



A quantitative analysis of weight targeted blame attribution and the moderating role of body appreciation

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ABSTRACT

This study examines differences in blame attributions afforded to an underweight and overweight target. Female University students (N=122) were randomly allocated to either the overweight or underweight target condition and instructed to rate statements indicating their perceptions of how responsible the target was for their respective weight in terms of internal (self) and external (environmental) blame. Participants own body appreciation was also measured using Avalos's (2005) Body Appreciation Scale (BAS). The overweight target was attributed significantly higher levels of internal (self) blame than the underweight target. The results support the notion that weight has strikingly different social and moral connotations dependent on which end of the spectrum one resides with overweight females considered significantly more responsible for their respective weight issues. This salient finding was understood in terms of attribution errors and more specifically, the just-world hypothesis. Body appreciation was also found to moderate the salient effect of internal blame, with those higher in body appreciation attributing lower internal blame to the overweight target than those lower in body appreciation. The results highlight the importance of considering the role of body appreciation and, more specifically the concept of it serving to potentially protect against both ideal/actual self-discrepancies and overly critical responses to an omnipotent 'feared' overweight self, resulting in lower attributions of internal blame.

KEY WORDS:	OVERWEIGHT	UNDERWEIGHT	BLAME	BODY	APPRECIATION
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Introduction

In the U.K, both underweight and overweight/obesity are medical categories related to body weight and eating. However, they have strikingly different social and moral connotations. In western societies, carrying excess weight is seen as the embodiment of gluttony, sloth, and lack of self-control (Crandall and Eshleman 2003; Latner and Stunkard 2003), while a slender physique is regarded as the embodiment of virtue and pinnacle of success (Joffe and Staerkle, 2007). Simply glancing at the magazine stands at most checkouts across the U.K, the average consumer will witness an abundance of headlines and articles devoted to weight loss and body transformation or condemning those carrying a few extra pounds. As a nation, we appear to be obsessed with weight and more specifically, idealising thinness and ridiculing fatness, particularly in terms of the female body (Hebl and Turchin, 2005). In spite of findings that evidence weight to be determined by a complex interaction of genetic, biological and environmental factors, the overriding consensus still remains that the individual is responsible, especially if they are overweight or obese (Saguy and Gruys, 2010). Research has coalesced around weight bias and anti-fat attitudes, seeking differences in judgements between overweight and normal weight subjects (Sagone and De Caroli, 2012). Many studies note the prevalence of weight bias towards the overweight and obese (Puhl and Heuer, 2009; Puhl and Latner, 2007). In contrast to this, studies on underweight subjects have instead favoured intense psychological investigation of eating disorders such as anorexia that cause extreme weight loss (Brumberg, 1988; Garner et al, 1980;1981). Consequently, the limited research on underweight vs. normal weight subjects has revealed a more sympathetic outlook, with no strong evidence of a societal bias (Saguy and Gruys, 2010). A vast amount of research demonstrates (Klassen et al,1996; Fonda, 2000; Puhl and Heuer, 2009) how overweight subjects are consistently treated more harshly than normal/underweight subjects. However, little research has sought to compare perceptions of both overweight and underweight subjects and, more specifically, the potential differences in terms of how perceiver's attribute blame, or the individual difference variables such as body appreciation that could potentially moderate this effect.

Research question, aims and objectives

“Does attribution of internal (self) and external (environmental) blame differ according to a target's weight status and, does a perceiver's body appreciation moderate this effect?”

The main rationale for the present study is the lack of research which explicitly compares underweight and overweight subjects, and the possible differences in blame attribution towards each. More specifically, it seeks to explore whether there are differences in how female perceiver's attribute internal (self) or external (environmental) blame between female overweight and underweight targets. The paper draws upon Heider's (1958) Attribution Theory to provide a theoretical framework. Similarly, research is also yet to determine whether individual differences in the perceiver reveal a greater or lesser inclination to blame the individual in question. This study seeks to determine whether body appreciation moderates how the perceiver rates levels of internal and external blame to those subjects at opposing ends of the weight spectrum.

In order to address the research question a set of aims have been formulated:

- To examine the relationship between overweight /underweight subjects and the perceiver's attribution of internal/external blame
- To test whether high/low body appreciation moderates blame attribution
- To relate the findings of this study to the existing literature on blame, weight bias and body appreciation

Literature Review

This chapter is divided into four sections. The first section seeks to distinguish between two opposing ends of the weight spectrum; Overweight and Underweight. The next section presents an overview of the literature regarding weight bias and blame. This is followed by psychological explanations of blame attribution, looking specifically at ‘Attribution Theory’ and the concept of Fundamental Attribution Error. The socio-cultural influences will then be examined. The next section seeks to present an overview of the literature surrounding the role of body appreciation and the studies that have sought to determine its effect. Finally, we visit the present study, outlining the influence of the literature on determining our research aims and hypotheses.

Overweight and Obesity vs. ‘Underweight’

The Health Survey for England (HSFE) (2013), recorded that 67% of men and 57% of women in the UK are either overweight or obese. The National Health Service (NHS, 2015) defines obesity among adults as having a body mass index (BMI) (weight in kilograms divided by height in metres) equal to or greater than 30, and ‘overweight’ as having a BMI equal or greater than 25 but less than 30.1. Obesity has been linked to a range of health problems including; type 2 diabetes, cardiovascular disease and cancer (NHS, 2015). Psychosocial issues including; depression (Mustillo, 2003); increased emotional distress as adults (Mills and Andrianopoulos, 1993); and a variety of interpersonal issues have also been correlated with obesity (Obesity Action Coalition, 2015). Both ‘overweight’ and obesity are readily conceptualised as conditions catalysed by over-eating i.e. ingesting more calories than necessary and living a sedentary lifestyle. However, as noted by NHS (2015) weight gain can be caused by a myriad of biological and social conditions such as; poor access to healthy food, genetic disorders, disability, medication reliance and depression.

In contrast to this, the NHS (2015) uses the term ‘underweight’ to describe an individual who's weight is regarded as dangerously low. In terms of BMI, anyone with a score below 18.5 would be considered underweight. Being underweight has been linked to numerous health problems including but not limited to; osteoporosis, infertility, anaemia and amenorrhea (NHS, 2015). The HSFE (2013) suggested that just over 2% of the adult population in the U.K were underweight. They also found that women are slightly more likely to be underweight than men. Being underweight has been readily associated as a symptom of underlying illness such as; cancer; autoimmune deficiencies and Crohn’s disease (NHS, 2015). It is also widely considered the bi-product of simply not eating enough to sustain the body’s functions (NHS, 2015). As such, being underweight can also be indicative of an underlying eating disorder; Anorexia is listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) as the reluctance of an individual to maintain their weight at or above the normal weight for their age and height. This is usually caused by an underlying fear of gaining weight or becoming fat, accompanied by denial of the severity of one’s low body weight (Grilo and Michell, 2010). However, much like being overweight or obese, there are a myriad of biological and social conditions that can lead to an individual becoming underweight (NHS, 2015).

Weight Bias and Blame

In recent years, weight bias has become increasingly widespread amongst both adults and children (Puhl and Heuer, 2009) and research has coalesced around forging a comprehensive model of such.

Puhl and Brownell (2008) note that those who are overweight or obese are likely to experience weight bias and discrimination at rates that rival racism. This is supported by Puhl and Heuer (2009) who found obese and overweight individuals are the targets for weight based discrimination in almost every aspect of life; from education and employment to health care and social engagements, those with a higher than average BMI were likely to be victimised. Such discrimination has been directly linked to intense psychological harm, body image disturbance and binge eating (Carels et al, 2009; Friedman et al, 2005). Those who internalise the widespread prejudiced attitudes are also more likely to suffer psychologically, particularly women who experience considerable pressure to be thin (Thompson and Stice, 2001). Discrimination toward the obese in the workplace has been documented by several researchers; Fonda (2000) reported employers to be less sympathetic towards periods of illness, and Klassen et al,(1996) found that overweight employees were regarded as less successful than their average weight counterparts. In terms of gender differences and the salience of weight bias, it has been widely acknowledged that women are significantly more likely to be exposed to anti-fat attitudes than men, with overweight females being provided less access to educational resources (Crandall, 1994), and earning lower salaries (Roehling, 1999), compared to equally qualified, average weight females.

In contrast to this, other studies have sought to investigate the underweight end of the weight spectrum and found that unlike obese or overweight individuals, those of a less than average weight did not experience such strong bias in society (Saguy and Gruys, 2010). In fact, Puhl and Heuer (2009) found that employers were no more or less likely to hire an underweight employee, nor was their weight correlated to their perceived ability to succeed in their chosen role. However, this is not to say that an underweight bias does not exist; Tantleff-Dunn et al, (2009) conducted a study to gauge how responsible underweight females were considered for their weight. Results indicated that those with an eating disorder were considered more responsible for their weight than those with heredity or illness. Tantleff-Dunn et al, (2009) also found that underweight women are readily stereotyped as depressed, deliberately under-eating or suffering from an eating disorder even when their weight is related to illness or heredity. This form of stereotyping however has not been found to evoke the same negative connotations or levels of discrimination that studies into obesity bias have noted. This is not to say that underweight stereotyping is not discriminatory and dangerous, but research is limited in this area and instead favours notions of anti-fat/pro-thin bias (Carels and Musher-Eizenman, 2009).

With weight bias so prevalent, it is vital to uncover any key differences at opposing ends of the weight spectrum and determine why we potentially attribute internal (self) blame and external (environmental) blame differently between underweight and overweight individuals. Puhl and Heuer (2009) assert that weight bias occurs when we afford blame to an individual for being overweight or underweight respectively. Shaver (1985:7) defines blame as a “condemnation that follows from responsibility for a reprehensible outcome but may be mitigated by justification or excuse”. For the purpose of this discussion, blame attribution is consistently conceptualised as the precursor to bias.

Attribution Theory and Fundamental Attribution Error

As discussed throughout this chapter, research suggests that society is consistently harsher in its judgements to overweight than to normal weight women, and negative stereotyping doesn't appear as pervasive or apparent for underweight vs. normal weight comparisons (Saguy and Gruys, 2010). For the purpose of this research it is vital to determine the underlying factors that catalyse these blame judgements and give way to subsequent bias.

During the course of everyday life, many different situations arise within the social arena and an important capability of human beings is to understand who is responsible. From macro scale events such as natural disasters to micro such as the obesity epidemic, identifying who is accountable is a vital requisite in order to understand the world's stage (Heider, 1958). Wortman (1976) suggests human beings strive to stabilise and simplify their surroundings by asserting what or who is responsible for certain behaviours or outcomes. He argues that acknowledging the causal factors that catalyse specific outcomes allows people to control the likelihood of that outcome, or at least forecast its emergence.

In line with such, Heider (1958) proposed Attribution theory whereby when exposed to a condition such as obesity or 'underweight', perceivers seek to make sense of it. This is achieved by ascribing reasons for that condition and thus, attribution in this instance, can be defined as a "judgment embedded in the point of view of the perceiver and subject to the epistemic state of that perceiver" (Tomai and Forbus, 2007:1). Fiske and Taylor (1991) suggest that human beings execute this mode of thinking in all walks of life as it enables them to categorise information about social groups and formulate expectations of the people within those groups. Moreover, Heider's (1958) theory asserts that when people afford an attribution, they are essentially determining whether the target's behaviour is the result of external or situational factors or a consequence of internal or dispositional forces. Thus, a perceiver who insists that weight is a matter of personal responsibility may be more likely to blame and in turn present bias towards those who are overweight/underweight. Once a judgment of internal (self) blame has been afforded, bias towards the individual in question is likely to entail (Shaver, 1985).

In vignette studies based on the attribution framework, participants have been shown to make more positive emotional attributions as well as show greater intentions to extend aid to individuals whose position is determined by uncontrollable external factors such as; upbringing and illness (DeJong, 1980 and Rush, 1998). Crandall (1994) also found robust correlations between global negative attitudes toward obesity and wide-spread beliefs in the controllability of such. These findings infer that because obesity has been constructed as a matter of personal responsibility, participants may be more likely to make negative attributions and blame the individual for their weight issues resulting in bias and discrimination (Crandall, 1994). Conversely, as females who are underweight have been portrayed as victims of external forces and illness (Saguy and Gruys, 2010), participants may be more likely to afford more sympathetic attributions, resulting in lower levels of internal (self) blame (Rush, 1998).

Furthermore, within the attribution framework, two Fundamental Attribution Errors (FAE), have been identified as contributing to weight bias. The first, readily discussed as the just-world hypothesis refers to the belief that individuals' fortunes are wholly deserved and a product of a just and fair world where people garner the status they deserve (Lerner and Miller, 1971). In line with this, Crandford (1994) and Carels et al, (2009) both reported the salience of weight bias to be positively associated with greater endorsement of just world beliefs. Another FAE is discussed in terms of the core belief that obesity is controllable and merely a bi-product of over-consumption (Puhl and Brownell, 2008). These FAE's cause an individual to neglect the role of the situational or the external factors that catalyse such conditions and instead place undue emphasis on the role of the individual and internal, dispositional traits. Crandall and Eshleman (2003) argue that these core errors in the attribution process serve as 'justification ideologies' and provide a comfortable foundation for discriminatory attitudes and weight bias without the manifestation of guilt. Consequently, it can be considered likely that such errors in attribution may also be fundamental in understanding how individuals attribute internal and external blame.

Influence of Socio-Cultural Discourse and Ideology

Whilst blame attribution has been largely conceptualised as a complex cognitive construct, it is important to recognise that is also essentially cultural and social in nature, determined by dominant and consensual representations of what is right and wrong (Augoustinos and Walker, 1995). In western societies, thin 'ideal' representations of the body are transferred through the media, and have become so pervasive in every day discourse that it is difficult to determine the objective truth (Saguy and Gruys, 2010). Such representations are passed on through processes of socialisation in early life and are discursively reproduced during the life course (Augoustinos and Walker, 1995).

More specifically, Crandall (1994) draws attention to the embedded cultural discourse surrounding self-reliance and meritocracy. He suggests body size is much like wealth in western societies, thought to be under individual control and a reflection of one's moral fibre. This ideology has heavily shaped how the mass media report on overweight/obesity and underweight/eating disorders. Saguy and Gruys (2010) undertook a study to compare articles published about both underweight and obese females. They found the media to treat thin female individuals as the embodiment of success and virtue. However, when this exceeds the rigid boundaries of what is considered 'normal', underweight individuals are then sympathetically portrayed as victims of stress and societal pressures and more extremely, in the case of anorexia, as victims of a terrible illness beyond their control. In stark contrast to this, overweight or obese females were found to be ridiculed for their lack of self-control and blamed for immoral individual behaviour (Saguy and Gruys, 2010).

In line with this, Joffe and Staerkle (2007) argue that self-control is the dominant ideology that holds the master status within the western world. Although the western ideology supports the notion of a thin, contained body, food is not just associated with biological need, but more commonly with socialising, rewards, religion and sex (Campo and Mastin, 2007). With so many activities surrounding consumption, to stay in control is the ultimate commodity (Joffe and Staerkle, 2007) Campo and Mastin (2007) support such, suggesting the body is the terrain upon which self-control can be

visually enacted in line with normative, ideological morality. Further to this, Morrison-Thomson (2009) argues the importance of graphical symbolism and draws attention to the how the media often display pictures of overweight individuals with their faces cut out, focusing exclusively on their overweight bodies. She suggests this serves to symbolise and re-enforce that such individuals are mindless, fixated and lacking in self-control. Morrison-Thomson (2009) also asserts how different this portrayal is compared to those who are thin or underweight; faces are rarely distorted and media outlets seek to uncover anecdotal explanation for their weight issues. These socio-cultural forces are crucial in understanding how our perceptions are manipulated and suggest that perhaps blame attributions may be mere reproductions of the westernised ideology.

This overview provides a foundation to understanding why opposing ends of the weight spectrum appear to be perceived so differently and highlights that the role of the Socio-Cultural cannot be overlooked when seeking to uncover potential differences in how individuals attribute blame.

The Role of Body Appreciation in Blame Attribution and Weight Bias

As highlighted by Halliwell (2012), positive body image is regarded as the way in which individuals experience their bodies, indicative of love and respect. For research purposes this construct has been widely referred to as body appreciation and as such this research friendly terminology will be employed throughout the present study. Halliwell (2012:509) states: “The Body Appreciation Scale (Avalos et al, 2005) taps into four essential qualities of positive body image; holding positive evaluations of the body, body acceptance, respecting and attending to bodily needs, and protecting the body by rejecting unrealistic appearance ideals.” Avalos et al, (2005) assert that body appreciation does not merely equate to body satisfaction, it instead refers to how individuals value their bodies and the cognitive schemas they enlist to protect and promote a positive view of such. Within this paradigm, the internalisation of the ‘thin ideal’ has been labelled a crucial risk factor in the exhibition of body appreciation (Thompson and Stice, 2001). The internalisation of the ‘thin ideal’ refers to the extent to which a woman incorporates the hegemonic socio-cultural ideals surrounding women’s beauty into her own personal ideals and moral values. As highlighted by Halliwell (2012), women in western societies are all aware of the dominant ideals surrounding body weight, however some women are facilitated to resist and protect against such.

More specifically, Halliwell (2012) makes the assertion that those with positive body appreciation are in fact protected from exposure to this ‘thin ideal’ that may have a potentially damaging psychological effect. In support of this, robust empirical research has found a line of evidence that suggests women higher in body appreciation are less likely to internalise the socio-cultural ideologies (Tylka et al, 2013). Additionally, meta analyses (Groesz et al, 2002; Want, 2009) report that women with high body appreciation who have not internalised the aesthetic ideal pushed by mainstream media outlets, were protected from the detrimental effects of such media exposure. Further to this, a qualitative study found that women with high body appreciation were highly critical of the unrealistic, pervasive images of the ‘thin ideal’ presented by the media (Holmqvist and Frisen, 2012).

Collectively, these findings suggest that body appreciation serves to protect against ideal-actual self-discrepancies and thus infers that body appreciation may also play a moderating role in the attribution of blame. The present study postulates that if those high in body appreciation are protected from the detrimental effects of mass media, critical of its effects and have less of an internalised notion of the thin ideal then they will perhaps be less likely to attribute blame internally to those who do not conform to such. This potential relationship has so far been overlooked by the current literature and will thus forge an inherent part of the present study.

The Present Study

This chapter has highlighted key differences in how individuals at opposing ends of the weight spectrum are perceived. As the obesity epidemic has intensified, research has coalesced around anti-fat attitudes, seeking differences in judgements between overweight/ underweight and normal weight subjects (Klassen et al,1996; Fonda, 2000; Sagone and De Caroli, 2012). However, to date, no studies have sought to compare potential differences in blame attribution between overweight and underweight individuals; this study proposes to address this gap in the literature. Analysis of the literature suggests that there are well supported differences between how those who are overweight and those who are underweight are perceived. This infers that differences in blame attributions are also likely. Furthermore, there is strong evidence that Body Appreciation serves to protect against ideal-actual self-discrepancies catalysed by exposure to the thin ideal (Duckitt, 1992; Thompson et al, 1999), and thus those higher in body appreciation may also be protected from overly critical responses in terms of internal blame judgement to those who do not conform to such. However, there is no research examining this possible relationship in the context of obesity and 'underweight'. In order to address this further gap in the literature, it will be examined whether levels of body appreciation serve to moderate attributions of blame.

Research Aims and Hypotheses

1. We predict that the overweight female target will be attributed with significantly higher levels of internal (self) blame than the underweight female target
2. We predict that the underweight female target will be attributed with significantly higher levels of external (environmental) blame than the overweight female target
3. We predict that low body appreciation will moderate higher attributions of internal (self) blame
4. We predict that high body appreciation will moderate lower attributions of internal (self) blame

Methodology

The present study sought to evaluate the potential differences in terms of blame attribution between overweight and underweight subjects by means of several data sources and quantitative analyses. The methods undertaken are divided into five subsections: (1) participants; (2) procedure and ethical considerations; (3) measures; (4) preliminary data analyses.

Participants

Female students enrolled at The University of Brighton were the target population. This was decided for a number of reasons. Firstly, the literature suggests that weight bias and constructions of the thin ideal is particularly pervasive for women and can be hugely detrimental to female mental health (Hebl and Turchin, 2005). Additionally, recruiting an exclusively female sample removed any potential sexism/gender issues that may have arisen if undertaking a cross-gendered study. Finally, it was considered more valid to our hypotheses to use both female targets across the two weight conditions and recruit only female participants as it renders a more relevant, reliable outcome when the bodies an individual is evaluating are of the same sex as themselves.

The volunteers were recruited for participation from the various schools within the University via e-mail and social-networking platforms. In the interest of greater generalisability, this dissertation sought to recruit approximately 120 participants, 60 per condition. 64 responses were obtained for the underweight condition ($N = 64$) and 58 responses for the overweight condition ($N=58$) with a total of 122 ($N = 122$). Any accidental male responses were discarded and the ages were between 18 and 32. Demographic information was collected for each participant and included; age, height and weight.

Measures

Overweight/Underweight Vignette

Two online questionnaires based on two separate conditions were constructed (See Appendix A); Condition 1 featured an image and short vignette of a severely overweight (obese) female within a clinical setting documenting key information such as; first name, age, BMI, weight category and reason for hospital admission. Condition 2 mirrored this format but featured a severely underweight female subject. Images for the vignettes were obtained via Google images and were considered free of copyright restrictions (Roebuck, 2012).

Responses to Vignette

Participants across both conditions were asked to rate statements relating to who was to blame for the situation in the vignette. The questionnaires were comprised of 15 items with two scales, internal blame attribution and external blame attribution each with 6 items, respectively (See Appendix A for the full list of items). The internal blame attribution sub-scale assessed the belief that being overweight or underweight was a matter of individual control or lack thereof, highlighting personal culpability i.e. “Kim/ Kayleigh is underweight/overweight because she has no willpower”. The

external blame sub-scale assessed the belief that external forces are culpable for an individual being overweight or underweight i.e. “The food industry are responsible for Kim’s/ Kayleigh’s weight issues”. The other 3 items were more general questions and were added in order to detract attention away from the underlying purpose of the research study, for example “ I feel sorry for Kim/ Kayleigh”. Items were scored on a seven-point Likert scale (1=Strongly Disagree to 7= Strongly Agree). The minimum and maximum scores for both the internal and external blame attribution sub-scales were 6 and 42, respectively. The minimum and maximum total possible scores were 15 and 105, respectively. Higher scores on each of the subscales reflected higher attributions of internal/external blame, respectively.

Body Appreciation Scale (BAS; Avalos et al., 2005)

This part of the online questionnaire sought to measure participants' body appreciation. The BAS (2005) consisted of 13 items i.e. “I feel good about my body”, rated on a 5-point Likert scale (1 = Never, 5 = Always), and was averaged for a mean score (higher scores reflect higher body appreciation; see Appendix B for the list of items). The English version of the BAS presents a unidimensional structure for women, and is considered to have a reliable, valid construct (Swami et al., 2008).

Procedure and Ethical Considerations

The questionnaire was distributed via e-mail to a sample of students studying at the University of Brighton. Social networking platforms with specific student groups were also enlisted to recruit participants. In the interest of randomisation, a rotating URL was developed so when a potential participant clicked on the SurveyMonkey link, they were randomly assigned one of the two conditions; either the severely overweight (obese) or underweight target. The main aim of this research was to obtain data relating to female blame perceptions of overweight and underweight targets and as such, the questionnaire had to include questions of a sensitive nature. Consequently, it was ethically crucial that participants were given a detailed account of what they were to expect when undertaking the questionnaire. However, it was also pertinent not to explicitly state the purpose of the research as this may have skewed the data and invalidated our results. Instead, participants were told that the purpose of the study was to look at awareness and understanding of a range of Health and Lifestyle issues. They were issued an information sheet (See Appendix C) that indicated they would be randomly issued a questionnaire relating to one of the following; Smoking; Eating; Drinking and Fitness. They were then advised that depending on the questionnaire they were issued, they may be presented with an image of an unwell individual within a health care setting with an accompanying scenario. It should be asserted that the benefits of partially deceiving the participants far outweighed the risks. If the true nature of the study was provided, individuals may have adjusted their answers according to what they consider the main hypothesis of the research to be; this is a common research dilemma known as the Hawthorne effect (Landsberger, 1958) and would have prevented results being generalised to the wider population. It was not the intention of this study to withhold information regarding what participants would be exposed to, the information sheet (See Appendix C) clearly stated that sensitive imagery and questions relating to body image may be encountered thus insuring any potential psychological harm was minimised. In order to improve participant’s comfort, they were informed that participation was completely voluntary and that they could

withdraw from the study at any time (Bryman 2004, Gilbert 2008). Participant questions were also addressed prior to beginning the study via the researcher's email address included in the information sheet.

After reviewing the information sheet, participants were asked to complete an electronic consent form confirming or declining their willingness to partake in the study (See Appendix D), an essential requirement for any ethically minded research study (Bryman, 2004). The confidentiality of the study and the anonymity of all respondents was fully assured as no identifying information was collected. Since some participants might have been offended by the pejorative wording of items contained in the questionnaire, time was allotted to discuss participant concerns, upon completion of the questionnaires, by contacting the researcher via email. Additionally, once the questionnaire was complete, students were issued a thorough debrief sheet (See Appendix E), this documented the exact and true nature of the research study, the motive for deceiving the participants, the option to withdraw via e-mail and links to third party resources such as student counselling support. For identification and privacy purposes, a unique 5-digit ID number was generated for each participant who undertook the questionnaire and would be used to enable participant withdrawal if requested

Preliminary Data Analyses

As all 10 hypothesised items from both the internal and external blame scale for Part 1 of the survey were created for this study, it was necessary to explore the structure of the scales and ensure their construct validity. A exploratory factor analysis (EFA) using Direct Oblimin rotation within SPSS (Statistical Package for Social Sciences) was executed using both internal and external blame ratings across both the underweight and overweight condition. The instrument was analysed at the item level to determine if the items designed for the 2 blame dimensions cohesively reported into those dimensions. This yielded 3 interpretable factors; The first factor loaded 5 of the 6 internal blame items with all factor loadings above 0.4 (Table 1) and no cross-loadings suggesting relatively high construct validity for the internal blame sub-scale. The second factor loaded 3 external blame items with no cross-loadings (Table 1).

The initial structure matrix indicated that for reasons beyond the researchers' control, items External.1 "Kim's/ Kayleigh's parents should have prevented her from becoming underweight/ overweight" and External.3 "Kim/ Kayleigh may not be able to afford to eat well" did not load on to their expected factors and were therefore removed. Internal.5 "Kim/Kayleigh is likely to have an underlying psychological instability" also loaded on to the External factor loadings. This indicates that although it was initially hypothesised as a question related to self-blame, participants may have perceived mental instability as an external variable beyond the control of the individual (Rice et al. 2001). Consequently, Internal.5 was re-coded as External.7 and included in the analysis as part of the external blame sub-scale. Items with loadings less than 0.4 on any of the factors were not retained (External.4 "Kim/ Kayleigh is likely to come from an unstable family background). Thus, we modified the hypothesised model and re-ran EFA using only pure items for analyses; internal blame items 1,2,3,4 and 6 and external blame items 2,5 and 6 and 7; this yielded two interpretable factors with no cross-loadings or items less than 0.4 (See Figure 1). This suggested that both modified

sub-scales had relatively high construct validity and were acceptable measures for further analysis.

Cronbach's reliability alpha was also run for the two subscales (See Figure 1); this reliability analysis is a measure of internal consistency and determines if participants are responding consistently across items. The analysis produced a coefficient alpha of $\alpha = .90$ for the internal blame sub-scale items and $\alpha = .70$ for the external blame sub-scale; both acceptably high and suggest the measures had sufficient levels of internal consistency (Cronbach, 1951).

Table 1
Factor loadings and reliabilities of the modified blame attribution items after initial EFA.

Internal Blame Attribution	$\alpha = .90$	1.	2.
Kim/ Kayleigh is underweight/overweight because she has no willpower	.89		
It is Kim's/ Kayleigh's choice to be underweight/overweight	.76		
Kim/ Kayleigh is a drain on public resources	.87		
Kim/ Kayleigh is responsible for her weight issues	.72		
Kim/ Kayleigh has no-one to blame for her weight other than herself	.77		
External Blame Attribution	$\alpha = .70$		
The media are responsible for Kim's/ Kayleigh's weight issues	.62		
The food industry are responsible for Kim's/ Kayleigh's weight issues	.65		
Kim/ Kayleigh may not have been educated about the dangers of under-eating	.44		
Kim/ Kayleigh is likely to have an underlying psychological instability	.42		

Results

SPSS (Statistical Package for Social Sciences) was employed to code the data and analyse the results. The main tests used in the data analysis were a one-way Analysis of Variance (renders the same p value as an independent measures t-test), in order to investigate the relationship between the independent and dependent variables, and a multiple regression analysis to determine a moderation effect (Field, 2013).

ANOVA

Levene's test was executed on both of the dependent variables across condition to determine if the data had equal variance and therefore met the assumptions of ANOVA.

Internal blame violated this assumption of the ANOVA, $F(1, 120) = 4.71, p = .03$. External blame also violated this assumption, $F(1, 120) = 3.871, p = .048$.

As both p values fell $<.05$, neither of the conditions met the criteria for homogeneity of variance and thus violated the assumptions of ANOVA. Consequently, the Brown-Forsythe and Welch tests were also executed for more robust outputs of the F-ratios (Field, 2013).

Results suggested a statistically significant difference between the weight condition and perceptions of internal blame: $F(1, 120) = 103.55, p = .000$. However, there was no significant statistical difference between the weight condition and perceptions of external blame: $F(1, 120) = 2.39, p = .12$.

More specifically, the means (See Figure 2) suggest that the overweight condition scored significantly higher on perceptions of internal blame: ($M = 4.31, SD = 1.19$) than the underweight condition: ($M = 2.36, SD = .87$). This result supports our hypothesis that overweight participants would be attributed significantly more internal blame than underweight participants etc.

However, participants across both conditions attributed similar levels of external blame: Overweight ($M = 4.0560, SD = 1.09529$); Underweight ($M = 4.3320, SD = .84522$) thus disproving our second hypothesis that underweight subjects would be attributed significantly higher levels of external blame. The means also suggest that within the conditions, the underweight participants rated external blame ($M = 4.3320$) higher than internal blame ($M = 2.36$) opposed to the overweight condition where both internal and external blame were rated similarly highly ($M = 4.31; M = 4.05$).

Table 2

Means and standard deviations for internal/external blame ratings on weight targets

	Underweight		Overweight	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
External Blame	4.33	0.84	4.05	1.09
Internal Blame	2.36	0.87	4.31	1.19

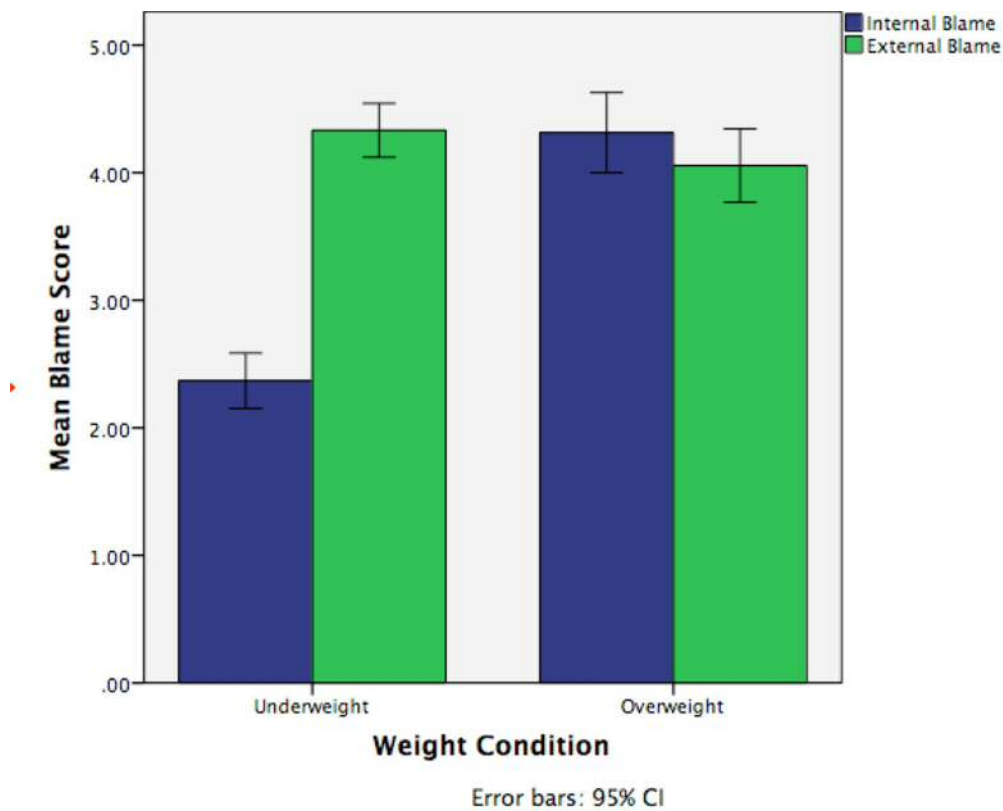


Figure 1: Bar chart illustrating differences in mean internal/external blame scores between overweight and underweight subjects

Multiple Regression

To test the hypothesis that a perceiver's own body appreciation moderates the effect of target weight (overweight vs. underweight) on ratings of internal blame attribution, a multiple regression analysis was conducted. In the first step, median splits were performed on the body appreciation scores to ascertain high body appreciation (over the median of 3.15) and low body appreciation (below the median

of 3.15). This also provided the dichotomous format required for the multiple regression analysis. To avoid potentially problematic high multicollinearity with the interaction term, the weight condition and body appreciation variables were centred and an interaction term between weight condition and body appreciation was computed (Aiken and West, 1991). The predictors and the interaction were then entered into a multiple regression model.

The weight condition indicated a significant difference between attributions of internal blame between the overweight and underweight target condition, with the overweight target being attributed significantly higher levels of internal blame ($B = 1.6$, $se = .18$, $p = .000$). Further analysis indicated that body appreciation ($B = -.62$, $se = .19$, $p = .001$) was significantly associated with scores of internal blame for perceptions of overweight subjects suggesting that women with higher levels of body appreciation generally attribute lower levels of internal blame. From analysis of the interaction effect ($B = -1.58$, $se = .38$, $p = .000$), there is a significant difference in the relationship between target's weight status and the internal blame attributed depending on participants' own body appreciation (See Figure 4 for Descriptive Statistics). The interaction plot (See Figure 5) demonstrates that as body appreciation goes up, the difference between overweight and underweight internal blame goes down. This specifically seems to be moderated by women high in body appreciation attributing less internal blame to overweight targets than women who are low in body appreciation (rather than any other difference).

Table 3
Multiple regression descriptive statistics

	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Constant	3.12	0.91	34.17	0.00
Weight Condition (centred)	1.63	0.18	8.94	0.00
Body Appreciation (centred)	-0.62	0.19	-3.27	0.00
Weight x Body Appreciation	-1.58	0.38	-4.17	0.00

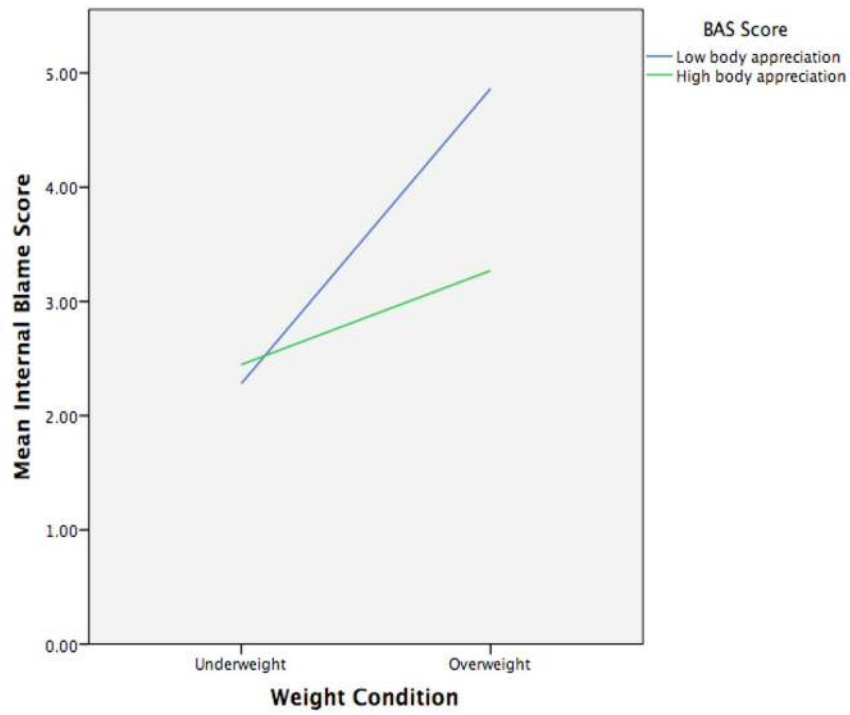


Figure 2: - Interaction plot illustrating the moderating effect of body appreciation on internal blame scores

Discussion

This chapter will discuss the implications of the results. To begin, the findings of the Analysis of Variance (ANOVA) will be discussed in reference to possible explanations and their divergence from the previous literature. Next, the findings of the multiple regression analysis will be explored. Limitations of the study will then be reviewed and recommendations and implications will be made for future research.

Internal Blame - Socio-Cultural Culpability

The primary purpose of this study was to investigate whether internal (self)/ external (environmental) blame attributions differ according to a target's weight status i.e. overweight or underweight. The research findings indicate that a significant difference exists between the levels of internal (self) blame attributed between overweight and underweight targets. Hypothesis 1 predicted that the overweight target would be attributed with significantly higher levels of internal blame than the underweight target. This hypothesis was supported by the findings of this study; the overweight target was attributed significantly higher levels of internal (self) blame for their weight status than the underweight target.

Although to date the weight bias literature has not specifically sought to uncover differences in blame attributions or compare overweight and underweight targets, many of the existing findings have built a substantial framework upon which to tentatively infer reasons behind the present study's findings as well as suggest potentially new conceptualisations. One explanation for this tendency to attribute higher levels of internal blame the overweight target than the underweight target is that obesity is widely considered an issue of personal responsibility whilst 'underweight' is widely regarded as the product of a severe underlying condition such as Anorexia (Saguy and Gruys, 2010) despite scientific evidence that suggests obesity, 'underweight' and eating disorders are each often the result of complex biological and socio-cultural factors beyond the control of the individual (Gard and Wright, 2005; Rice, 2007). This finding is consistent with the wide body of research that has uncovered a pervasive socio-cultural discourse surrounding obesity and individual accountability based on the western ideology of the 'thin' ideal. Joffe and Staerkle (2007) argue how obesity has been constructed as matter of individual self-control and that in order to hold a successful position within society, one must exert self-control over the mind, body and destiny. Not doing so deliberately violates the hegemonic ideology and such deviants would be discriminated against and placed in an out-group (Joffe and Staerkle, 2007). For instance, in terms of the present study, those who are obese and thus 'choosing' to defy the embedded western ideology of the 'thin' ideal are denigrated by tools such as the mass media and thus, our perceptions of who is to blame are perhaps manipulated accordingly. Therefore, this difference in internal blame suggests that, more generally, hegemonic cultural ideologies and pervasive discourses shape how individuals attribute different levels of blame dependent on which end of the weight spectrum an individual resides.

Internal Blame - Attribution Errors and The 'Just World' Hypothesis

As discussed in Chapter 2, Attribution Theory (Haider, 1958) may also be fundamental to interpreting our findings. As theorised by Lerner and Miller (1977), the

process of attribution can sometimes result in what is referred to as Fundamental Attribution Error (FAE) or the tendency to overestimate the role of dispositional or internal factors in assessing certain behaviours and neglecting the role of the situational (Lerner and Miller, 1977). This is consistent with our findings which suggest that internal blame is higher for overweight females than underweight females despite both being medical conditions catalysed by a myriad of external factors (Gard and Wright, 2005; Rice, 2007). More specifically, Crandall (1994) found FAE causes people to credit slender physiques for their superior virtue and denigrate full-figured individuals as merely weak-willed. FAE literature argues that individuals have a tendency to blame and condemn individuals even when a situation is beyond their control in order to reassure themselves of their insusceptibility to such (Burger, 1981). In relation to this study, it should be acknowledged that as obesity is so widely ridiculed and a point of high shame within western societies, an individual's drive to enhance their feelings of insusceptibility may be crucial in attempting to understand blame attributions. Thus, as suggested by Walster (1966) attributing blame to an individual for a negative outcome rather than seeking external explanations satisfies our innate need to think we are in control of our life course and that such 'feared' outcomes are avoidable.

Furthermore, as discussed in Chapter 2, FAE is often explained in terms of the just-world hypothesis whereby individuals adopt the ideological assumption of a fair 'just' world where individuals get what they deserve. Crandall (1994) and Carels et al; (2009) both found that bias and discrimination towards obesity is strongly associated with the endorsement of just-world beliefs. In line with such, Burger (1981) argues that individuals are motivated to think of the world as a fair, just place as it reduces the salience of perceived threats. In the present study, the threat of becoming overweight and the subject of ridicule and discrimination may have been motivation for women to adopt such just-world beliefs and afford higher levels of internal blame to the overweight target. As discussed readily in Chapter 2, being underweight does not seem to render the same levels of discrimination and bias as being overweight or obese (Saguy and Gruys, 2010), nor is it pervasively constructed as a matter of deviance so prominently. Thus, women are unlikely to conceptualise the notion of underweight in the same 'threatening', fearful way as they do the thought of becoming overweight or obese (Lamb et al, 1993). In sum, the adoption of this FAE may manifest in terms of high levels of internal blame for overweight subjects for a number of reasons; it facilitates women to protect themselves from what they consider a threat to their sense of self, it allows meaning to be afforded to unsettling circumstances and provides overall psychological benefit.

However, it should also be acknowledged that Ebner et al (2011) did not find just-world beliefs to be a significant predictor of weight bias amongst those who were obese or with eating disorders. This may suggest it is wrong to assume that ideological assumptions such as just-world beliefs can wholly explain internal blame attributions for overweight subjects. Instead, Ebner et al's (2011) findings were consistent with Crandall's (2003) perspective that it is the belief that a certain condition such as obesity is internally controllable that may lead to individual blame and bias towards the condition. In line with this, Mehta and Farina (1997) found that when an explicit biological explanation was offered for a condition, participants reported lower levels of internal blame compared to when no explanation was offered. This may be the same for both obesity and 'underweight'. However, this study did not provide such causal

information, and instead sought to identify blame attributions at face value i.e. the ones we make on a everyday basis without any informed knowledge. This was done in order to highlight the harsh and unfair nature of such, especially to those who are overweight or obese. The images presented in the present study were deliberately similar to those pushed by the media on a daily basis, with little anecdotal explanation for the weight condition thus highlighting the damaging nature of such. Future studies should focus on incorporating causal factors to determine if differences exist when participants are provided with real-life context and causal factors.

External Blame - The Emergence of Socio-Cultural Culpability

In terms of a secondary hypothesis, the present study asserted that the underweight target would be attributed significantly higher levels of external (environmental) blame for their weight status than the overweight target. However, findings yielded from a one-way ANOVA suggest that there was no statistically significant difference between levels of external blame across both target weight conditions. Additionally, there was no statistically significant difference between levels of internal and external blame within just the overweight condition. Although these findings disprove our second hypothesis and contradict the existence of FAE within this paradigm, it is useful to acknowledge their surprising significance. They suggest that individuals attribute blame equally to internal (self) and external (environmental) factors inferring that the rhetoric of self-blame and individual responsibility that is so pervasive in the current literature and media may not necessarily carry validity in real-life application (Saguy and Gruys, 2010). If individuals consider external factors to be equally culpable in the manifestation of obesity then it is necessary to question why the overweight and obese are condemned and ridiculed at such a prevalent rate (Klassen et al, 1996; Fonda, 2000; Sagone and De Caroli, 2012). Such findings are inconsistent with current literature that coalesces around a prevalent overweight bias that presupposes individual responsibility (Crandall, 1994; Puhl and Heuer, 2009). However, one possible explanation for such is the acknowledgment of the growing discussion in the media that both the food industry and the media are in part to blame for the obesity 'epidemic' and that culture in general has become obesogenic (Morrison-Thomson, 2009). There is growing recognition that public health issues are involved with the prevalence of obesity and it is not merely a matter of individual responsibility (Lawrence, 2004; Niederdeppe et al, 2011).

However, although the present study's findings suggest women are recognising that much like being 'underweight', obesity is not just a matter of individual responsibility, levels of internal blame still remain significantly higher for the overweight target. This suggests that the construction of obesity as a matter of personal responsibility that has been embedded in our everyday discourse remains pervasive when it comes to attributing blame. However, this finding may be representative of a shift in attitude towards obesity; suggesting it is perhaps no longer considered wholly a product of individual choice and lacking self-control (Joffe and Staerkle, 2007). This is not to say that there is not a considerable way to go in order to overcome the rhetoric of individual blame, but the conflicted nature of these blame attributions does suggest that the growing recognition of the food industry and media as culpable agents in the obesity 'epidemic' is perhaps slowly bridging the gap between how overweight and underweight individuals are perceived and in turn, helping to reduce the societal burden that being overweight or obese can afford.

The Moderating Role of Body Appreciation and the Implication of the 'Feared' Self

Aside from more generalised differences in how internal (self) blame is attributed unequally between overweight and underweight targets, the present study sought to determine whether the perceivers own body appreciation moderated these attributions. To test our third and fourth hypotheses, a multiple regression analysis was undertaken and perceiver's body appreciation was found to moderate levels of internal blame. More specifically, levels of internal blame were found to be moderated by women high in body appreciation attributing less internal blame to overweight targets than women who are low in body appreciation thus confirming our hypotheses. Moreover, findings from the present study compliment current literature and suggest body appreciation serves as a protector against thin ideals and renders an individual more critical of such resulting in, in this instance, lower attributions of internal (self) blame for those who violate such. Aside from this notion of body appreciation serving as a protector against ideal actual self-discrepancies, it is also possible to infer further explanation for this effect in terms of a 'feared' self (Markus and Nurius, 1986; Ogilvie, 1987; Steer and Woodman, 2011).

More specifically, throughout the present study, the concept of a thin 'ideal' self has been readily discussed (Halliwell, 2012; Thompson and Stice, 2001; Joffe and Staerkle, 2007). This concept creates a westernised vision of what women should ensure their bodies look like (Thompson and Stice, 2001). As it has been noted, deviance from this ideal, in the form of becoming overweight or obese is condemned and ridiculed at prevalent rates (Saguy and Gruys, 2010; Puhl and Heuer, 2009; Crandall, 1994). Consequently, researchers have conceptualised what is referred to as the 'feared' self (Steer and Woodman, 2011). In essence, the 'feared' self is the version of the self an individual is afraid to become. For women, this is most often conceptualised in terms of the omnipotent foe – the fat 'feared' self (Steer and Woodman, 2011). In an online survey, Schwartz et al, (2006) found that 60% of women would rather lose a year of their life than be fat and between 15% and 30% said they would rather divorce their partners, be depressed, or become alcoholic than be obese. This highlights the prevalence of fear at becoming overweight or obese. However, by conceptualising body appreciation as a protector against exposure to images of ideal bodies (Halliwell, 2012), it could be suggested that within this paradigm, body appreciation also serves to protect against overly critical responses to the feared self. This is to suggest that all women in today's culture have a version of a 'feared' self (Woodman and Hemmings, 2008). However, if high body appreciation serves to protect them from internalisation of the thin ideal (Halliwell, 2012), then it may also protect them from the 'feared' self and thus render them less likely to make such highly critical judgments of those who represent such. More specifically, it can be cautiously suggested that those high in body appreciation may be less likely to attribute internal (self) blame to an overweight target because they are protected from both the ideal and 'feared' self. This potential dualistic notion would perhaps serve as the ultimate defence against both pervasive socio-cultural discourses of the thin 'ideal' and the consequential 'feared' self. However, such a conceptualisation is yet to be investigated and this postulation should be taken with caution.

In addition to this, research on the ‘feared’ self provides further insight into our findings; as asserted by Steer and Woodman (2011), those who are closer to realising their ‘feared’ self are more likely to want to create distance from such in order to ensure controllability and psychological well-being (Carver et al, 2008). More specifically, it can be tentatively implied that perhaps those with low body appreciation scores when observing an overweight female would feel that the image represents a psychical manifestation of their omnipotent ‘feared’ self and in order to distance themselves from such, they may attribute higher levels of internal (self) blame. It would be psychologically beneficial to favour the notion of individual responsibility in order to reassure them that it is within their control to avoid giving in to this notion of the ‘feared’ fat self that resides in the conscious of many women (Steer and Woodman, 2011). More specifically, the harsh judgement in terms of high internal blame score could be suggested as a way of distancing themselves from unsatisfactory aspects of their own behaviour which may mirror those of the perceived target (Steer and Woodman, 2011). In contrast to this, those with high body appreciation and thus possibly further from their ‘feared’ self were perhaps more comfortable to attribute lower levels of internal blame because their ‘feared’ self does not appear as overarching. These suggestions are all based on a limited research foundation and as such, should be taken with caution.

Limitations and Future Directions

Although the present study had much strength, in terms of a large, randomised sample, the limitations must also be acknowledged. Firstly, the participants were recruited from a University population thus limiting the generalisability of the findings to the wider population who will differ significantly in terms of age, class and educational background.

Secondly, the measures used to assess internal and external blame, respectively, relied on explicit rather than implicit attitudes. Although the study itself sought to hide the true purpose of the research, the questions were explicitly worded in terms of blame judgements. There are currently no pre-existing tests that measure implicit blame attributions towards either overweight or underweight targets and the division of one surpassed the realms of this research paper. Despite concerns regarding both the validity and reliability of implicit measures, future research may benefit from investigating such (Gawranski et al, 2007).

Thirdly, the present study sought to investigate blame attributions towards fictional characters who were either overweight or underweight, respectively. As such, an important limitation of the present study is that *actual* blame attributions towards a *real-life* overweight or underweight target in *real-life* settings were not examined. In order to replicate the harsh nature of the blame attributions individuals make at face value on an everyday basis and the images that we are subjected to in the media, this study did not seek to incorporate any causal information for the targets weight conditions that may alter an individual’s perception. However, the findings can therefore not be considered representative of blame attributions that would perhaps be made if participants had received additional causal information or perhaps a different context for the targets weight condition. Although this is an important first step, more ecologically-valid research is needed to understand the relationship

between internal/external blame attributions and overweight/underweight targets and perhaps the causal/ contextual variables that may moderate such.

Finally, the present study adopted a quantitative methodology, praised for its control and objectivity. However, it is also considered to provide a narrow and superficial outlook that does not necessarily yield real-world reflections of people's attitudes and opinions (Given, 2008). Qualitative methodologies are beneficial in gaining a richer, more elaborate account of human perception and would perhaps be beneficial in the blame attribution paradigm (Given, 2008).

In terms of future directions, in addition to the more generalised recommendations discussed above, it is important to recognise the importance of the present study's findings and its implications for future research in the field of blame attribution and weight bias. One of the most salient findings demonstrated how individuals perhaps seek to protect themselves from the 'uncomfortable' notion of becoming overweight or obese. Whether it be via the feared self or adoption of just-world beliefs, a prominent discourse of defensiveness has emerged during the course of the present study. Future studies may benefit from the exploration of this further and investigate how such may not only serve to protect us from the fear of realising an uncomfortable version of our selves but also perhaps result in harsher judgements to those who do not conform to the westernised ideal notion of a slim physique. Moreover, body appreciation was found to moderate attributions of internal blame for overweight subjects and such was discussed in terms of the feared self. This conceptualisation is in its infancy and no research to date has uncovered a causal link between affordances of blame and emotional proximity to the 'feared' overweight self. At present, such a connection is tentative and future studies should seek to test a direct relationship using implicit measures across a diverse sample in order to gauge its significance in the field of blame attribution.

Conclusion and Recommendations

In summary, the present study highlights that women attribute significantly higher internal (self) blame attributions to a target who is overweight. This is congruent with the literature that suggests weight bias towards the obese is a prevalent societal problem and society pervasively frames obesity as a moral problem indicative of lacking discipline and self-control (Joffe and Staerkle, 2007) and more specifically, individual choice (Crandall, 2003), despite increased discussion of external social-cultural culpability (Lawrence 2004). This is opposed to underweight individuals that have been framed as victims of societal pressures and eating disorders, triggered by external forces beyond their control (Saguy and Gruys, 2010). Moreover, the results of the current study indicate that justification ideologies and fundamental errors in attribution, such as just-world beliefs and the controllability of the condition may underlie how blame is attributed differently between opposing ends of the weight spectrum (Burger, 1981). The salience of internal blame for overweight subjects is likely the product of pervasive socio-cultural discourses that place undue emphasis on individual culpability and the deviant nature of the overweight and obese. However, the findings in terms of external blame have provided a foundation of evidence for the existence of a new discourse that recognises the role of external factors in the manifestation of both 'overweight' and 'underweight'. Based on these findings, weight bias reduction efforts that highlight a stronger emphasis on a medical, socio-cultural basis for obesity and target attribution errors, such as just-world beliefs may be promising strategies for future research.

Furthermore, another promising finding of the present study highlights the implication of body appreciation in the blame attribution and weight bias paradigm with high body appreciation serving as a moderator to reduce the salient effect of internal blame attribution. An interesting conceptualisation posits a relationship between high body appreciation and protection against both ideal/actual self-discrepancies as well as overly critical responses to the 'feared' self-resulting in lower attributions of internal (self) blame to those who are overweight (Halliwell, 2012; Steer and Woodman, 2011). This potential new finding is worthy of further investigation and could prove crucial in weight bias reduction efforts. Future initiatives should perhaps focus on body appreciation enhancement to help alleviate the burden put upon women by pervasive socio-cultural discourses.

In conclusion, the present study originally sought to examine potential differences in how we blame overweight and underweight individuals. However, it has become apparent that it is crucial we uncover who or what is responsible for such blame judgments. Attribution Theory and more specifically, Fundamental Attribution Error offers a psychological insight into what motivates human beings to attribute blame. Literature surrounding the concept of an omnipotent 'feared self' also provides clear evidence to support why individual difference factors in terms of body appreciation may play a crucial role. However, these are both heavily influenced by the socio-cultural discourses and ideologies that reside in the western world. That is to say, blame attribution cannot be considered the exclusive consequence of individual differentiation, exposure to hegemonic ideologies or Fundamental Attribution Error. It is instead, interdependent, mutually reliant on a myriad of both psychological and sociological processes that work together to negotiate both our motivations to understand society and whom we render responsible.

References

- Aiken, L. S., and West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: Sage.
- Augoustinos, M., and Walker, I. (1995) *Social cognition: an integrated introduction*. London: Sage.
- Avalos, L., Tylka, T. L., and Wood-Barcalow, N. (2005). The Body Appreciation Scale: Development and psychometric evaluation. *Body Image*, 2: 285– 297.
- Brumberg, J.J. (1988). *Fasting girls: The emergence of anorexia nervosa as a modern disease*. Cambridge: Harvard University Press.
- Bryman, A. (2004). *Social research methods*. Oxford: Oxford University Press.
- Burger, J. M. (1981). Motivational biases in the attribution of responsibility for an accident: A meta-analysis of the defensive-attribution hypothesis. *Psychological Bulletin*, 90: 496-512.
- Campo, S., and Mastin, T. (2007). Placing the Burden on the Individual: Overweight and Obesity in African American and Mainstream Women's Magazines. *Health Communication* 22 (3): 229-240.
- Carels, R.A., Young, K.M., Coit, C., Harper, J., Gumble, A., Wagner, M., et al. (2009). Internalized weight stigma and its ideological correlates among treatment-seeking adults. *Eating and Weight Disorders*, 14:92–97.
- Carver, C. S., Lawrence, J. W., and Scheier, M. J. (1999). Self-discrepancies and affect: Incorporating the role of feared selves. *Personality and Social Psychology Bulletin*, 25: 783–792.
- Crandall, C. (2003) Ideology and lay theories of stigma: The justification of stigmatization in Heatherton, T., Kleck, R., Hebl, M., and Hull, J. (Eds.), *The social psychology of stigma*, Guilford Press, New York.
- Crandall, C.S. (1994). Prejudice against fat people: Ideology and self-interest. *Journal of Personality & Social Psychology*, 66(5): 882-894.
- Crandall, C.S. and Eshleman, A. (2003). "A Justification-Suppression Model of the Expression and Experience of Prejudice." *Psychological Bulletin*, 129: 414–46
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika* 16 (3): 297–334.
- DeJong, W. (1980). The stigma of obesity: The consequences of naïve assumptions concerning the causes of physical deviance. *Journal of Health and Social Behavior*, 21: 75-87.

- Duckitt, J. (1992). *The Social Psychology of Prejudice*. New York: Praeger Publishers.
- Ebneter, D.S., Latner, D.J., and O'Brien, K.S. (2011). Just world beliefs, causal beliefs, and acquaintance: Associations with stigma toward eating disorders and obesity. *Personality and Individual Differences*, 51(5): 618-622
- Field, A. (2013). *Discovering Statistics using IBM SPSS Statistics*. London: Sage.
- Fiske, S.T. and Taylor, S.E. (1991). *Social cognition (2nd ed.)*. New York: McGraw-Hill.
- Fonda, S. (2000) Fat is a financial issue: Summary of study, economic and employment outcomes of obesity in middle-aged women and men. *Economist*, 357: 93
- Friedman, K.E, Reichmann, S.K., Costanza, P.R., Zelli, A., Ashmore, J.A., and Musante, G.J. (2005). Weight stigmatization and ideological beliefs: Relation to psychological functioning in obese adults. *Obesity*.13: 907–916.
- Gard, M., and Wright, J. (2005) *The obesity epidemic: science, morality and ideology*, London: Routledge.
- Garner, D.M., and Garfinkel, P.E. (1980) Socio-cultural factors in the development of anorexia nervosa. *Psychological Medicine*, 10: 647-656.
- Garner, D.M., and Garfinkel, P.E. (1981). Body image in anorexia nervosa: Measurement, theory and clinical implications. *International Journal of Psychiatry in Medicine*, 11:263-284.
- Gawranski, B., Lebel, E.P., and Peteres, K.R. (2007). What Do Implicit Measures Tell Us?: Scrutinizing the Validity of Three Common Assumptions. *Perspectives on Psychological Science*, 2(2): 181-193
- Gilbert, N. (2008). *Researching social life*. London: Sage Publications.
- Given, L.M. (2008). *The Sage encyclopedia of qualitative research methods*. Los Angeles, Calif: Sage Publications.
- Grilo, C.M., and Mitchell, J.E. (2010). *The treatment of eating disorders: A clinical handbook*. London: Guilford Press.
- Groesz, L.M., Levine, M.P., and Murnen, S.K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review *International Journal of Eating Disorders*, 31:1–16
- Halliwell, E. (2012). The impact of thin idealized media images on body satisfaction: Does body appreciation protect women from negative effects? *Body Image* 10(4) 509-514

Health and Social Care Information Centre. (2013). The Health Survey for England - 2012 trend tables. London: Health and Social Care Information Centre, [Online] Available at: <http://www.hscic.gov.uk/catalogue/PUB13219>. Last Accessed: 13/03/2015.

Hebl, M.R., and Turchin, J.M. (2005) The stigma of obesity: What about men? *Basic and Applied Social Psychology*, 3:267–275.

Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: Wiley.

Holmqvist, K., and Frisén, A. (2012). I bet they aren't that perfect in reality: Appearance ideals viewed from the perspective of adolescents with a positive body image. *Body Image*, 9: 388–395

Joffe, H., and Staerkle', C. (2007). The centrality of the self-control ethos in western aspersions regarding outgroups: A social representational approach to stereotype content. *Culture & Psychology*, 13: 395–418.

Klassen, M.L., Clayson, D., and Jasper, C.R. (1996) Perceived effect of a salesperson's stigmatized appearance on store image: an experimental study of student's perceptions. *The International Review of Retail, Distribution and Consumer Research*, 6: 216-224.

Lamb, C., Jackson, L., Cassidy, P. and Priest, D. (1993). Body Figure Preferences of Men and Women: A Comparison of Two Generations, Sex Roles. *A Journal of Research*, 2 (5): 345.

Landsberger (1958), *Hawthorne Revisited*, Ithaca.

Latner, J.D. and Stunkard, A.J. (2003). "Getting Worse: The Stigmatization of Obese Children." *Obesity Research*, 11: 452–56.

Lawrence, R. G. (2004). Framing obesity: The evolution of news discourse on a public health issue. *The International Journal of Press Politics*, 9: 56–75.

Lerner, M. J., and Miller, D. T. (1977). Just-world research and the attribution process: Looking back and ahead. *Psychological Bulletin*, 85: 1030-1051.

Markus, H., and Nurius, P. (1986). Possible selves. *American Psychologist*, 41:954–969.

Mehta, S., and Farina, A. (1997). Is being "sick" really better? Effect of the disease view of mental disorder on stigma. *Journal of Social and Clinical Psychology*, 16: 405–419

Mills, J. K. and Andrianopoulos, G.D. (1993). The relationship between childhood onset obesity and psychopathology in adulthood. *Journal of Psychology*, 127(5): 547- 551.

- Morrison-Thomson, D. (2009). Big food and the body politics of personal responsibility. *Southern Communication Journal*, 71(1): 2-17
- Musher-Eizenman, D., and Carels, R.A. (2009). The impact of target weight and gender on perceptions of likeability, personality attributes, and functional impairment. *Obesity Facts*, 2: 311–317.
- Mustillo, S. (2003). Obesity and psychiatric disorder: Developmental trajectories. *Pediatrics*, 111: 851-859.
- Niederdeppe, J., Shapiro, M., & Porticella, N. (2011). Attributions of responsibility for obesity: Narrative communication reduces reactive counter-arguing among liberals. *Human Communication Research*, 37: 295-323.
- Obesity Action Coalition. (2015). Obesity - Related Conditions. [Online] Available at: <http://www.obesityaction.org/understanding-obesity/related-conditions>. Last Accessed: 13/03/2015.
- Ogilvie, D. M. (1987). The undesired self: A neglected variable in personality research. *Journal of Personality and Social Psychology*, 52: 379–385.
- Puhl, R.M. and 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. and Heuer, C.A. (2009). The stigma of obesity: A review and update. *Obesity*, 17: 1–24.
- Puhl, R.M. and Latner, J.D. (2007). Stigma, obesity, and the health of the nation's children. *Psychological Bulletin*. 13: 557–580
- Puhl, R.M., and Latner, J.D. (2010). Reducing anti-fat prejudice in pre-service health students: A randomized trial. *Obesity*, 18(11): 2138-2144.
- Rice, C. (2007). Becoming the fat girl: Acquisition of an unfit identity. *Women's Studies International*, 30: 158-174.
- Roebuck, K. (2012). *US Privacy Regulation: High-impact Strategies - What You Need to Know: Definitions, Adoptions, Impact, Benefits, Maturity, Vendors*. New York: Emereo Publishing.
- Roehling, M. V. (1999). Weight-based discrimination in employment: Psychological and legal aspects. *Personnel Psychology*, 52: 969– 1017.
- Rush, L.J. (1998). Affective reactions to multiple social stigmas. *Journal of Social Psychology*, 138: 421-430.
- Sagone, E., and De Caroli, M. E. (2012). Anti-fat or anti-thin attitudes toward peers? Stereotyped beliefs and weight prejudice in Italian children. *Procedia – Social and Behavioral Sciences*, in press.

Saguy, and Gruys, (2010). "Morality and health: News media constructions of overweight and eating disorders." *Social Problems*, 57(2): 231-250.

Shaver, K. G. (1985). *The attribution of blame: Causality, responsibility, and blameworthiness*. New York: Springer-Verlag.

Schwartz, M.B., Vartanian, L. R., Nosek. B.A., and Brownell, K. (2006). The influence of one's own body weight on implicit and explicit anti-fat bias. *Obesity*, 14(3): 440- 447.

Steer, R., and Woodman, T. (2011). Body self-discrepancies and women's social physique anxiety: The moderation role of the feared body. *British Journal of Psychology*, 102(2): 147-160

Swami, V., Hadji-Michael, M., and Furnham, A. (2008). Personality and individual difference correlates of positive body image. *Body Image*, 5: 322–325

Tantleff-Dunn, S., Hayes, S. and Braun, C.P. (2009). How did you get so thin? The effect of attribution on perceptions of underweight females. *Eating Weight Disorders*, 14 (1): 38-44.

The National Health Service. (2015). Obesity. [Online] Available at: <http://www.nhs.uk/conditions/Obesity/Pages/Introduction.aspx>. Last Accessed 13/03/2015.

The National Health Service. (2015). Obesity. [Online] Available at: <http://www.nhs.uk/Livewell/Goodfood/Pages/Underweightadults.aspx>. Last Accessed 13/03/2015.

Thompson, J. K., Covert, M. D., and Stormer, S. M. (1999). Body image, social comparison, and eating disturbance: A covariance structure modelling investigation. *International Journal of Eating Disorders*, 26: 43–51.

Thompson, J.K. and Stice, E. (2001). Thin-ideal internalization: Mounting evidence for a new risk factor for body-image disturbance and eating pathology. *Current Directions in Psychological Science*, 10: 181–183.

Thompson, J.K., and Stice, E. (2001). Thin-ideal internalization: Mounting evidence for a new risk factor for body-image disturbance and eating pathology. *Current Directions in Psychological Science*, 10:181–183

Tomai, E. and Forbus, K. (2007). Plenty of blame to go around: a qualitative approach to attribution of moral responsibility. In Proc. Qualitative Reasoning Workshop, Aberystwyth: UK

Tylka, T.L., and Kroon Van Diest, A.M. (2013). The Intuitive Eating Scale-2: Item refinement and psychometric evaluation with college women and men. *Journal of Counseling Psychology*, 60: 137–153

Walster, E. (1966). Assignment of responsibility for an accident. *Journal of Personality and Social*, 31: 73-79.

Want, S.C. (2009). Meta-analytic moderators of experimental exposure to media portrayals of women on female appearance satisfaction: Social comparisons as automatic processes. *Body Image*, 6: 257–269.

Woodman, T., and Hemmings, S. (2008). Body image self-discrepancies and affect: Exploring the feared body self. *Self and Identity*, 7: 413–429.

Wortman, C. B. (1976). Causal attributions and personal control. In J. H. Harvey, Ickes, W.J., and Kidd, R.E. (Eds.), *New directions in attribution research* (pp. 23-51). Hillsdale, New Jersey: Erlbanm.