critical need to address the prevalence of body image concerns as a public health issue within programs and policies (Bucchianeri and Neumark-Sztainer, 2014).

The investigation of the use of resilience education tools, such as the capacity building kit developed by the Queen Victoria Women's Centre (QVWC) in Victoria, Australia, titled, 'Young women, body image and the digital age: QVWC women's capacity building kit' (Queen Victoria Women's Centre, 2008), deserve attention for the power that these can have in handing back control to the individual. As evidence demonstrates that body image problems often develop early, these resources, or similar and age-appropriate, may prove particularly helpful if administered in late primary school, rather than waiting until difficulties arise in adolescence.

Adopting a feminist approach to the treatment of body image difficulties and eating disorders may be valuable for those women old enough to understand the concepts inherent in this approach. This is discussed in detail in Chapter 4.4. Furthermore, teaching eating disorder sufferers, and those who are heavily restricting intake but do not have a formal diagnosis, how to externalise their disorder as an illness, rather than internalising it as a complicated extension of being female, may prove to be one of the most valuable concepts of all. If successful, this approach can not only allow disassociation from the eating disorder, but also restore self-esteem.

Finally, a review of the Australian anti-obesity policy and campaign may result in a way of managing obesity reduction that acknowledges, and accounts for, the possibility of negative unintended consequences. Consideration of approaching obesity and disordered eating simultaneously has been suggested by others and the current research supports this while also advocating for interventions that cultivate individual self-resilience.

References

Alberga, A., Russell-Mayhew, S., Von Ranson, K. & Mclaren, L. 2016. Weight bias. A call to action. *Journal of Eating Disorders,* 4 (34).

Aleccia, J. 2013. Fat-shaming may curb obesity bioethicist says. *Today Health.* US: NBC News.

Allen, K. L., Byrne, S. M., Forbes, D. & Oddy, W. H. 2009. Risk factors for full and partial-syndrome early adolescent eating disorders: a population-based pregnancy cohort study. *Journal of the American Academy of Child and Adolescent Psychiatry,* 48**,** 800-9.

Alleva, J. M., Paraskeva, N., Craddock, N. & Diedrichs, P. C. 2018. Body appreciation in British men: Correlates and variation across sexual orientation. *Body Image,* 27**,** 169-178.

American Psychological Associaton. Washington DC. Available: https://www.apa.org/pi/aids/resources/exchange/2012/04/minority-stress [Accessed 22nd March 2019].

Anglin, J. C. 2012. Assessing the effectiveness of intuitive eating for weight loss - pilot study. *Nutrition and Health,* 21**,** 107-15.

Anorexia Nervosa Genetics Initiative (Angi). 2015. *M.A.N. – Male Anorexia Nervosa.* [Online]. Australia. Available: http://vivacommunications.com.au/blog/male-anorexia-nervosa-m-a-n/ [Accessed 30th August 2019].

Armstrong, J. 1974. *Eclectic Research and Construct Validation* [Online]. Philadelphia: University of Pennsylvania. Available: https://repository.upenn.edu/ [Accessed 3rd February 2019].

Armstrong, J. 1985. *LONG-RANGE FORECASTING. From Crystal Ball to Computer. Second edition.,* Philadelphia, University of Pennsylvania.

Armstrong, J. 2014. *Children under 10 in hospital with eating disorders - drawn in by horrific 'thinspiration' photos* [Online]. UK: Daily Mirror. Available: http://www.mirror.co.uk/news/uk-news/children-under-10-hospital-eating-4282982 [Accessed 11th December 2019].

Arnold, C. 2013. *When the healthy eating message goes very, very wrong.* [Online]. USA. Available: http://edbites.com/2013/02/when-the-healthy-eating-message-goes-very-very-wrong/ [Accessed 6th December 2019].

Arseniev-Koehler, A., Lee, H., Mccormick, T. & Moreno, M. A. 2016. #Proana: Pro-Eating Disorder Socialization on Twitter. *Journal of Adolescent Health,* 58**,** 659-64.

Ashmore, J., Friedman, K., Reichmann, S. & Musante, G. 2007. Weight-based stigmatization, psychological distress, and binge eating behavior among obese treatment-seeking adults. *Eating Behaviors,* 9**,** 203-209.

Atieno, O. P. 2009. An analysis of the strengths and limitations of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century,* 13.

Australia & New Zealand Academy for Eating Disorders. 2019. *Letter to Members: ANZAED position on the Fast Track Trial* [Online]. Sydney. Available: http://www.anzaed.org.au/letter-to-members-anzaed-position-on-the-fast-track-trial/ [Accessed 6th December 2019].

Australian Bureau of Statistics. 2015. *National Health Survey: First Results, 2014-15* [Online]. Canberra: Australian Government. Available: http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2014-15~Main%20Features~Overweight%20and%20obesity~22 [Accessed 6th December 2019].

Australian Bureau of Statistics. 2019. *National Health Survey: First Results, 2017-18* [Online]. Canberra: Australian Government. Available: https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2017-18~Main%20Features~Overweight%20and%20obesity~90 [Accessed 6th December 2019].

Australian Government 2009. Australian Better Health Initiative. Canberra: Department of Health and Ageing.
Australian Public Services Commissioner 2012. Tackling wicked problems: A public policy perspective. Canberra: Australian Government.
Bacon, L. 2008. *Health At Every Size. The surprising truth about your weight,* US, Benbella Books Inc.
Bacon, L. 2009. Reflections on fat acceptance: lessons learned from privilege. *National Association to Advance Fat Acceptance.* US.
Bacon, L. & Aphramor, L. 2011. Weight science: evaluating the evidence for a paradigm shift. *Nutrition Journal,* 10**,** 9.
Bacon, L., Stern, J. S., Van Loan, M. D. & Keim, N. L. 2005. Size acceptance and intuitive eating improve health for obese, female chronic dieters. *Journal of the American Dietetic Association,* 105**,** 929-36.
Bandura, A. 2001. Social cogntiive theory. An agentic perspective. *Annual Review of Psychology,* 52**,** 26.
Bardone-Cone, A. M. & Cass, K. M. 2007. What does viewing a pro-anorexia website do? An experimental examination of website exposure and moderating effects. *International Journal of Eating Disorders,* 40**,** 537-48.
Bardone-Cone, A. M., Fitzsimmons-Craft, E. E., Harney, M. B., Maldonado, C. R., Lawson, M. A., Smith, R. & Robinson, D. P. 2012. The inter-relationships between vegetarianism and eating disorders among females. *Journal of The Academy of Nutrition and Dietetics,* 112**,** 1247-52.
Barlett, C., Vowels, C. & Saucier, D. 2008. Meta-analyses of the effects of media images on men's body-image concerns. *Journal of Social and Clinical Psychology,* 27**,** 279–310.
Barry, C. L., Brescoll, V. L., Brownell, K. D. & Schlesinger, M. 2009. Obesity metaphors. How beliefs about the causes of obesity affect support for public policy. *The Milbank Quarterly,* 87**,** 7-47.
Bartsch, D. 2007. Prevalence of body dysmorphic disorder symptoms and associated clinical features among Australian university students. *Clinical Psychologist,* 11**,** 16-23.
Baruch, Y. 2016. Response Rate in Academic Studies-A Comparative Analysis. *Human Relations,* 52**,** 421-438.
Bayer, R. 2008. Stigma and the ethics of public health: not can we but should we. *Social Science and Medicine,* 67**,** 463-72.
Bell, D. 1979. Talcott Parsons. Nobody's theories were bigger. *New York Times Archive*.
Bell, K. & Mcnaughton, D. 2007. Feminism and the invisible fat man. *Body & Society,* 13**,** 107-131.
Berge, J., Winkler, M., Larson, M., Miller, J., Haynos, A. & Neumark-Steiner, D. 2018. Intergenerational transmission of parent encouragement to diet from adolescence into adulthood. *Pediatrics,* 141 (4).
Bergman, S. B. 2009. Part time fatso. *In:* ROTHBLUM, E. D. & SOLOVAY, S. (eds.) *The fat Studies Reader.* New York: New York University Press.
Bjornsson, A., Didie, E. & Phillips, K. 2010. Body dysmorphic disorder. *Dialogues in Clinical Neuroscience* 12 (2)**,** 221-232.
Blowers, L. C., Loxton, N. J., Grady-Flesser, M., Occhipinti, S. & Dawe, S. 2003. The relationship between sociocultural pressure to be thin and body dissatisfaction in preadolescent girls. *Eating Behaviors,* 4**,** 229-244.
Boero, N. & Pascoe, C. J. 2012. Pro-anorexia communities and online interaction: Bringing the pro-ana body online. *Body & Society,* 18**,** 27-57.
Bordo, S. 1989. The body and the reproduction of femininity: A feminist approach to Foucault. *In:* JAGGAR, A. & BORDO, S. (eds.) *Gender/body/knowledge: Feminist reconstructions of being and knowing.* New Brunswick: Rutgers University Press.
Bordo, S. 1993. *Unbearable weight. Feminism, western culture and the body.,* London, University of California Press.

Borzekowski, D. L., Schenk, S., Wilson, J. L. & Peebles, R. 2010. e-Ana and e-Mia: A content analysis of pro-eating disorder web sites. *American Journal of Public Health,* 100**,** 1526-34.
Branley, D. B. & Covey, J. 2017. Pro-ana versus Pro-recovery: A Content Analytic Comparison of Social Media Users' Communication about Eating Disorders on Twitter and Tumblr. *Frontiers of Psychology,* 8**,** 1356.
Bratland-Sanda, S., Nilsson, M. & Sundgot-Borgen, J. 2015. Disordered eating behavior among group fitness instructors. A health-threatening secret? *Journal of Eating Disorders,* 3.
Bratman, S. 1997. *Original orthorexia essay.* [Online]. US. Available: http://www.orthorexia.com/original-orthorexia-essay/ [Accessed 25th August 2019].
Bratman, S. 2016. *Orthorexia: An update* [Online]. Available: http://www.orthorexia.com [Accessed 1st September 2019].
Braun, V. & Clarke, V. 2019. Reflecting on reflexive thematic analysis. *Sport, Exercise and Health,* 11 (4)**,** 589-597.
Braun, V., Clarke, V., Hayfield, N. & Terry, G. 2019. *'Applied Thematic Analysis ' in Liamputtong P (ed.) Handbook of Research Methods in Health Social Sciences,,* Singapore, Springer Nature Singapore
Braunack-Mayer, A. & Carter, S. M. 2015. Ethics and health promotion: research, theory, policy and practice. *Health Promotion Journal of Australia,* 26**,** 165-166.
Brennan, D. J., Crath, R., Hart, T. A., Gadalla, T. & Gillis, L. 2011. Body Dissatisfaction and Disordered Eating Among Men Who Have Sex with Men in Canada. *International Journal of Men's Health,* 10**,** 253-268.
Brewis, A. B., Wutich, A., Falletta-Cowden, A. & Rodriguez-Soto, I. 2011. Body norms and fat stigma in global perspective. *Current Anthropology,* 52.
British Broadcasting Corporation. 2012. *Tumblr to ban self-harm and eating disorder blogs.* [Online]. London. Available: http://www.bbc.co.uk/newsbeat/article/17195865/tumblr-to-ban-self-harm-and-eating-disorder-blogs [Accessed 15th April 2019].
Brotsky, S. & Giles, D. 2007. Inside the "Pro-ana" community: A covert online participant observation. *Eating Disorders,* 15**,** 93-109.
Brown, H. 2010a. *Brave girl eating. A family's struggle with anorexia,* New York, Harper Collins.
Brown, H. 2010b. For obese people, prejudice in plain sight. *New York Times*.
Brown, H. 2013. *When your doctor makes you feel fat.* [Online]. US. Available: http://www.prevention.com/print/22527#ixzz2TEbkd8k4 [Accessed 16th July 2019].
Brownell, K. D. 2004. *The LEARN program for weight management,* North Carolina, American Health Publishing Company; 10th edition
Brownell, K. D., Puhl, R. M., Schwartz, M. B. & Rudd, L. 2005. *Weight bias. Nature, consequences, and remedies,* New York, The Guilford Press.
Bruch, H. 1973. *Eating Disorders: Obesity, Anorexia Nervosa, and the person within* New York, Basic Books.
Brytek-Matera, A., Donini, L. M., Krupa, M., Poggiogalle, E. & Hay, P. 2015. Orthorexia Nervosa and self-attitudinal aspects of body image in female and male university students. *Journal of Eating Disorders,* 3**,** 2.
Bucchianeri, M. & Neumark-Sztainer, D. 2014. Body dissatisfaction: an overlooked public health concern. *Journal of Public Mental Health,* 13**,** 64-69.
Buchanan, B. 2015. Body Dysmorphic Disorder. Identifying and treating an invisible problem. *Australian Clinical Psychologist,* 1.
Buhlmann, U., Glaesmer, H., Mewes, R., Fama, J. M., Wilhelm, S., Brahler, E. & Rief, W. 2010. Updates on the prevalence of Body Dysmorphic Disorder: a population-based survey. *Psychiatry Research,* 178**,** 171-5.
Burns, M. & Gavey, N. 2004. 'Healthy weight' at what cost? 'Bulimia' and a discourse of weight control. *Journal of Health Psychology,* 9**,** 549-65.

Butterfly Foundation 2012. Paying the Price. The economic and social impact of eating disorders in Australia. Canberra: The Butterfly Foundation.
Byrne, S. & Niederdeppe, J. 2012. Unintended consequences of obesity prevention messages. *In:* CAWLEY, J. (ed.) *The Oxford Handbook of the Social Science of Obesity.* New York: Oxford University Press.
Callahan, D. 2013. Obesity: chasing an elusive epidemic. *Hastings Centre Report,,* 43**,** 34-40.
Camussi, E., Bert, F., Gualano, M. & Siliquini, R. 2015. Risks and threats of social media websites: Twitter and the pro-ana movement. *European Journal of Public Health,* 25**,** 164.
Canto-Mila, N. & Seebach, S. 2011. Ana's Friends. Friendship in online pro-ana communities. *Sociological Research Online,* 16 (1) 1.
Caplan, H. 2018. *Where eating disorders hide and thrive* [Online]. Available: http://heathercaplan.com/nutrition/recognizing-eating-disorders/ [Accessed 9th March 2019].
Carels, R. A. & Musher-Eizenman, D. R. 2010. Individual differences and weight bias: Do people with an anti-fat bias have a pro-thin bias? *Body Image,* 7**,** 143-8.
Carey, R. N., Donaghue, N. & Broderick, P. 2010. 'What you look like is such a big factor': Girls' own reflections about the appearance culture in an all-girls' school. *Feminism & Psychology,* 21**,** 299-316.
Carlson, J. & Ray, R. 2018. *Sociology: Feminist Theory* [Online]. Oxford: Oxford University Press. Available: https://www.oxfordbibliographies.com/view/document/obo-9780199756384/obo-9780199756384-0020.xml#firstMatch [Accessed 23rd June 2019].
Carter, S. 2012. What is health promotion ethics? *Health Promotion Journal of Australia,* 23 (1).
Carter, S. M., Cribb, A. & Allegrante, J. P. 2012. How to think about health promotion ethics. *Public Health Reviews,* 34 (1).
Catling, L. & Malson, H. 2012. Feeding a fear of fatness? A preliminary investigation of how women with a history of eating disorders view anti-obesity health promotion campaigns. *Psychology of Women Section Review,* 14 (1).
Cernik, L. 2018. *It's not fine to be fat. Celebrating obesity is irresponsible* [Online]. Sydney: The Guardian (Australian edition). Available: https://www.theguardian.com/commentisfree/2018/apr/10/fat-pride-obesity-public-health-warnings-dangerous-weight-levels [Accessed 29th April 2019].
Chancellor, S., Pater, J. A., Clear, T. A., Gilbert, E. & De Choudhury, M. #thyghgapp: Instagram content moderation and lexical variation in pro-eating disorder communities. Conference on Computer-Supported Cooperative Work & Social Computing, 2016 San Francisco. 1201-1213.
Chaney, M. 2008. Muscle Dysmorphia, self-esteem, and loneliness among gay and bisexual men. *International Journal of Men's Health,* 7**,** 157-170.
Chernik, A. 1995. The Body Politic. *In:* FINDLEN, B. (ed.) *Listen up. Voices from the next feminist generation, electronic book,.* US: Seal Press.
Chiodo, J., Stanley, M. & Harvey, J. 1984. Attributions about Anorexia Nervosa and Bulimia. *Journal of Social and Clinical Psychology,* 2**,** 280.
Choi, P. Y. L., Pope H G Jr & Olivardia, R. 2002. Muscle Dysmorphia: a new syndrome in weightlifters. *British Journal of Sports Medicine* 36**,** 375–377.
Chrisler, J. C. 2011. "Why can't you control yourself?" Fat should be a feminist issue. *Sex Roles,* 66**,** 608-616.
Coag Health Council 2018. Final Report on Obesity Canberra: Australian Government.
Coag Reform Council 2015. *In:* GOVERNMENT., A. (ed.). Canberra.
Cobb, G. 2016. "This is not pro-ana": Denial and disguise in pro-anorexia online spaces. *Fat Studies,* 6**,** 189-205.
Cohen, L., Perales, D. & Steadman, C. 2005. The O word. Why the focus on obesity is harmful to community health. *Californian Journal of Health Promotion,* 3**,** 154-161.

Cohen, R., Newton-John, T. & Slater, A. 2017. The relationship between Facebook and Instagram appearance-focused activities and body image concerns in young women. *Body Image,* 23**,** 183-187.
Collins Dictionary.Com. Glasgow. Available: https://www.collinsdictionary.com/dictionary/english [Accessed 16th June 2019].
Couch, D., Fried, A. & Komesaroff, P. 2017. Public health and obesity prevention campaigns – a case study and critical discussion. *Communication Research and Practice***,** 1-18.
Couch, D., Thomas, S. L., Lewis, S., Blood, R. W. & Komesaroff, P. 2015. Obese Adults' Perceptions of News Reporting on Obesity. *SAGE Open,* 5**,** 215824401561252.
Crowe, N. & Watts, M. 2014. 'We're just like Gok, but in reverse': Ana Girls – empowerment and resistance in digital communities. *International Journal of Adolescence and Youth***,** 1-12.
Damiano, S., Paxton, S., Wertheim, E. H., Mclean, S. & Gregg, K. 2015. Can social factors influence the dietary restraint of girls as young as five? *Journal of Eating Disorders* 3(Suppl 1).
Daraganova, G. 2013. *Body image of primary school children.* [Online]. Canberra: Australian Institute of Family Studies. Available: http://www.growingupinaustralia.gov.au/pubs/asr/2013/asr2013g.html [Accessed 14th October 2019].
Darby, A., Hay, P., Mond, J., Quirk, F., Buttner, P. & Kennedy, L. 2009. The rising prevalence of comorbid obesity and eating disorder behaviors from 1995 to 2005. *The International Journal of Eating Disorders,* 42**,** 104-8.
Darby, A., Hay, P., Mond, J., Rodgers, B. & Owen, C. 2007. Disordered eating behaviours and cognitions in young women with obesity: relationship with psychological status. *International Journal of Obesity,* 31**,** 876-82.
Day, J., Ternouth, A. & Collier, D. 2009. Eating disorders and obesity. Two sides of the same coin. *Epidemiologia e Psichiatria Sociale,* 18**,** 96-100.
Day, K. & Keys, T. 2008. Starving in cyberspace: a discourse analysis of pro-eating-disorder websites. *Journal of Gender Studies,* 17**,** 1-15.
De Zwaan, M. 2001. Binge eating disorder and obesity. *International Journal of Obesity,* 25**,** S51-S55.
Denzin, N. & Lincoln, Y. 2000. *The SAGE Handbook of Qualitative Research,* California, Sage Publications.
Department of Health and Ageing 2005. Economic implications of an ageing Australia. Productivity Commission Research report. Canberra: Australian Government.
Department of Health and Ageing 2007. Australian Better Health Initiative. Canberra: Australian Government.
Dias, K. 2003. The ANA sanctuary: Women's pro-anorexia narratives in cyberspace. *Feminism and Women's Studies,* 4 (2).
Dickins, M., Thomas, S. L., King, B., Lewis, S. & Holland, K. 2011. The role of the fatosphere in fat adults' responses to obesity stigma: a model of empowerment without a focus on weight loss. *Qualitative Health Research,* 21**,** 1679-91.
Diversi, T., Hughes, R. & Burke, K. 2016. The prevalence and practice impact of weight bias amongst Australian dietitians. *Obesity Science & Practice; Wiley Online Library***,** 456-465.
Dohnt, H. & Tiggemann, M. 2006. The contribution of peer and media influences to the development of body satisfaction and self-esteem in young girls: a prospective study. *Developmental Psychology,* 42**,** 929-36.
Domoff, S. E., Hinman, N. G., Koball, A. M., Storfer-Isser, A., Carhart, V. L., Baik, K. D. & Carels, R. A. 2012. The effects of reality television on weight bias: an examination of The Biggest Loser. *Obesity* 20**,** 993-8.
Duggan, S. J. & Mccreary, D. R. 2004. Body image, eating disorders, and the drive for muscularity in gay and heterosexual men: the influence of media images. *Journal of Homosexuality,* 47**,** 45-58.
Eating Disorders Australia. 2016. *Eating Disorders And Obesity Conference. Why Diabulimia Eating Disorder is never talked about* [Online]. Sydney. Available:

https://eatingdisordersaustralia.org.au/why-diabulimia-eating-disorder-is-never-talked-about/ [Accessed 5th October 2019].
Eating Disorders Australia. 2018. *National eating disorders and obesity conference* [Online]. Queensland. Available: https://eatingdisordersaustralia.org.au [Accessed 17th June 2019].
Eating Disorders Coalition. 2013. *Anti-obesity programs may be causing harm.* [Online]. USA. Available: http://eatingdisorderscoalition.org.s208556.gridserver.com/couch/uploads/file/Challenge%20Anti-Obesity.pdf [Accessed 15th December 2019].
Eating Disorders Victoria 2015. Key research and statistics. Melbourne.
Eating Disorders Victoria. 2017. *FAQs* [Online]. Melbourne. Available: https://www.eatingdisorders.org.au/faq-sp-1514650793#health [Accessed 17th September 2019].
Epidata Software. Odense, Denmark. Available: http://epidata.dk [Accessed 24th August 2019].
Euromonitor International. 2018. *Packaged food in Australia* [Online]. London. Available: https://www.euromonitor.com/australia [Accessed 6th September 2019].
Evans, B. 2006. Gluttony or sloth: critical geographies of bodies and morality in (anti)obesity policy. *Area,* 38**,** 259-267.
Evans, J., Evans, B. & Rich, E. 2006. 'The only problem is, children will like their chips': education and the discursive production of ill-health. *Pedagogy, Culture & Society,* 11**,** 215-240.
Evans, J., Rich, E., Davies, B. & Allwood, R. 2008. Education, disordered eating and obesity discourse: Fat fabrications London: Routledge.
Family and Community Development Committee 2003. Inquiry into issues relating to the development of body image among young people and associated effects on their health and wellbeing. Melbourne: Parliament of Victoria.
Fardouly, J., Diedrichs, P. C., Vartanian, L. R. & Halliwell, E. 2015. Social comparisons on social media: the impact of Facebook on young women's body image concerns and mood. *Body Image,* 13**,** 38-45.
Fast Track to Health. 2019. Sydney. Available: https://www.fasttracktrial.com [Accessed 3rd June 2019].
Fat Heffalump. 2014. *You cannot help those you loathe.* [Online]. USA. Available: https://fatheffalump.wordpress.com/2014/01/03/you-cannot-help-those-you-loathe/ [Accessed 14th December 2019].
Field, A. E., Sonneville, K. R., Crosby, R. D., Swanson, S. A., Eddy, K. T., Camargo, C. A., Jr., Horton, N. J. & Micali, N. 2014. Prospective associations of concerns about physique and the development of obesity, binge drinking, and drug use among adolescent boys and young adult men. *Journal of American Medical Association. Pediatrics.,* 168**,** 34-9.
Fikkan, J. L. & Rothblum, E. D. 2011. Is fat a feminist issue? Exploring the gendered nature of weight bias. *Sex Roles,* 66**,** 575-592.
Fikkan, J. L. & Rothblum, E. D. 2012. We agree: Fat is a feminist issue! Response to commentators. *Sex Roles,* 66**,** 632-635.
Forde, O. H. 1998. Is imposing risk awareness cultural imperialism? *Social Science & Medicine,* 47**,** 1155-1159.
Foucault, M. 1975. *Discipline and Punish. The Birth of the Prison.,* New York, Vintage Books.
Foucault, M. 2008. *The History of Sexuality,* London, Penguin Books. Volume 1.
Fridkis, K. 2014. *Things you get away with by being skinny* [Online]. Australia: Fairfax. Available: http://www.dailylife.com.au/life-and-love/real-life/things-you-get-away-with-by-being-skinny-20140627-3ayf9.html [Accessed 14th August 2019].
Fry, C. 2012. Ethical issues in obesity interventions for populations. *Public Health Bulletin,* 23 (5-6).
Fukui, M. 2014. *Asceticism or Anorexia? Rethinking starvation and women's spirituality* [Online]. Australia. Available:

http://www.abc.net.au/religion/articles/2014/04/01/3976124.htm [Accessed 28th August 2019].
Gerrard, Y. The future of eating disorder content moderation. atm-ucla2017, 2018 Los Angeles.
Gianini, L., Walsh, B., Steinglass, J. & Mayer, L. 2016. Long-term weight loss maintenance in obesity: Possible insights from anorexia nervosa? *International Journal of Eating Disorders,* 50**,** 341–342.
Gillespie, T., Boczkowski, P. & Foot, K. 2014. The relevance of algorithms. *In:* GILLESPIE, T. (ed.) *Media Technologies.* Cambridge: MIT Press.
Goffman, E. 1963. *Stigma. Notes on the management of spoiled identity.,* New York, Simon & Schuster Inc.
Gordon, R. 2000. *Eating disorders. Anatomy of a social epidemic. Second edition,* New Jersey, Blackwell Publishers Ltd.
Government of Western Australia. 2015. *LiveLighter. Factsheet. About toxic fat.* [Online]. Western Australia. Available: https://www.healthdirect.gov.au/partners/livelighter [Accessed 5th December 2019].
Gowers, S. & Shore, A. 1999. The stigma of eating disorders. *International Journal of Clinical Practice,* 53.
Grant, J., Kim, S. & Eckert, E. 2002. Body dysmorphic disorder in patients with anorexia nervosa. Prevalence, clinical features, and delusionality of body image. *Wiley Periodicals, Inc.* [Online].
Grant, M. J. & Booth, A. 2009. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Information and Libraries Journal,* 26**,** 91-108.
Griffiths, S., Hay, P., Mitchison, D., Mond, J., Mclean, S. A., Rodgers, B., Masse, R. & Paxton, S. 2016. Sex differences in the relationships between body dissatisfaction, quality of life and psychological distress. *Australian and New Zealand Journal of Public Health,* 40.
Griffiths, S., Murray, S. & Touyz, S. 2015. Keeping pace with the growing problem of male eating disorders. *Medicine Today,* 16**,** 63-65.
Griffiths, S., Murray, S. B. & Touyz, S. 2013. Disordered eating and the muscular ideal. *Journal of Eating Disorders,* 1.
Grinnell College. *Pro-Ana subculture* [Online]. Grinnell, Iowa. Available: https://haenfler.sites.grinnell.edu/subcultures-and-scenes/pro-ana-2/ [Accessed 5th May 2019].
Guest, G., Macqueen, K. & Namey, E. 2012. *Applied Thematic Analysis,* Thousand Oaks, Sage Publications Inc.
Hamberg K, Johansson, E., Lindgren, G. & Westman, G. 1994. Scientific rigour in qualitative research - examples from a study of women's health in family practice. *Family Practice,* 11 (2).
Hardin, P. 2003. Shape-shifting discourses of anorexia nervosa: reconstituting psychopathology. *Nursing Inquiry,* 10 (4)**,** 209-217.
Harjunen, H. 2016. Neoliberal bodies and the gendered fat body. London: Taylor and Francis.
Harry, S. 2014. *I'm more than my body SBS,* [Online]. Australia. Available: http://bodypositiveaustralia.com.au/2014/05/immorethanmybody/ [Accessed 16th June 2019].
Hartlev, M. 2017. Stigmatisation as a Public Health tool against obesity — A health and human rights perspective. *European Journal Of Health Law,* 21**,** 365-386.
Harvard Medical School. 2015. *Bulimia* [Online]. Maryland: Harvard Health Publications. Available: https://www.health.harvard.edu/mind-and-mood/bulimia-symptoms-diagnosis-and-treatments [Accessed 4th May 2019].
Hatzis, S. 2016. *My best friend saved my life.* [Online]. Australia: The Huffington Post, Australia. Available: http://www.huffingtonpost.com.au/sophia-hatzis/my-best-friend-saved-my-l_b_9412392.html?utm_hp_ref=australia [Accessed 31st August 2019].

Head, B. & Alford, J. 2008. Wicked Problems: The Implications for Public Management. . *Public Management in Practice.* Brisbane: International Research Society for Public Management
Henderson, A. 2005. The value of integrating interpretive research approaches in the exposition of healthcare context. *Journal of Advanced Nursing,* 52 (5)**,** 554-560.
Hilbert, A., Rief, W. & Braehler, E. 2008. Stigmatizing attitudes toward obesity in a representative population-based sample. *Obesity* 16**,** 1529-34.
Hill, A. 2007. Obesity and eating disorders. *Obesity Reviews,* 8 (supplement 1)**,** 151-155.
Hoerburger, R. 1996. *Karen Carpenter's Second Life* [Online]. New York Times Company. Available: https://www.nytimes.com/1996/10/06/magazine/karen-carpenter-s-second-life.html [Accessed 23rd June 2019].
Holland, G. & Tiggemann, M. 2016. A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image,* 17**,** 100-10.
Holland, K. E., Blood, R. W., Thomas, S. I., Lewis, S., Komesaroff, P. A. & Castle, D. J. 2011. 'Our girth is plain to see': An analysis of newspaper coverage of Australia's Future 'Fat Bomb'. *Health, Risk & Society,* 13 (1)**,** 31-46.
Holmes, S., Drake, S., Odgers, K. & Wilson, J. 2017. Feminist approaches to Anorexia Nervosa: a qualitative study of a treatment group. *Journal of Eating Disorders,* 5 (36).
Hornbacher, M. 2006. Wasted: A memoir of Anorexia and Bulimia, elecronic book. New York: Harper Collins
Huifeng Shih, G. 2009. Diabulimia: What it is and how to treat it. Available from: https://www.diabeteshealth.com/diabulimia-what-it-is-and-how-to-treat-it/ [Accessed 5th October 2019].
Huizinga, M. M., Cooper, L. A., Bleich, S. N., Clark, J. M. & Beach, M. C. 2009. Physician respect for patients with obesity. *Journal Of General Internal Medicine,,* 24**,** 1236-9.
Humphrey, L., Clifford, D. & Morris, M. 2015. Health At Every Size college course reduces dieting behaviors and improves intuitive eating, body esteem, and anti-fat attitudes. *Journal of Nutritiion Education and Behavior. 2015;47:354-360.),* 47**,** 354-360.
Jendrzyca, A. & Warschburger, P. 2016. Weight stigma and eating behaviours in elementary school children: A prospective population-based study. *Appetite,* 102**,** 51-9.
Jett, S., Laporte, D. J. & Wanchisn, J. 2010. Impact of exposure to pro-eating disorder websites on eating behaviour in college women. *European Eating Disorders Review,* 18**,** 410-6.
Jick, T. 1979. Mixing qualitative and quantitatve methods. Triangulation in action. *Administrative Science Quarterly,* 24.
Kausman, R. 2014. *Obesity ad health fear.* [Online]. Melbourne. Available: http://www.ifnotdieting.com.au/cpa/htm/htm_article_view.asp?id=687 [Accessed 15th December 2019].
Kincheloe, J. & Mclaren, L. 2011. Rethinking critical theory and qualitative research. *In:* DENZIN, N. & LINCOLN, Y. (eds.) *Handbook of Qualitative Research.* Thousand Oaks: Sage Publications Inc (3rd Edition).
Kinzl, J. F., Hauer, K., Traweger, C. & Kiefer, I. 2006. Orthorexia nervosa in dieticians. *Psychotherapy and Psychosomatics,* 75**,** 395-6.
Kittler, J., Menard, W. & Phillips, K. 2007. Weight concerns in individuals with body dysmorphic disorder. *Eating Behaviors,* 8**,** 115-120.
Klimek, P., Murray, S. B., Brown, T., Gonzales Iv, M. & Blashill, A. J. 2018. Thinness and muscularity internalization: Associations with disordered eating and muscle dysmorphia in men. *International Journal of Eating Disorders,* 51**,** 352-357.
Kollei, I., Schieber, K., De Zwan, M., Svitak, M. & Martin, A. 2013. Body dysmorphic disorder and nonweight-related body image concerns in individuals with eating disorders. *International Journal of Eating Disorders,* 46.

Kratina, K. 2003. Health at every size. Clinical applications. *Healthy Weight Journal,* 17**,** 19-23.
Krippendorff, K. 2004. *Content Analysis : An Introduction to Its methodology. 2nd Ed.,* Thousand Oaks, Sage Publications Inc.
Kuczmarski, R. J., Carroll, M. D., Flegal, K. M. & Troiano, R. P. 1997. Varying BMI cutoff points to describe overweight prevalence among U.S. adults: NHANES 111 (1988-1994). *Obesity Research* 5.
Larbi, M. 2017. *Why do so many eating disorder survivors turn to veganism as part of their recoveries?* [Online]. UK: Metro News. Available: http://metro.co.uk/2017/09/07/why-do-so-many-eating-disordersurvivors-turn-to-veganism-as-part-of-their-recoveries-6910356/ [Accessed 7th December 2019].
Larsen, D. 1999. Eclecticism: Psychological theories as interwoven stories. *International Journal for the Advancement of Counselling,* 21.
Leaver, K. 2017. *Feminist reading really can help beat Anorexia. It worked for me.* [Online]. Sydney: The Guardian. Available: https://www.theguardian.com/commentisfree/2017/nov/16/feminist-reading-anorexia-books-susie-orbach [Accessed 16th November 2019].
Leblanc, V., Provencher, V., Begin, C., Corneau, L., Tremblay, A. & Lemieux, S. 2012. Impact of a Health-At-Every-Size intervention on changes in dietary intakes and eating patterns in premenopausal overweight women: results of a randomized trial. *Clinical Nutrition,* 31**,** 481-8.
Lee, J. 2012. A big fat fight. The case for activism. *Overland Journal* [Online]. Available from: http://overland.org.au/previous-issues/issue-207/feature-jennifer-lee/ [Accessed 15th December 2019].
Lee, J. A. & Pause, C. J. 2016. Stigma in practice: Barriers to health for fat women. *Frontiers in Psychology,* 7**,** 2063.
Leone, J., Sedory, E. & Gray, K. 2005. Recognition and treatment of Muscle Dysmorphia and related body image disorders. *Journal of Athletic Training,* 40**,** 352-359.
Lewis, S., Thomas, S. L., Blood, R. W., Castle, D. J., Hyde, J. & Komesaroff, P. A. 2011. How do obese individuals perceive and respond to the different types of obesity stigma that they encounter in their daily lives? A qualitative study. *Social Science & Medicine,* 73**,** 1349-56.
Lewis, S., Thomas, S. L., Hyde, J., Castle, D., Blood, R. W. & Komesaroff, P. A. 2010. "I don't eat a hamburger and large chips every day!" A qualitative study of the impact of public health messages about obesity on obese adults. *BMC Public Health,* 10**,** 309.
Lupton, D. 2012. *What does the yuck factor achieve in anti-obesity campaigns ?* [Online]. Sydney: The Conversation Media Group Ltd. Available: http://theconversation.com/what-does-the-yuck-factor-achieve-in-anti-obesity-campaigns-8451 [Accessed 16th September 2019].
Lupton, D. 2013a. *Fat,* London and New York, Routledge.
Lupton, D. 2013b. *Fat politics. Collected writings.,* Sydney, University of Sydney.
Lupton, D. 2014a. “How do you measure up?” Assumptions about “obesity” and health-related behaviors and beliefs in two australian “obesity” prevention campaigns. *Fat Studies,* 3**,** 32-44.
Lupton, D. 2014b. The pedagogy of disgust: the ethical, moral and political implications of using disgust in public health campaigns. *Critical Public Health,*.
Lyon, A. 1998. *Intentions: Negotiated, contested, and ignored*, The Pennyslvania State University Press.
Macnamara, J. 2005. Media content analysis: Its uses; benefits and best practice methodology. *Asia Pacific Public Relations Journal,,* 6(1), 1–34.
Madden, S., Morris, A., Zurynski, Y., Kohn, M. & Elliot, J. 2009. Burden of eating disorders in 5-13 year-old children in Australia. *Medical Journal of Australia,* 190**,** 410-414.
Major, B., Hunger, J. M., Bunyan, D. P. & Miller, C. T. 2014. The ironic effects of weight stigma. *Journal of Experimental Social Psychology,* 51**,** 74-80.

Malson, H. 1997. *The Thin Woman: Feminism, Post-Structuralism and the Social Psychology of Anorexia Nervosa.,* London, Routledge.
Malson, H., Bailey, L., Clarke, S., Treasure, J., Anderson, G. & Kohn, M. 2010. Un/imaginable future selves: A discourse analysis of in-patients' talk about recovery from an 'Eating Disorder'. *European Eating Disorders Review,* 19**,** 25-36.
Malson, H. & Burns, M. 2009. Critical Feminist Approaches to Eating Dis/Orders. . London: Routledge.
Malson, H. & Ussher, J. 1997. Beyond this mortal coil: femininity, death and discursive constructions of the anorexic body. *Mortality,* 2 (1).
Mathiesen, T. 1997. The viewer society: Michel Foucault's `panopticon' revisited. *Theoretical Criminology* 1.
Mathieu, J. 2005. What is Orthorexia? *Journal of the American Dietetic Association,* 105**,** 1510-2.
Mayes, C. & Kaldor, J. 2016. *'Headless Fatty' pics don't protect people, They dehumanise them* [Online]. Sydney: HuffPost. Available: https://www.huffingtonpost.com.au/christopher-mayes/headless-fatty-pics-dont-protect-people-they-dehumanise-them_a_21475358/ [Accessed 4th September 2019].
Mayring, P. 2014. Qualitative content analysis. Theoretical foundation, basic procedures and software solution. *SSOAR. Open Access Repository*
Mckeon, G. 2014. *Bigorexia: young men, body image and steroids* [Online]. Sydney: ABC Radio National. Available: http://www.abc.net.au/radionational/programs/lifematters/men-body-image-steroids/5306494 [Accessed 9th July 2019].
Mclean, S. A., Paxton, S. J. & Wertheim, E. H. 2011. A body image and disordered eating intervention for women in midlife: a randomized controlled trial. *Journal Of Consulting And Clinical Psychology,* 79**,** 751-8.
Mensinger, J. L., Calogero, R. M. & Tylka, T. L. 2016. Internalized weight stigma moderates eating behavior outcomes in women with high BMI participating in a healthy living program. *Appetite,* 102**,** 32-43.
Merli, R., Preziosi, M. & Acampora, A. 2018. How do scholars approach the circular economy? A systematic literature review. *Journal of Cleaner Production,* 178**,** 703-722.
Miller, W. & Jacob, A. 2001. The health at any size paradigm for obesity treatment. The scientific evidence. *Obesity Reviews,* 2**,** 37-45.
Mitchell, N. 2017. *'Fat but fit' is a myth and big is not beautiful – so stop making excuses for obesity* [Online]. London: The Telegraph. Available: https://www.telegraph.co.uk/health-fitness/body/fat-fit-myth-big-not-beautiful-stop-making-excuses-obesity/ [Accessed 15th December 2019].
Mitchison, D. & Mond, J. 2015. Epidemiology of eating disorders, eating disordered behaviour, and body image disturbance in males. A narrative review *Journal of Eating Disorders,* 3.
Mond, J. M., Robertson-Smith, G. & Vetere, A. 2009. Stigma and eating disorders: Is there evidence of negative attitudes towards anorexia nervosa among women in the community? *Journal of Mental Health,* 15**,** 519-532.
Moore, J. 2016. What is the sense of agency and why does it matter? *Frontiers in Psychology,* 7**,** 1272.
Morley, B., Niven P, Dixon, H., Swanson, M., Szybiak, M., Shilton, T., Pratt, I., Slevin, T., Hill, D. & Wakefield, M. 2016. Population-based evaluation of the 'LiveLighter' healthy weight and lifestyle mass media campaign. *Health Education Research* Advance Access.
Morton, S., Bandara, D., Robinson, E. & Carr, P. 2012. In the 21st Century, what is an acceptable response rate? *Australian and New Zealand Journal of Public Health 2012 vol. 36 no. 2,* 36 (2).
Murray, S. B., Rieger, E., Karlov, L. & Touyz, S. 2013. Masculinity and femininity in the divergence of male body image concerns. *Journal of Eating Disorders,* 1.

Murray, S. B., Rieger, E., Touyz, S. & De La Garza Garcia, Y. 2010. Muscle Dysmorphia and the DSM-V Conundrum. Where Does It Belong? A Review Paper. *International Journal of Eating Disorders,* 43**,** 483-491.
Musolino, C., Warin, M., Wade, T. & Gilchrist, P. 2015. 'Healthy anorexia': The complexity of care in disordered eating *Social Science and Medicine,* 139.
National Eating Disorders Association. 2017. *Eating disorders in LGBT populations* [Online]. Available: https://www.nationaleatingdisorders.org/eating-disorders-lgbt-populations [Accessed 11th May 2019].
National Eating Disorders Collaboration. *The boomerang effect* [Online]. Sydney. Available: http://www.nedc.com.au/the-boomerang-effect [Accessed 15th December 2019].
National Eating Disorders Collaboration. *Communicating about eating disorders and obesity* [Online]. Sydney. Available: http://www.nedc.com.au/eating-disorders-and-obesity [Accessed 15th June 2019].
National Eating Disorders Collaboration. *Eating disorders in Australia* [Online]. Sydney. Available: http://www.nedc.com.au/eating-disorders-in-australia [Accessed 19th July 2019].
National Eating Disorders Collaboration Eating disorders in males. *e-bulletin number 44.* Sydney.
National Eating Disorders Collaboration 2010a. Eating disorders. Prevention, treatment and management. Sydney.
National Eating Disorders Collaboration 2010b. Eating disorders. The way forward. A strategic communication framework. Sydney.
National Eating Disorders Collaboration 2011. Evaluating the risk of harm of weight-related public messages. Sydney.
National Eating Disorders Collaboration 2012a. DSM-5: Overview of Changes. *e-bulletin number 13* Sydney.
National Eating Disorders Collaboration 2012b. An integrated response to complexity. National Eating Disorders Framework 2012. Sydney.
National Eating Disorders Collaboration 2015. Body image fact sheet. Sydney.
National Eating Disorders Collaboration 2016. Eating Disorders in schools: prevention, early identification and response. Second edition. Sydney.
National Eating Disorders Collaboration 2017a. Binge Eating Disorder fact sheet. Sydney.
National Eating Disorders Collaboration 2017b. Bulimia Nervosa fact sheet. Sydney.
National Eating Disorders Collaboration 2017c. Disordered eating and dieting. Fact sheet. Sydney.
National Eating Disorders Collaboration 2017d. Eating disorders in males. Sydney.
National Health and Medical Research Council 2013. Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia. Canberra: Australian Government.
National Obesity Taskforce 2004. Obesity Taskforce Report 2004. Canberra: Australian Government.
National Partnership Agreement on Preventive Health Implementation Working Group 2009. National Partnership Agreement on Preventive Health - National Implementation Plan 2009-2015. Canberra: Australian Government.
National Preventative Health Taskforce 2010. Taking preventative action – a response to Australia: the healthiest country by 2020. Canberra: Australian Government.
Neumark-Steiner, D. & Eisenberg, M. 2015. Body image concerns, muscle-enhancing behaviors, and eating disorders in males *Journal of the American Medical Association,* 168**,** 34-39.
Neumark-Sztainer, D. 2005. Can we simultaneously work toward the prevention of obesity and eating disorders in children and adolescents? *The International Journal Of Eating Disorders,* 38**,** 220-7.
Neumark-Sztainer, D. 2009. The interface between the eating disorders and obesity fields. Moving toward a model of shared knowledge and collaboration. *International Journal of Eating and Weight Disorders,* 14 (1).

Neumark-Sztainer, D., Paxton, S. J., Hannan, P. J., Haines, J. & Story, M. 2006a. Does body satisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviors in adolescent females and males. *Journal of Adolescent Health,* 39**,** 244-51.

Neumark-Sztainer, D., Wall, M., Guo, J., Story, M., Haines, J. & Eisenberg, M. 2006b. Obesity, disordered eating, and eating disorders in a longitudinal study of adolescents: how do dieters fare 5 years later? *Journal of the American Dietetic Association,* 106**,** 559-68.

Neumark-Sztainer, D., Wall, M., Story, M. & Sherwood, N. E. 2009. Five-year longitudinal predictive factors for disordered eating in a population-based sample of overweight adolescents: implications for prevention and treatment. *The International Journal of Eating Disorders,* 42**,** 664-72.

Nuffield Council on Bioethics 2007a. Public health - ethical issues. *Public health: ethical issues.* London.

Nuffield Council on Bioethics 2007b. Public health: ethical issues; a guide to the report. *Public health: ethical issues.* London.

O'brien, K. S., Latner, J. D., Puhl, R. M., Vartanian, L. R., Giles, C., Griva, K. & Carter, A. 2016. The relationship between weight stigma and eating behavior is explained by weight bias internalization and psychological distress. *Appetite,* 102**,** 70-6.

O'connell, B. 2012. *Anti-obesity panic blamed for new eating disorder.* [Online]. Melbourne: NewsCorp. Available: http://www.heraldsun.com.au/archive/news/anti-obesity-panic-blamed-for-new-eating-disorder/news-story/47b96439293129851417707 34cfcf434 [Accessed 4th September 2019].

O'dea, J. A. 2005. Prevention of child obesity: 'first, do no harm'. *Health Education Research,,* 20**,** 259-65.

Obear, K. 2018. *Transformation and change* [Online]. Available: https://drkathyobear.com/about-kathy/ [Accessed 16th September 2019].

Orbach, S. 1978. *Fat is a feminist issue,* London, Penguin Books.

Orbach, S. 1982. *Fat is a feminist issue,* London, Random House.

Orbach, S. 1986. *Hunger strike: The anorectic's struggle as a metaphor for our age.,* London, Penguin Books. 2nd Edition.

Orbach, S. 2006. *Fat is a feminist issue. New edition,* London, Random House.

Osgood, K. 2015. How to disappear completely. On modern anorexia, electronic book,. New York: The Overlook Press.

Oxford University Press. 2014. *Oxford Dictionaries* [Online]. UK. Available: https://en.oxforddictionaries.com [Accessed 5th September 2019].

Padula, M. 2008. The AIDS Grim Reaper Campaign : A case study. *The Australia and New Zealand School of Government,*.

Parker, E., Gould, T. & Fleming, M. 2007. Ethics in health promotion - reflections in practice. *Health Promotion Journal of Australia,,* 18.

Pause, C. 2017. Borderline: The ethics of of fat stigma in Public Health. *Journal of Law, Medicine and Ethics,* 45**,** 510-517.

Paxton, S. 2011. Position Statement: Australian Psychological Society: Psychological prevention and intervention strategies for body dissatisfaction and disordered eating. *Australian Psychological Society*.

Pellerano, R. 2014. Bulimia. *In:* SILBER, T. (ed.) *Basics in Adolescent Medicine. A Practical Manual of Signs, Symptoms and Solutions.* New Jersey: World Scientific Publishing.

Pelz, B. 2020. *Interpretive research* [Online]. New York: Lumen Learning. Available: https://courses.lumenlearning.com/atd-herkimer-researchmethodsforsocialscience/chapter/chapter-12-interpretive-research/ [Accessed 28th June 2020].

Pepin, G. & Endresz, N. 2015. Facebook, Instagram, Pinterest and co.: body image and social media. *Journal of Eating Disorders,* 3**,** O22.

Perkins, N. 2017. *Natalie Perkins* [Online]. Australia. Available: http://www.natalieperkins.com/ [Accessed 15th December 2019].
Peryakoil, V. 2007. Taming wicked problems in modern health care systems. *Journal of Palliative Medicine,* 10 (3).
Peterson, R., Grippo, K. & Tantleff-Dunn, S. 2008. Empowerment and powerlessness: A closer look at the relationship between feminism, body image and eating disturbance. *Sex Roles,* 58**,** 639-648.
Phelan, S., Burgess, D., Yeazel, M., Hellerstedt, W., Griffin, J. & Van Ryn, M. 2015. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. *Obesity Reviews,* 16**,** 319-326.
Phelan, S. M., Dovidio, J. F., Puhl, R. M., Burgess, D. J., Nelson, D. B., Yeazel, M. W., Hardeman, R., Perry, S. & Van Ryn, M. 2014. Implicit and explicit weight bias in a national sample of 4,732 medical students: the medical student CHANGES study. *Obesity (Silver Spring),* 22**,** 1201-8.
Phillips, K. 2004. Body dysmorphic disorder. Recognising and treating imagined ugliness. *World Psychiatry,* 3.
Phillips, K. 2007. Suicidality in Body Dysmorphic Disorder. *Primary Psychiatry,* 14**,** 58-66.
Pinhas, L., Mcvey, G., Walker, K. S., Norris, M., Katzman, D. & Collier, S. 2013. Trading health for a healthy weight: the uncharted side of healthy weights initiatives. *Eating Disorders,* 21**,** 109-16.
Piran, N. 2010. A feminist perspective on risk factor research and on prevention of eating disorders. *Eating Disorders,* 18 (3)**,** 183-198.
Pizzo, K. 2016. *The problem with going vegan after recovering from an eating disorder.* [Online]. Florida: Spoon University. Available: https://spoonuniversity.com/lifestyle/the-problem-with-going-vegan-after-recovering-from-an-eating-disorder [Accessed 15th December 2019].
Pollack, D. 2003. Pro-eating disorder websites. What should the feminist response be? *Feminism and Psychology,* 13**,** 246-251.
Pope, C. & Mays, N. 1995. Reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *British Medical Journal,* 311**,** 42.
Provencher, V., Begin, C., Tremblay, A., Mongeau, L., Corneau, L., Dodin, S., Boivin, S. & Lemieux, S. 2009. Health-At-Every-Size and eating behaviors: 1-year follow-up results of a size acceptance intervention. *Journal of the American Dietetic Association,* 109**,** 1854-61.
Puhl, R. M., Andreyeva, T. & Brownell, K. D. 2008. Perceptions of weight discrimination: prevalence and comparison to race and gender discrimination in America. *International Journal of Obesity,* 32**,** 992-1000.
Puhl, R. M. & Brownell, K. D. 2012. Confronting and coping with weight stigma: An investigation of overweight and obese adults. *Obesity,* 14.
Puhl, R. M. & Heuer, C. A. 2009. The stigma of obesity: a review and update. *Obesity* 17**,** 941-64.
Puhl, R. M. & Heuer, C. A. 2010. Obesity stigma: Important considerations for Public Health. *American Journal of Public Health,* 100 1019-1028.
Puhl, R. M., Moss-Racusin, C. A. & Schwartz, M. B. 2006. Internalization of weight bias: implications for binge eating and emotional well-being. *Obesity,* 15.
Puhl, R. M., Peterson, J., Depierre, J. & Luedicke, J. 2013. Headless, hungry, and unhealthy: A video content analysis of obese persons portrayed in online news. *Journal of Health Communication,* 18**,** 686-702.
Qsr International. US. Available: http://www.qsrinternational.com [Accessed 15th December 2019].
Queen Victoria Women's Centre. 2008. *Young women, body image and the digital age. QVWC women's capacity building kit.* [Online]. Melbourne. Available: http://www.qvwc.org.au/wp-content/uploads/2012/05/QVWC_YoungWomenBodyImageandtheDigitalAgeKit_2009.pdf [Accessed 21st September 2019].

Rahebi, A. 2016. *Why YouTube Is So Successful. YouTube is the future of entertainment.* [Online]. Alabama: Odyssey University online. Available: https://www.theodysseyonline.com/youtube-successful [Accessed 27th October 2019].
Read, K. 2018. *Fat Heffalump* [Online]. Available: https://fatheffalump.wordpress.com/about/ [Accessed 16th September 2018].
Reilly, T., Crawford, B., Lobo, R., Leavy, A. & Jancey, J. 2016. Ethics and health promotion practice: exploring attitudes and practices in Western Australian health organisations. *Health Promotion Journal of Australia,* 27**,** 54-60.
Rhea, D. J., Lantz, C. D. & Cornelius, A. E. 2004. Development of the Muscle Dysmorphia Inventory (MDI). *Journal of Sports Medicine and Physical Fitness,* 44**,** 428.
Robertson, N. & Vohora, R. 2008. Fitness vs. fatness: Implicit bias towards obesity among fitness professionals and regular exercisers. *Psychology of Sport and Exercise,* 9**,** 547-557.
Robinson, E. & Sutin, A. 2017. Parents' perceptions of their children as overweight and children's weight concerns and weight gain. *Psychological Science,* 28 (3)**,** 320-329.
Roehling, P. V. 2011. Fat is a feminist issue, but it is complicated: Commentary on Fikkan and Rothblum. *Sex Roles,* 66**,** 593-599.
Roehrig, J. P. & Mclean, C. P. 2010. A comparison of stigma toward eating disorders versus depression. *International Journal of Eating Disorders,* 43**,** 671-4.
Rothblum, E. & Solovay, S. 2009. *The fat studies reader. ,* New York, New York University Press.
Roy Morgan. 2018. *The slow but steady rise of vegetarianism in Australia* [Online]. Melbourne. Available: http://roymorgan.com/findings/vegetarianisms-slow-but-steady-rise-in-australia-201608151105 [Accessed 6th September 2019].
Saguy, A. 2011. Why fat is a feminist issue. *Sex Roles,* 66**,** 600-607.
Saguy, A. 2013. *Whats Wrong With Fat?,* US, Oxford University Press.
Salas, X. 2015. The ineffectiveness and unintended consequences of the public health war on obesity. *Canadian Journal of Public Health,* 106**,** e79-81.
Sawyer, S. M., Whitelaw, M., Le Grange, D., Yeo, M. & Hughes, E. K. 2016. Physical and psychological morbidity in adolescents with atypical Anorexia Nervosa. *Pediatrics,* 137.
Scambler, G. 2018. Heaping blame on shame: 'Weaponising stigma' for neoliberal times. *Sociological Review Monographs,* 66 (4)**,** 766-782.
Scheck, A. 2001. Body image through the ages as seen by anatomists, artists, surgeons. *Cosmetic Surgery Times,* 4**,** 4.
Schneider, S., Mond, J., Turner, C. & Hudson, J. 2017. Sub threshold body dysmorphic disorder in adolescents. Prevalence and impact. *Psychiatry Research,* 251**,** 125-130.
Schott, N. D. & Langan, D. 2015. Pro-anorexia/bulimia censorship and public service announcements: the price of controlling women. *Media, Culture & Society,* 37**,** 1158-1175.
Schvey, N. A. & White, M. A. 2015. The internalization of weight bias is associated with severe eating pathology among lean individuals. *Eating Behaviors,* 17**,** 1-5.
Schwartz, M. B. & Henderson, K. E. 2009. Does obesity prevention cause eating disorders? *Journal of the American Academy of Child and Adolescent Psychiatry,* 48**,** 784-6.
Schwartz, M. B., O'neal Chambliss, H., Brownell, K. D., Blair, S. N. & Billington, C. 2003. Weight bias among health professionals specializing in obesity. *Obesity Research,* 11.
Scott, S. 2012. *Battle of the binge: the dark side of the anti-obesity message* [Online]. Sydney: ABC. Available: http://www.abc.net.au/news/2012-12-17/scott-eatingdisorders/4430644 [Accessed 15th December 2019].
Sechrest, L. & Sidani, S. 1995. Quantitative and qualitative methods. Is there an alternative? *Evaluation and Program Planning,* 18**,** 77-87.

Sensis Pty. Ltd. 2016. Sensis Social Media Report 2016. How Australian people and businesses are using social media. Melbourne.
Siddique, H. 2019. *One in eight UK adults have suicidal thoughts over body image.* [Online]. Sydney: The Guardian. Available: https://www.theguardian.com/lifeandstyle/2019/may/13/body-image-survey-one-in-eight-uk-adults-suicidal-thoughts [Accessed 24th May 2019].
Sikorski, C., Luppa, M., Kaiser, M., Glaesmer, H., Schomerus, G., Konig, H. H. & Riedel-Heller, S. G. 2011. The stigma of obesity in the general public and its implications for public health - a systematic review. *BMC Public Health,* 11**,** 661.
Sim, L. A., Lebow, J. & Billings, M. 2013. Eating disorders in adolescents with a history of obesity. *Pediatrics,* 32**,** e1-e5.
Simpson, C. & Mazzeo, S. 2017. Calorie counting and fitness tracking technology: Associations with eating disorder symptomatology. *Eating behaviors,* 26**,** 89-92.
Simpson, C. C., Sutter, M. & Perrin, P. B. 2016. Can community consciousness be a bad thing? A moderated mediation analysis of heterosexism, mental health and body appreciation in sexual minority men. *Culture, Health and Sexuality,* 18**,** 1279-94.
Slevec, J. H. & Tiggemann, M. 2011. Predictors of body dissatisfaction and disordered eating in middle-aged women. *Clinical Psychology Review,* 31**,** 515-24.
Smith, G., Kohn, S., Savage-Stevens, S., Finch, J., Randall, I. & Lim, Y. 2000. The effects of interpersonal and personal agency on perceived control and psychological well-being in adulthood. *The Gerontologist,* 40**,** 458-468.
Smith, T. & Hawks, S. R. 2006. Intuitive eating, diet composition and the meaning of food in healthy weight promotion. *American Journal of Health Education,* 37**,** 130.
Social Issues Research Centre. *Totally In Control: The rise of pro-ana/ pro-mia websites.* [Online]. Oxford. Available: http://www.sirc.org/articles/totally_in_control2.shtml [Accessed 5th May 2019].
Social Media News. 2018. *Social Media Statistics Australia – May 2018* [Online]. Sydney: Vivid Social. Available: https://www.socialmedianews.com.au/social-media-statistics-australia-may-2018/ [Accessed 15th December 2019].
Sontag, S. 1978. *Illness as metaphor,* US, Farrar, Straus and Giroux.
Spencer, G. 2015. 'Troubling' moments in health promotion: unpacking the ethics of empowerment. *Health Promotion Journal of Australia,* 26**,** 205-209.
Sport England. 2015. *This Girl Can* [Online]. UK. Available: http://www.thisgirlcan.co.uk/feel-inspired/ [Accessed 21st September 2019].
Star, A. M. 2012a. *Eating and weight problems in the community. Prevalence, implications for mental health and community beliefs.* PhD, James Cook University.
Star, A. M. 2012b. Public consultation. Revised draft clinical practice guidelines for the management of overweight and obesity in adults, children and adolescents. *In:* NHMRC (ed.). Australia: Australian Government.
Star, A. M., Hay, P., Quirk, F. & Mond, J. 2015. Perceived discrimination and favourable regard toward underweight, normal weight and obese eating disorder sufferers: implications for obesity and eating disorder population health campaigns. . *BMC Obesity Open Access*.
Star, A. M. & Hay, P. J. 2014. The impact of obesity treatment and dietary guidelines on eating disorders. *Medical Journal of Australia,* 200**,** 78-9.
Statista. 2018. Hamburg. Available: https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/ [Accessed 30th September 2019].
Stevens, J. 2018. *Starvation diets, obsessive training and no plus-size models: Victoria's Secret sells a dangerous fantasy* [Online]. London: The Guardian Available: https://www.theguardian.com/lifeandstyle/2018/nov/22/victorias-secret-show-angels-lingerie [Accessed 29th November 2019].
Stice, E., Marti, C. N. & Durant, S. 2011. Risk factors for onset of eating disorders: evidence of multiple risk pathways from an 8-year prospective study. *Behaviour Research and Therapy,* 49**,** 622-7.

Stice, E. & Shaw, H. E. 2002. Role of body dissatisfaction in the onset and maintenance of eating pathology. *Journal of Psychosomatic Research,* 53**,** 985-993.
Strother, E., Lemberg, R., Stanford, S. C. & Turberville, D. 2012. Eating disorders in men: underdiagnosed, undertreated, and misunderstood. *Eating Disorders,,* 20**,** 346-55.
Sullivan, V. & Damani, S. 2000. Vegetarianism and eating disorders. Partners in crime? . *European Eating Disorders Review,* 8 (4).
Swinburn, B. 1999. Dissecting Obesogenic environments: The development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Preventive Medicine,* 29**,** 563-570.
Swinburn, B. A. 2008. Obesity prevention: the role of policies, laws and regulations. *Australia and New Zealand Health Policy,* 5**,** 12.
Syed-Abdul, S., Fernandez-Luque, L., Jian, W., Li, Y., Crain, S., Hsu, M., Wang, Y., Khandregzen, D., Chuluunbaatar, E., Nguyen, P. & Liou, D. 2013. Misleading health-related information promoted through video-based social media: Anorexia on YouTube. *Journal of Medical Internet Research,* 15.
Talcott Parsons 1951. *The Social System,* London, Routledge.
Tandoh, R. 2016. *The Unhealthy Truth Behind 'Wellness' and 'Clean Eating'* [Online]. UK. Available: https://www.vice.com/en_uk/article/ruby-tandoh-eat-clean-wellness [Accessed 3rd February 2019].
Teachman, B. A. & Brownell, K. D. 2001. Implicit anti-fat bias among health professionals: is anyone immune? *International Journal of Obesity* 25**,** 1525-1531.
Ten Have, M., De Beaufort, I. D., Teixeira, P. J., Mackenbach, J. P. & Van Der Heide, A. 2011. Ethics and prevention of overweight and obesity: an inventory. *Obesity Reviews,* 12**,** 669-79.
Thomas, S., Karunaratne, A., Lewis, S., Castle, D., Knoesen, N., Honigman, R., Hyde, J., Kausman, R. & Komesaroff, P. 2010a. 'Just Bloody Fat!': A Qualitative Study of Body Image, Self-Esteem and Coping in Obese Adults. *International Journal of Mental Health Promotion,* 12**,** 39-49.
Thomas, S. L., Hyde, J., Karunaratne, A., Herbert, D. & Komesaroff, P. A. 2008a. Being 'fat' in today's world: a qualitative study of the lived experiences of people with obesity in Australia. *Health Expectations,,* 11**,** 321-30.
Thomas, S. L., Hyde, J., Karunaratne, A., Kausman, R. & Komesaroff, P. A. 2008b. "They all work...when you stick to them": a qualitative investigation of dieting, weight loss, and physical exercise, in obese individuals. *Nutrition Journal,* 7**,** 34.
Thomas, S. L., Lewis, S., Hyde, J., Castle, D. & Komesaroff, P. 2010b. "The solution needs to be complex." Obese adults' attitudes about the effectiveness of individual and population based interventions for obesity. *BMC Public Health,* 10**,** 420.
Tong, S., Heinemann-Lafave, D., Jeon, J., Kolodziej-Smith, R. & Warshay, N. 2013. The use of Pro-Ana blogs for online social support. *Eating Disorders,* 21(5)**,** 408-422.
Turner, P. & Lefevre, C. 2017. Instagram use is linked to increased symptoms of orthorexia nervosa. *Eating and Weight Disorders***,** 277-284.
Tyler, I. 2018. Resituating Erving Goffman: From Stigma Power to Black Power. *Sociological Review Monographs,* 66 (4).
Tyler, I. & Slater, T. 2018. Rethinking the sociology of stigma. *Sociological Review Monographs,* 66 (4)**,** 721-743.
Uconn Rudd Center for Food Policy and Obesity. 2017. Connecticut. Available: http://www.uconnruddcenter.org/QggXZ/resources/upload/docs/what/reports/Rudd_Policy_Brief_Weight_Bias.pdf [Accessed 27th August 2019].
Van Dyke, N. & Drinkwater, E. J. 2013. Review Article Relationships between intuitive eating and health indicators: literature review. *Public Health Nutrition***,** 1-10.
Vartanian, L. R. & Smyth, J. M. 2013. Primum non nocere: obesity stigma and public health. *Bioethical Inquiry,,* 10**,** 49-57.

Vichealth. 2004. Parliamentary Inquiry into issues relating to the development of body image among young people and associated effects on their health and wellbeing. VicHealth response. [Accessed 22nd April 2015].
Vichealth. 2018. *This Girl Can* [Online]. Melbourne: Victorian Government. Available: https://thisgirlcan.com.au/ [Accessed 15th December 2019].
Victorian Department of Health 2014. Victorian eating disorders strategy. Melbourne: Victorian State Government.
Victorian Government 2003. Inquiry into issues relating to the development of body image among young people and associated effects on their health and wellbeing. Melbourne: Victorian Government.
Walls, H. L., Peeters, A., Proietto, J. & Mcneil, J. J. 2011. Public health campaigns and obesity - a critique. *BMC Public Health,* 11**,** 136.
Weaver, L., Beebe, T. & Rockwood, T. 2019. The impact of survey mode on the response rate in a survey of the factors that influence Minnesota physicians' disclosure practices. *BMC Medical Research Methodology,* 19 (73).
Weiffenbach, A. & Kundu, R. 2015. Body Dysmorphic Disorder. Etiology and pathophysiology. *Beauty and Body Dysmorphic Disorder.* Switzerland: Springer International Publishing.
Westen, D. & Rosenthal, R. 2003. Quantifying construct validity: Two simple measures. *Journal of Personality and Social Psychology,* 84**,** 608-618.
White, M. & Marsh, E. 2006. Content analysis. A flexible methodology. *LIBRARY TRENDS,* 55**,** 22-45.
Wibberley, C. 2017. Bricolage Research Methods. *In:* GLASPER, E. & REES, C. (eds.) *Health Care Research: at a glance.* Oxford: Wiley-Blackwell.
Wilson, R. E., Latner, J. D. & Hayashi, K. 2013. More than just body weight: the role of body image in psychological and physical functioning. *Body Image,* 10**,** 644-7.
World Health Organization. 1986. *The Ottawa Charter for Health Promotion* [Online]. Geneva. Available: http://www.who.int/healthpromotion/conferences/previous/ottawa/en/ [Accessed 30th June 2019].
World Health Organization 2000a. Obesity: Preventing and managing the global epidemic. *WHO Technical Report series.* Geneva: WHO.
World Health Organization 2000b. The problem with overweight and obesity (Part 1). Geneva.
World Health Organization 2017. Weight bias and obesity stigma: considerations for the WHO European Region. Copenhagen.
Wright, F. 2015. Small acts of disappearance. Sydney: Giramondo Publishing.
Wykes, J. 2013. *A complete lack of insight* [Online]. Melbourne. Available: http://www.fatuosity.net/2013/06/02/a-complete-lack-of-insight/#comments [Accessed 15th December 2019].
Yelland, C. & Tiggemann, M. 2003. Muscularity and the gay ideal: body dissatisfaction and disordered eating in homosexual men. *Eating Behaviors,* 4**,** 107-116.
Young, M. 2014. *Male privilege and transitioning from a fat woman to a fat man.* [Online]. USA. Available: http://www.therainbowhub.com/male-privilege-and-transitioning-from-a-fat-woman-to-a-fat-man/ [Accessed 10th June 2019].
Youtube. 2019. *YouTube in numbers* [Online]. San Bruno. Available: https://www.youtube.com/intl/en-GB/yt/about/press/ [Accessed 24th October 2019].
Zuromski, K., Witte, T., Smith, A., Goodwin, N. & Bodell, L. 2015. Increased prevalence of vegetarianism among women with eating pathology. *Eating Behaviors,* 19**,** 24-27.

Appendices

Appendix 1: Obesity epidemic in Australia: Final Report Recommendations

5 December 2018

Recommendations from the report

Recommendation 1 2.25 The committee recommends that Commonwealth funding for overweight and obesity prevention efforts and treatment programs should be contingent on the appropriate use of language to avoid stigma and blame in all aspects of public health campaigns, program design and delivery.

Recommendation 2 2.26 The committee recommends that the Commonwealth Department of Health work with organisations responsible for training medical and allied health professionals to incorporate modules specifically aimed at increasing the understanding and awareness of stigma and blame in medical, psychological and public health interventions of overweight and obesity.

Recommendation 3 3.27 The committee recommends the establishment of a National Obesity Taskforce, comprising representatives across all knowledge sectors from federal, state, and local government, and alongside stakeholders from the NGO, private sectors and community members. The Taskforce should sit within the Commonwealth Department of Health and be responsible for all aspects of government policy direction, implementation and the management of funding.

Recommendation 4 3.28 The committee recommends that the newly established National Obesity Taskforce develop a National Obesity Strategy, in consultation with all key stakeholders across government, the NGO and private sectors.

Recommendation 5 3.29 The committee recommends that the Australian Dietary Guidelines are updated every five years. **Recommendation 6** 4.98 The committee recommends the Minister for Rural Health promote to the Australia and New Zealand Ministerial Forum on Food Regulation the adoption of the following changes to the current Health Star Rating system:

•The Health Star Rating Calculator be modified to address inconsistencies in the calculation of ratings in relation to:

•foods high in sugar, sodium and saturated fat;

•the current treatment of added sugar;

•the current treatment of fruit juices;

•the current treatment of unprocessed fruit and vegetables; and

•the 'as prepared' rules.

•Representatives of the food and beverage industry sectors may be consulted for technical advice but no longer sit on the HSR Calculator Technical Advisory Group.

•The Health Star Rating system be made mandatory by 2020.

Recommendation 7 4.100 The committee recommends Food Standards Australia New Zealand undertake a review of voluntary front-of-pack labelling schemes to ensure they are fit-for-purpose and adequately represent the nutritional value of foods and beverages.

Recommendation 8 4.102 The committee recommends the Minister for Rural Health promote to the Australia and New Zealand Ministerial Forum on Food Regulation the adoption of mandatory labelling of added sugar on packaged foods and drinks.

Recommendation 9 4.104 The committee recommends that the Council of Australian Governments (COAG) Health Council work with the Department of Health to develop a nutritional information label for fast food menus with the goal of achieving national consistency and making it mandatory in all jurisdictions.

Recommendation 10 6.32 The committee recommends the Australian Government introduce a tax on sugar-sweetened beverages, with the objectives of reducing consumption, improving public health and accelerating the reformulation of products.

Recommendation 11 7.44 The committee recommends that, as part of the 2019 annual review of the Commercial Television Industry Code of Practice, Free TV Australia introduce restrictions on discretionary food and drink advertising on free-to-air television until 9.00pm.

Recommendation 12 7.45 The committee recommends that the Australian Government consider introducing legislation to restrict discretionary food and drink advertising on free-to-air television until 9.00pm if these restrictions are not voluntary introduced by Free TV Australia by 2020.

Recommendation 13 7.47 The committee recommends the Australian Government make mandatory the display of the Health Star Rating for food and beverage products advertised on all forms of media.

Recommendation 14 8.22 The committee recommends the proposed National Obesity Taskforce is funded to develop and oversee the implementation of a range of National Education Campaigns with different sectors of the Australian community. Educational campaigns will be context dependent and aimed at supporting individuals, families and communities to build on cultural practices and improve nutrition literacy and behaviours around diet, physical activity and well-being.

Recommendation 15 9.37 The committee recommends that the National Obesity Taskforce, when established, form a sub-committee directly responsible for the development and management of a National Childhood Obesity Strategy.

Recommendation 16 9.71 The committee recommends the Medical Services Advisory Committee (MSAC) consider adding obesity to the list of medical conditions eligible for the Chronic Disease Management scheme.

Recommendation 17 9.75 The committee recommends the Australian Medical Association, the Royal Australian College of General Practitioners and other college of professional bodies educate their members about the benefits of bariatric surgical interventions for some patients.

Recommendation 18 10.34 The committee recommends the proposed National Obesity Taskforce commission evaluations informed by multiple methods of past and current multi-strategy prevention programs with the view of designing future programs.

Recommendation 19 10.35 The committee recommends the proposed National Obesity Taskforce is funded to develop and oversee the implementation of multi-strategy, community-based prevention programs in partnership with communities.

Recommendation 20 10.36 The committee recommends the proposed National Obesity Taskforce develop a National Physical Activity Strategy.

Recommendation 21 10.38 The committee recommends the proposed National Obesity Taskforce is funded to develop and oversee culturally appropriate prevention and intervention programs for Aboriginal and Torres Strait Islander communities.

Recommendation 22 10.39 The committee recommends the Commonwealth develop additional initiatives and incentives aimed at increasing access, affordability and consumption of fresh foods in remote Aboriginal and Torres Strait Islander communities.

Appendix 2: The Ana Creed - Ana’s Voice (Letter From Ana)

Ana's voice sings softly and deceptively in my ears. Ana consumes me. She is in my heart and in my head. Don't eat that, you fat ass! You're worthless, you don't deserve to live! Ana's voice cuts through my thoughts like the razorblade that I slashed my arms with earlier. You are such a fatty, everyone hates you! Only I care about you. Silently crying I must put on a smile. Good girl, now lie and say that you are okay. Don't let anyone see what I have done to you. I look like I am so perfect and happy on the outside, no one sees how I'm dying. I'm sorry my eyes don't sparkle anymore, and I'm sorry that I seem so hollow and dead. I reach out, please, somebody help me! No, shut up, no one can know what I do! You idiot, you are nothing without me! You're wrong, I scream. You know I am right, Bee, after all, I am your best friend, Ana whispers. I am crying out, but can anybody really hear me? They all think they know me, but they just know the girl I pretend to be. You're lucky no one heard you, Ana tells me. If they had all hell would've broken loose. You are my servant, I am your master. No, please, let me go, I plead. It's too late, she says, I am already in you. I am a part of you forever. Our thoughts have become one. I've spent a lot of time working on you, and I do not plan on leaving. Look at what I have made you into. Don't you want all this? The truth is, I don't know. Please save me! I really need help. If only they could hear Ana's poison voice too. Then they would know that I have become her slave, and I will remain her slave forever and ever, unless someone can help me. Maybe you’re gonna be the one who saves me.

Appendix 3: Email with set of questions: May 2015

I am a PhD candidate enrolled at la Trobe University exploring the views of eating disorder experts on the effect of the anti-obesity campaign on Body Dysmorphic Disorder and Eating Disorders in Australia.

Over the last few years several eating disorder experts in Australia, and overseas, have expressed concern that the anti-obesity campaign that is been waged across the globe is having a detrimental effect on the rate and spread of body dysmorphic disorder (BDD) and eating disorders (ED).

The aim of our research is to help clarify this by seeking the views of experts working in the field of BDD and/or ED in Australia. We identified experts by systematically searching state by state for eating disorder clinics and public entities, not-for-profit organisations and speaker lists on relevant advertised conferences.

As one of the identified experts, we are keen to get your views on this important topic and invite you to take part in this study. Participation is entirely voluntary and neither you nor your organisation will be identified in any reports.

Please find more detailed information in the attached Participant Information Statement. If you would like further information, or would prefer a telephone interview rather than email your response, please contact Susanna Psalios, School of Psychology and Public Health, La Trobe University, at: smpsalios@students.latrobe.edu.au

We don't anticipate any disadvantages to you in taking part in the survey; neither do we expect you to have any personal benefits. If there are questions you would prefer not to answer, feel free to leave them out and only complete those questions you feel comfortable answering.

We anticipate that this will take about 10-20 minutes depending on the amount of information that you wish to share. If you would prefer, please feel free to respond to these questions on a separate document and email this to the email address above.

If you are able to assist us we have made this as very easy by including the survey within this email. All you need to do is:

1. Read the attached documents - the Participant Information Statement, the Consent Form and the Withdrawal of Consent Form.

2. Respond to the consent question.

3. Complete the survey and email it back.

We appreciate your time and your assistance.

This project has been approved by the La Trobe University College of Science, Health and Engineering Human Ethics Subcommittee, and has been assigned the SHE-CHESC registration number S15/54.

Best wishes

Susanna Psalios

Student investigator: Susanna Psalios, PhD candidate, La Trobe University.

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Supervisor: Dr Priscilla Robinson

priscilla.robinson@latrobe.edu.au

Supervisor: Dr Simon Barraclough

s.barraclough@latrobe.edu.au

CONSENT

Please indicate below that you have read the attached documents and consent to the conditions detailed in the attached Consent Form:

I CONSENT Please delete as appropriate: **Yes/No**

SURVEY

Question 1:

In your opinion, has the current anti-obesity campaign from 2004 onwards had any negative effect on:

The numbers of individuals with Body Dysmorphic Disorder (BDD) and Eating Disorders (ED) within the usual expected population group, for instance, adolescent girls and young women?

The emergence of individuals presenting with BDD and ED in new population groups, for instance, children, older women and men?

Your response:

Question 2:

Do you have any objective evidence to support your view?

Your response:

Question 3:

In your view does this warrant attention by policy-makers?
In what way?

Your response:

Question 4:

Do you have any suggestions that would lessen any impact of the anti-obesity campaign on BDD and ED?

Your response:

_____

Question 5:

Do you think that it would be useful for the Australian and state governments to adopt the Health At Every Size (HAES) approach that shifts the emphasis from weight-loss to health-gain?

Your response:

_____

We sincerely appreciate your time in taking part in this survey

Appendix 4: Email with set of questions: May 2018

Collateral Damage: The Australian anti-obesity campaign: from fat stigma to eating disorders

Dear .....

In 2015 I contacted you to ask if you would agree to answer a set of questions relating to my PhD research on the above topic and you were kind enough to offer your thoughts and views. These have been invaluable in progressing my work and I am now nearing the end of my candidature and thesis. During this time, and as my work has moved forward, my focus has changed a little in tune with the evidence that I have uncovered. Because of this, and building on the original responses, I would be most grateful if you were able to find the time to answer a few more questions. This would be extremely helpful to me.

My preference would be to speak with you by phone, however, I know that you are busy so I have included the questions below if you would prefer to reply by email.

As before, participation is entirely voluntary and neither you nor your organisation will be identified in any reports.

If there are questions you would prefer not to answer, feel free to leave them out and only complete those questions you feel comfortable answering.

I anticipate that this will take about 10-20 minutes depending on the amount of information that you wish to share. If you would prefer, please feel free to respond to these questions on a separate document.

Please find more detailed information in the attached Participant Information Statement.

If you are able to assist, please:

1. Read the attached documents - the Participant Information Statement, the Consent Form and the Withdrawal of Consent Form.

2. Respond to the consent question, which is below.

3. Complete the questions and email your responses back to me.

I appreciate your time and your assistance.

This project has been approved by the La Trobe University College of Science, Health and Engineering Human Ethics Subcommittee, and has been assigned the SHE-CHESC registration number S15/54.

Best wishes

Susanna Psalios

Student investigator: Susanna Psalios, PhD candidate, La Trobe University.

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CONSENT

Please indicate that you have read the attached documents and consent to the conditions detailed in the attached Consent Form:

I CONSENT Please delete as appropriate: **Yes/No**

Questions:

1. Apart from those diagnosed with an eating disorder, do you consider disordered eating, such as, restrictive eating, bingeing, purging, and other unhealthy eating practices, to be a problem in the general population?

   a) If so, do you think this more problematic in females? Why?

b) In your experience, is there an age group where you consider this is to be more prevalent? Why?

Your response:

2. The Australian anti-obesity campaign and its associated public health messages urge weight-loss for anyone with a BMI of 26 or greater. Do you believe that this singular focus on weight-loss rather than health-gain contributes to obesity stigma and negative body image?

Your response:

3. What, in your opinion, is the strongest predictor for the development of disordered eating in those wanting to lose weight? (For example, negative body image, feeling shamed and stigmatised, wanting to fit in with the thin-ideal of beauty etc.?)

Your response:

4. Where do you think that most people get their weight-loss inspiration from? For example, social media platforms? (Facebook, You Tube and Instagram), television, print media, social networks?

   a. Do you believe that this is a problem mainly for women? Why?

Your response:

5. How much influence do you consider social media to have on body image?

   a. In your experience do 'thinspo' images, commonly found on YouTube and Instagram, influence the decision of some to adopt unhealthy eating practices?

b. In your experience are women more susceptible to this type of influence than men? What about older women?

Your response:

1. Although a well-planned vegan diet can be extremely healthy, there is some evidence to suggest that, because of its total elimination of many food groups, veganism is sometimes co-opted to disguise an eating disorder or to lose weight quickly.

    a. Have you observed this, or the use of any other legitimate diets, for example: Paleo, Vegetarian, Ketogenic that you believe are being used to hide eating disorders?

Thank you very much for your participation.

Susanna Psalios, April 2018

Appendix 5: Pro-Ana websites visited

PRO-ANA WEBSITES	
Site number	**Website name**
1	https://www.myproana.com
2	http://pro-ana-buddies.weebly.com
3	https://gettingthinsoon.wordpress.com/about/
4	https://myproanathinspo.weebly.com
5	https://thehiddenbutterflysite.wordpress.com/
6	https://emilysbones.wordpress.com
7	https://always4everana.wordpress.com
8	https://proanatips.xyz
9	https://discussion.femalefirst.co.uk/viewtopic.php?t=196347&start=15
10	http://foreverproanagirl.tumblr.com
11	https://stopbeingsofatem.tumblr.com
12	https://moonlightrogue.livejournal.com/6772.html
13	http://www.proanatipsandtricks.com
14	https://devonsmith35.livejournal.com/12719.html
15	http://shatterthisillusion.blogspot.com/2012/10/anorexia-tips-1-
16	https://theproanatips.com
17	http://keeping-myself-thinspired.tumblr.com
18	https://thinandbonesblog.wordpress.com
19	https://www.eatingdisordercentral.com/
20	https://princess-hazzel.tumblr.com
21	https://thin-korean-girl.tumblr.com

22	https://dec141998.tumblr.com/anorexiajourney
23	https://anaandmia.wordpress.com
24	https://myproanathinspo.weebly.com
25	http://tillium.tumblr.com
26	https://fruitlick.tumblr.com
27	https://foreverandalwaysproana.wordpress.com
28	Espere Belle
29	My sweet disease
30	http://yearningforperfection.blogspot.com/2008/
31	https://www.yogilateral.com/blog-1/ana-do-you-love-me-now
32	https://www.fitnesss.net/how-to-become-anorexic/

Appendix 6: Open access items

1. National Health Survey: First Results, 2014-15 (Creative Commons Attribution 4.0 International) licensing.

   Accessed: 11 December 2019