An Exploration of the Influence
Of Media on Body Image Among
Irish Students and Public.

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An exploration of the influence of media on body image among Irish students

And the public.

ABSTRACT

The aim of this study is to explore how the media influences people’s body image. This paper will examine how the media portrays its beauty ideal. Different models to measure body image will also be examined. A cross-section questionnaire study was carried out using independent samples. One hundred participants were involved, fifty of whom were students from Dublin Business School. The remaining fifty were picked randomly from the public. The questionnaire included of a participant information sheet, The Sociocultural Attitudes Towards Appearance Questionnaire devised by Heinburg & Thompson, 1995, the Body Shape Questionnaire devised by Cooper et al. (1986). Average media influence was tested as a predictor variable. ANOVA tests indicated that there were some differences in outcome measure regarding body shape and frequency.
INTRODUCTION

Overview

This introduction will define and outline the main models to measure body image by a range of researchers. The influence of the media on males and females body image, its influence on culture and beauty ideals will also be discussed. Sources of body image dissatisfaction will also be discussed in detail.

The Media and beauty ideals.

Women in the Western world are subjected to a culture of thinness and there is pressure on males to be muscular (Agliata & Tantleff-Dunn, 2004). The media are found to shape this perceived ideal, shaping peoples physical ideals and this can negatively impact females and males body image. The media uses sexual images and barely dressed models to endorse and sell their products. Scantily clad female and muscular male models are used to sell anything from perfume to beer. Skinny or muscular celebrities are splattered across magazines as well as television ads, their body shape known as the ideal body image (Barlett et al., 2008) “The beauty industry is one of the most prosperous sectors in today’s developed economies” (Eisend & Moller, 2006, p.101).

Sociocultural influences include family, peers and media but women have reported that the greatest amount of pressure to conform to an ideal body image came from the media (Watson & Vaughn, 2006). Informed by the sociocultural theory, research into body ideals and the mass media is growing. This research discusses whether body perfect ideals portrayed in the media are factors for negative body image in males and females. This perfect body ideal is biogenetically difficult for the
average women. The thin ideal portrayed in the media has become thinner over the past decades, making this ideal even more unrealistically to attain. Theorists have argued that this image and also a culture obsessed with dieting has been one of the indicators in the growing number of people with eating disorders (Hawkins et al., 2004). Cafri et al 2005 found a meta-analysis of cross sectional studies found that internalisation has medium-to-large associations with body dissatisfaction. Several longitudinal studies have also provided empirical evidence that internalization of the thin ideal is a significant predictor of increases in body dissatisfaction, particularly for girls (Knauss et al., 2008, p.635).

Koyunco et al., (2010) found that this pressure on achieving this perfect ideal can lead to social physique anxiety in both children and adults. Mc cabe and Ricciardelli 2005 found that children of mothers who were bulimic were more critical of their daughters weight (Nustad, et al., 2008). Social marketing may be a useful method of counteracting negative media influences, used as an intervention programme. “Social marketing is based upon consumer’s beliefs, needs and attitudes and is aimed at influencing behaviour” (Nustad et al., 2008).

**The Medias influence on culture.**

Most adults read magazines, newspapers on regular basis. Nearly every Western household has a television with people tuning in for a couple of hours at least each day. Most people watch television more than any other pastime (Cash & Pruzinsky, 2002). These adverts are displayed in magazines, television, the internet and even driving down the street on billboards (Hobza et al., 2007). Celebrity culture is very popular. “Nowadays digital enhancement of magazine images normalises an illusion of desirable bodies that is not physically possible” (Tucci & Peters, 2008, p.521). Images of thin models in the media, expression of negative attitudes towards
fatness is implicated in promoting that thinness is desirable. (Wardle & Watters, 2004). Pursuing absurdly thin ideal weights risks people’s mental health (Wardle et al., 2006). Beauty ideals vary across different ethnicities. Archibald et al, 1999 found that African American females tend to score higher on measures of Body image than their Caucasian counterparts (Ata et al., 2007).

**Influence of the Media on males body image.**

Attention to male’s body image has slowly been increasing. “From Playgirl and the Chippendales, debuting in the 1970s, to muscular movies such as Rambo in the 80s, to the male cosmetic surgeries of the 90s, the emphasis on appearance that has long plagued women has been increasingly directed at men” (Agliata & Tantleff-Dunn, 2004). “Barlett et al., (2005) found that after handling extremely muscular action figures, males had decreased body esteem” (Barlett et al. 2008, p.283). The pressure on males to increase muscles has been linked to their body image (Ata et al., 2006). A close inspection of popular magazines found that the majority of diet-related adverts were found in female-targeted magazines whereas male magazines had more exercise and weight-lifting adverts (Agliata & Tantleff- Dunn, 2004). Negative body image has been associated with disordered eating behaviours (Watkins et al., 2008). Pope et al., (2000) found that the current ideal male body is characterized by a mesomorphic body shape (Hargreaves & Tiggemann, 2009).

It was found that more modern action figures, which are played with by young boys, are growing in muscle size across the past three decades (Barlett et al., 2008). This grooming from an early age to fit into this muscular ideal can have devastating effects and behaviours. “These negative behaviours may include increased steroid usage (Blovin & Goldfield, 1995), increased food supplement intake (Mc Cabe & Ricciardelli, 2003), and an increased probability to develop an eating disorder, such as
bulimia or anorexia nervosa” (Barlett et al., 2008). Ata et al., 2007 found that males and females differed in their means of media influences.

**Influence of the Media on females body image.**

“Body image is an important element of the intricate mechanisms of one’s own identity” (Priya et al., 2010). Miller (2005) found that whether a woman is underweight, overweight or normal weight, most Western women are obsessed about tips on how to become thinner. Heinberg & Thompson (1995) found that women became more depressed, angry, and had higher degrees of body image disturbance after watching adverts that focused on appearance and thinness (Agliata & Tantleff-Dunn, 2004).

“Groesz, Levine, and Murnen (2002) conducted a meta-analysis to examine the effect that thin media images had on the self-image of females. Their meta-analysis included 25 studies that yielded 43 effect sizes and showed a significant effect size estimate, d=0.31, which suggests that there is a significant relationship between viewing images of thin women and the development of a negative self-image in women” (Barlett et al. 2008, p.282).

This gap between the skinny models and the size of the average woman is likely to be reflected in their self concept (Dittmar et. al., 2009). Body image is central to self concept and self-esteem which influences psychological functioning and unhealthy body shaping behaviours (Dittmar et. al., 2009). “A remunerative strategy for marketing health, beauty, and fashion products, for example, is to create an awareness of a “gap” between the consumer and the ideal, and then to promise (and sell) the solution in a product” (Becker, 2004, p.534).

Becker et al., (2002) found in their study a dramatic increase in indicators of disordered eating during the 3 years following the introduction of broadcast television
with Western programming to a community in Fiji, a period which was also a time of rapid social and economic transition (Becker, 2004). Another study on the same community found the percentage of subjects with pathologically high scores on a test for disordered eating more than doubled from 12.7% to 29.2% and three quarters of the study population reported that they felt ‘too big or fat’.

Western media images may be powerful in non-Western contexts because of its exclusivity (Becker, 2004). In a study interviewing women’s opinions Murray, Touyz & Beumont (1996) found that seventy percent of their female interviewees reported that magazines make them want to look like the models in the images. The same results were reported for television images (Maddox, 2005). Self-presentation refers to the process of monitoring and controlling how one is perceived and evaluated by others, with the goal of creating a good impression, which is important to many women (Koyunco, 2010). The new extreme of dress size “zero” represents a starvation-level Body Mass Index (<16) in the range of people suffering from anorexia (Dittmar, 2009).

Research has found that college-aged women are likely to manage their weight inappropriately (Wharton et al, 2008). “Richins (1991) conducted focus group interviews with college women and found evidence of specific comparisons with models featured in media images, as well as negative self-related feelings resulting from exposure to these images”(Maddox, 2005, p.1117). Also “Turner, Hamilton, Jacobs, Agood, and Hovde (1997) showed that after viewing magazine images, body dissatisfaction was greater in the control condition, and Lavine, Sweeney, and Wagner (1999) showed a similar result for viewing television images”(Monro & Huon, 2005, p.86). “Stice, Schupak-Neuberg, Shaw and Stein (1994) linked overall media exposure to increased eating disorder symptomatology in a sample of female
undergraduates” (Miller and Halberstadt, 2005, p.190). Furthermore Harring et al (2010) examined the relationship between eating disturbance, body image, and academic achievement and concluded that academic interference may be an outcome for individuals who experience eating problems and body image disturbance. "Exposure to visual images depicting attractive females is found to alter women’s perception of their own sexual attractiveness and mating viability through a cognitive comparison process referred to as the contrast effect” (Sigman, 2010, p.4).

Gender differences in brain activity generated by unpleasant word stimuli concerning body image’ found that in women, words such as ‘obesity’, ‘corpulence’ or ‘heavy’ were accompanied by increased activation in the amygdale, while the left medial prefrontal cortex associated with decision making and rational thought became inactive. In men the response was the reverse (Sigman, 2010).

On the cover of magazines are headlines encouraging women to diet. Celebrity’s diets are revealed and readers are encouraged to follow in their footsteps. This dieting may affect psychological well being and biological functioning (Sigman, 2010). “Cottone et al (2009) found that the brain of rats alternating between healthy and sweet (unhealthy) food in the way many dieters do, showed highly significant recruitment of neural circuits (CRF system) involved in stress reactions and promoted the ‘compulsive selection’ of unhealthy food and the under eating of healthy foods” (Sigman, 2010, p.4). “Diet can affect gene expression and a disturbance of dopaminergic genes have been found in people with eating disorders” (Sigman, 2010, p.4).

Models to measure body image.

“Applied to body image, sociocultural theory suggests that the ideal human form is a representative consensus of what is designated by society” (Neighbours et
al., 2008, p.69). “Sociocultural theory of body image proposes that societal standards of beauty are inordinately stressed (Fallon, 1990) and contribute to the development and maintenance of body image disturbance (Thompson et al., 1999). There are two major Types of social comparison, downward social comparison, comparison to others who we perceive to be less fortunate than ourselves in some way this enhances mood and feelings of self-worth. Upward social comparison, comparison to others we perceive to be socially better than ourselves, which can lead to negative mood and can threaten self-evaluation (Bessenoff, 2006).

“One shortcoming of sociocultural theory is that it fails to explain why some people are more impacted by the media than others. To address this, researchers have borrowed from Markus’s (1977) self-schema theory and have applied the concept of appearance schemas-organising and guiding cognitive structures that process self-relevant information” (Agliata & Tantleff-Dunn, 2004, p.9). The thin-ideal internalization measures whether or not women have internalized sociocultural pressures towards thinness but simply being aware of them, through adopting the thin ideal as goal (Dittmar et al., 2009).

Most women have larger bodies than ultra thin models, therefore we would expect that they experience body dissatisfaction when exposed to such models, but only if they desire, and strive for a thin body. In support of this proposal, thin-ideal internalization emerged as a reliable moderator of media exposure effects across a number of experiments (Dittmar et al., 2009). “Self-discrepancy theory may provide a link between research on moderators and the social comparison research on media effect. Self-discrepancies are representations in the self concept of ways in which one falls short of some important standard (Bessenoff, 2006, p.240).
Bandura’s social cognitive theory “assumes that people learn and model behaviours of attractive others. Social cognitive theory posits that women find thin models in magazines and television attractive and try to imitate their lifestyle, this is done through dieting which in some cases can trigger an eating disorder” (Holmstrom, 2004). “Cultivation theory asserts that enduring exposure to television has subtle and cumulative effects on shaping views of social reality (Gerbner et al., 1994). Cultivation effects relate also to body image” (Eisend & Moller, 2007, p.102). Also Cultivation theorists “argue that normative beliefs about the social world, as emphasized in mass media, become beliefs and attitudes about the self” (Levine & Murnen, p.28).

“Objectification Theory (Fredrick & Roberts, 1997) posits that women will have a negative self-image after viewing thin female models” (Barlett et al., 2008, p.281). “Objectification Theory and Mc Kinley and Hyde’s (1996) objectified body consciousness construct are based on a social construction perspective and are highly comparable. Both theories assume that the female body compared to the male body is more likely to be looked at, evaluated and potentially objectified” (Knauss et al., 2008, p.634). “Factors that have also been proposed to be related to objectified body consciousness are the internalisation of the perceived media body ideal” (Knauss et al., 2008, p.634).

“The tripartite influence model (Shroff & Thompson, 2006; Smolak, Muren, & Thompson, 2005) posits that three primary sociocultural influences (parents, peers, and mass media) directly impact body image dissatisfaction, which has a direct effect on behavioural outcomes eg: bulimia and steroid usage” (Barlett et al, 2008, p.283).

Body image disturbance
Body image disturbance has been linked to depression, low self esteem and social anxiety (Agliata & Tantleff- Dunn, 2004). “In 1984, Rodin, Silberstein and Striegel-Moore coined the term normative discontent to refer to troubling findings of widespread body dissatisfaction among girls and women in Western cultures” (Maddox, 2005, p.1114). Body dissatisfaction can be considered a risk factor for eating disorders (Lew et al., 2007). Research in this area has produced over a hundred studies that demonstrate body image predicts eating pathology (Grabe et al., 2008).

“At the core of the phenomenology of body image dissatisfaction are two images: the perceived self and the ideal self” (Silberstein et al., 1988). Body dissatisfaction has been linked to dieting and disordered eating (Agliata & Tantleff- Dunn, 2004). Results of many studies indicate that desiring an ideal body image different to their own can lead to weight control strategies, body image dissatisfaction and a potential for eating disorders (Agliata & Tantleff- Dunn, 2004). “With a mortality rate of between 10-20 per cent, the Royal College of Psychiatrists states: Anorexia Nervosa has the highest death rate of any psychological disorder” (Sigman, 2010, p.1). The American Psychiatric Associations Work Group on Eating Disorders 2000 estimated that between 0.5 to 3.7 percent of females will suffer from anorexia nervosa in their lifetime (Chambers & Alexander, 2007).

Perry et al 2008 found that young adults who recall poor equality emotional bonds with parents have developed a negative self concept that leads to greater body image dissatisfaction (Cheng & Mallinckrodt, 2009).

Women with a higher Body Mass Index (BMI), consistently report more body dissatisfaction (Dittmar et al., 2009). “Thompson and Heinberg (1999) found that women who viewed fashion magazines were less satisfied with their body” (Mc Cabe et al., 2007). These concerns are related to negative self-images, which can be related
to excessive exercising and increased negative self-image. These negative self images are a way of thinking and feeling about their bodies affecting body esteem, body satisfaction and self esteem (Barlett et al., 2008).

Body dissatisfaction, is linked to a range of physical and mental health problems, including disordered eating, obesity, body dimorphic disorder, depression, or low self-esteem (Cash & Pruzinsky, 2002). It is also implicated in the increasing use of body-shaping behaviours with potentially unhealthy consequences, such as cosmetic surgery. “A meta-analytic review of 25 studies entitled “The effect of experimental presentation of thin media images on body satisfaction” concluded as have others that body image was significantly more negative after viewing thin media images” (Sigman, 2010, p.4). Body dissatisfaction also is appearing in young girls. “In a study by University of Central Florida, nearly half of the 3 to 6 year old girls said they worried about been fat” (Sigman, 2010, p.1).

As mentioned, media exposure to body shape ideals is “related to weight concerns (eg. Harrison & Carntor, 1997; Heinberg, Thompson & Stormer, 1995), as well as disordered eating behaviour (eg. Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Stice & Shaw, 1994). However, other research has shown either no relationship between media exposure and negative effects (e.g., Champion & Furnham. 1999) or inconsistent results (e.g, Cash, Cash, & Butters, 1983; Irving 1990). This inconsistency in the literature has led researchers to wonder why some women are susceptible to these media effects whereas others remain relatively unaffected” (Bessenoff, 2006, p239).

Research specifically exploring influence of the media on body image disturbance among female and male students and the general public is sparse.
None of the literature explores a female, male combined and a student, public perspective and none such literature in Ireland. Therefore the purpose of this investigation is to examine the thus far unstudied relationship between perceived media influence and body image disturbance among adult female and male student and the public in Ireland.

The current study examines the amount of media influence and if it leads to biased social perceptions of body images, enhanced body dissatisfaction and biased beliefs with respect to body image. The relationship between body image and levels of exposure to the media will be examined in the present study. Levels of media viewing will be tested as both a predictor of negative body image and an outcome measure of body dissatisfaction. Media influences (moderators) and psychological processes (mediators) will be examined. It is hypothesised first that individuals who are exposed to high levels of media imagery will display higher levels of body image dissatisfaction. Second, it is predicted that women will have higher levels of body image dissatisfaction than males.
METHOD

Materials

A questionnaire was handed to each participant. The first page contained participant information (see Appendix A). Written on the first page was a description of the study. The purpose of the study was also outlined along with contact details and information to the participant that filling out the questionnaire was voluntary. The second page contained demographic questions (see Appendix B). The following two pages of the questionnaire included the Sociocultural Attitude towards Appearance Questionnaire 3 devised by Heinburg & Thompson in 1995 (see Appendix C). The scale has subscales that assess internalization general and pressures. The questionnaire used had 30 questions. Thirty statements of feelings are made in the questionnaire and the participants are asked to rate these statements on how true they are from 1 to 5, 1 being ‘definitely disagree’ and 5 been ‘definitely agree’. The statements 3, 6, 9, 12, 13, 19, 27, 28 are reversed scored and four levels are measured including internalization general, internalization athlete, pressures and information.

The following pages contained the BSQ (Body shape questionnaire) devised by Cooper, P.J., Taylor, M.J., Cooper, Z. & Fairburn, C.G in 1986 (see Appendix D). In this questionnaire there are eight questions in each part A, B C, D. These questions are in relation to how the person was feeling over the past four weeks. The participants are asked to rate the statements from 1 to 6, 1 been ‘never’ and 6 been ‘always”. Male participants were given the same questionnaire as females except for the questions 9, 12 and 25 were changed from a female perspective to a male
perspective. The scores are summed and the outcome means that a score of 1<80 results in no concern with shape. A score of 81 to 110 results in a mild concern with shape. A score of 111 to 140 results in a moderate concern with shape and a score of > 141 results in a marked concern with shape. The final pages of the questionnaire contained a list of helpful phone numbers (see Appendix E). Plain A4 paper was used for the questionnaire.

**Apparatus**

A standard printer was used to print the questionnaires.

**Participants**

One hundred participants took part. Fifty of the participants were students from a mixture of courses and fifty were a random sample of adults from County Wicklow, Kildare and Dublin. Fifteen participants filled out the questionnaire in their place of work, thirty five were filled out in their home, forty were filled out in their lecture room and ten were filled out in the college café. The total sample included 68 females and 32 males. The ages ranged from 26 to 45 years. The majority of the participants were employed. The participants completed the questionnaire voluntarily.

**Design**

This questionnaire employed a cross-sectional design using unrelated samples. The primary predictor variable was average media influence. The media influence was also broken down to four subscales. These subscales were also predictor variables they were: pressure to respond to media images, generic media influence related to tv, magazines and movies, internalization of athletic and sports stars and media as an informational source. Secondary demographic predictor variables were also tested including gender, age, student status, employment status and education level. The
primary outcome variables were no concern, mild concern, moderate concern and marked concern with shape.

Procedure

Fifty students were asked in a classroom and college café if they would like to volunteer to complete a questionnaire. The researcher explained that the questionnaire was voluntary and was available to clarify any of the questions. The participants were given a A4 envelope along with the questionnaire. Males were given the same questionnaire except for the Body Shape Questionnaire questions 8a5, 8b7 and 8d2 were changed to a male perspective. The questionnaire were then collected I the sealed envelope after they were completed. The second fifty participants were randomly sampled from the general public. They were asked in their place of work and their home if they could fill in the questionnaire. All questionnaires were placed in a sealed enveloped upon completion and collected immediately.

Data analysis

The tests carried out were analysis of variance tests, correlation tests and cronbachs alpha as a measure of reliability.
RESULTS

Figure I. Graphs
Figure II. Scatter plot.

Scatter plot of pressures score vs body shape score

$R^2$ Linear = 0.56
Summary Statistics

Response rate analysis: A sample of 50 students and 50 members of the general public were selected to administer the questionnaire. All 100 completed the survey.

Analysis of demographic characteristics

The profile of the respondents was as follows. There respondents consisted of 68 females and 32 males. The average age was 32.57 years with a standard deviation of 7.53 years, consisting of 14 respondents 25 or under, 56 respondents in the 26-35 year age group, 24 in the 36-45 year age group and 6 over 45 years of age. 45 respondents were currently attending college, 23 have never been to college and the remaining 32 had previously been college students.

The respondents consisted of 44 classifying themselves as single and 33, 5 and 18 classifying themselves as married, divorced or cohabiting respectively. The majority of respondents were employed, with 88 classifying themselves as employed as against 10 classified as unemployed, 2 respondents did not indicate an employment status. The respondents had a range of incomes, with 30 earning under €25K, 52 earning between €35K and €50K, 10 earning €50K to €75K and 8 earning more than €75K.

Reliability Analysis

A reliability analysis was carried out to determine the overall reliability of the body shape scale. Cronbach’s alpha is a coefficient of reliability. It is commonly used as a
measure of the internal consistency or reliability of a test score for a sample of respondents. Values above 0.7 are generally considered to indicate a reliable scale. A Cronbach’s coefficient alpha value of 0.971 for the 32 body shape questions indicates a highly reliable scale.

Factor Analysis

A principal component analysis was carried out on the body shape questions to determine the underlying factors. The 32 body shape questions resolved into 6 factors accounting for 74.76% of the variance explained. The six factors indicate independent sub scales of the overall body shape scale. These subscales indicate relationships between the responses to the body shape questions and were interpreted as follows:

<table>
<thead>
<tr>
<th>Subscale</th>
<th>% of Variance</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26.659</td>
<td>General body shape factor</td>
</tr>
<tr>
<td>2</td>
<td>13.177</td>
<td>Physical factor associated with the visual size of the respondent’s body.</td>
</tr>
<tr>
<td>3</td>
<td>12.467</td>
<td>A 'Feel fat' factor associated with feelings due to the respondents body shape</td>
</tr>
<tr>
<td>4</td>
<td>8.26</td>
<td>An anorexic tendency factor associated with excessive thinness or empty stomach</td>
</tr>
<tr>
<td>5</td>
<td>7.464</td>
<td>A self conscious factor that is associated with how the respondent is perceived by others</td>
</tr>
<tr>
<td>6</td>
<td>6.736</td>
<td>An extreme consciousness factor associated with depressive or physical harm tendencies</td>
</tr>
</tbody>
</table>
Statistical relationships

The summary statistics for each of the media and body shape scales are presented below:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Shape Score</td>
<td>72.95</td>
<td>32</td>
<td>167</td>
<td>28.25</td>
</tr>
<tr>
<td>Internalization general</td>
<td>24.33</td>
<td>9</td>
<td>34</td>
<td>5.2</td>
</tr>
<tr>
<td>Internalization athletic</td>
<td>13.03</td>
<td>5</td>
<td>23</td>
<td>3.57</td>
</tr>
<tr>
<td>Pressures</td>
<td>17.32</td>
<td>7</td>
<td>32</td>
<td>6.3</td>
</tr>
<tr>
<td>Information</td>
<td>25.13</td>
<td>9</td>
<td>34</td>
<td>4.72</td>
</tr>
</tbody>
</table>

An analysis of Variance was carried out to determine whether there was a relationship between the respondent’s scores on the ‘General Internalization’ score, ‘Athletic Internalization’ score, ‘Pressure’ score, ‘Information’ score and the overall body shape score. Post-hoc t-tests were carried out to determine where the significant differences in average scores lay, following a statistically significant ANOVA F-test, where appropriate. A statistically significant difference in average internalization scores was found between males and females (F_{1,98}=5.687, p-value = 0.019). On
average females scored 25.16 versus a score of 22.56 for males. No differences were detected with respect to the respondents marital status (F_{3,96}=0.010, p-value = 0.999), education status (F_{2,97}=1.105, p-value = 0.335), income (F_{3,96}=1.334, p-value = 0.268), employment status (F_{1,96}=0.135, p-value = 0.714), or age group (F_{3,96}=1.536, p-value = 0.210).

A statistically significant difference in average athletic internalization scores was found between the respondents employment status (F_{1,96}=4.192, p-value = 0.043). On average employed respondents scored 13.18 versus a score of 10.80 for unemployed respondents. No differences were detected with respect to the respondents gender (F_{1,98}=0.004, p-value = 0.951), marital status (F_{3,96}=1.241, p-value = 0.299), education status (F_{2,97}=0.475, p-value = 0.623), income (F_{3,96}=0.340, p-value = 0.796), or age group (F_{3,96}=0.257, p-value = 0.858).

A statistically significant difference in average pressure scores was found between males and females (F_{1,98}=11.925, p-value = 0.001). On average females scored 18.74 versus a score of 14.31 for males. No differences were detected with respect to the respondents marital status (F_{3,96}=1.202, p-value = 0.313), education status (F_{2,97}=0.652, p-value = 0.523), income (F_{3,96}=2.296, p-value = 0.084), employment status (F_{1,96}=0.467, p-value = 0.496), or age group (F_{3,96}=1.114, p-value = 0.335). A statistically significant difference in average information scores was found between males and females (F_{1,98}=7.994, p-value = 0.006). On average females scored 26.01 versus a score of 23.25 for males. No differences were detected with respect to the respondents marital status (F_{3,96}=1.432, p-value = 0.238), education status (F_{2,97}=0.739, p-value = 0.480), income (F_{3,96}=0.255, p-value = 0.858), employment status (F_{1,96}=2.281, p-value = 0.134), or age group (F_{3,96}=0.853, p-value = 0.468).
A highly statistically significant difference in average body shape scores was found between males and females ($F_{1,98}=16.478$, p-value $<= 0.001$)(See figure 1). On average females scored 80.26 versus a score of 57.41 for males. No differences were detected with respect to the respondents marital status ($F_{3,96}=2.532$, p-value $= 0.062$), education status ($F_{2,97}=1.069$, p-value $= 0.347$), income ($F_{3,96}=1.666$, p-value $= 0.179$), employment status ($F_{1,96}=0.305$, p-value $= 0.582$), or age group ($F_{3,96}=1.763$, p-value $= 0.159$).

The body shape score was classified into four groups, where less than 80 was considered to have no concern, 80 to 110 were considered to have mild concern, 111 to 140 were considered to have moderate concern and over 140 were considered to have marked concern. The distribution of the respondents concern was as follows:

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Concern</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>Mild Concern</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Moderate Concern</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Marked Concern</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Due to there only being a single respondent illustrating marked concern, the concern characteristic was re classified as ‘No Concern’, ‘Mild Concern’ and ‘Moderate or greater concern’. A $\chi^2$ test of independence was carried out to determine whether there were any significant relationships between this concern classification and the respondent’s demographic characteristics. Consistent with previous findings, there was a statistically significant relationship between the respondent’s concern classification and their gender. ($\chi^2$ with 2 dfs $=9.365$, p-value $= 0.009$). 10 (14.7%) of
females indicated moderate or greater concern with their body shape as compared to males, where only 1 (3.1%) indicated moderate or greater concern with their body shape.

<table>
<thead>
<tr>
<th></th>
<th>Moderate or greater</th>
<th>No concern</th>
<th>Mild Concern</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Count</td>
<td>27</td>
<td>4</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>% within Males</td>
<td>84.40%</td>
<td>12.50%</td>
<td>3.10%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Female Count</td>
<td>36</td>
<td>22</td>
<td>10</td>
<td>68</td>
</tr>
<tr>
<td>% within Female</td>
<td>52.90%</td>
<td>32.40%</td>
<td>14.70%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>26</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td>% Total</td>
<td>63.00%</td>
<td>26.00%</td>
<td>11.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Also consistent there was no statistically significant relationships between the respondents body shape concern and the other demographic characteristics. Correlation analysis was carried out to determine whether there were significant relationships between the respondent’s body shape score and their scores on the media questions.

<table>
<thead>
<tr>
<th>Body Shape Score</th>
<th>Body Shape Internalization Score</th>
<th>Internalization Score</th>
<th>Internalization Score</th>
<th>Pressures Score</th>
<th>Information Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>general</td>
<td>athletic</td>
<td>Pressures</td>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>Body Shape Score</td>
<td>1</td>
<td>.681**</td>
<td>.404**</td>
<td>.748**</td>
<td>.402**</td>
</tr>
</tbody>
</table>
There were statistically significant positive linear relationships between the body shape score and each of the components of the media questions. A positive relationship implies that as you increase the individual media scores there is an increase in the body shape score. Pearson correlations between 0.5 and 0.8 are considered moderate linear relationships (See Figure II).

**Linear Regression**

A stepwise ordinary least squares regression was carried out to determine what the key media drivers of the body shape score were. The stepwise regression indicated that the general internalisation and pressures scores were statistically significant, but that the athletic internalisation and information scores were not significant (not important) once the other drivers were taken into account.

The regression equation is given below:

<table>
<thead>
<tr>
<th></th>
<th>Std. Beta</th>
<th>Standardised Beta</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-7.272</td>
<td>-0.823</td>
<td>0.413</td>
<td></td>
</tr>
<tr>
<td>Pressures</td>
<td>2.41</td>
<td>0.537</td>
<td>5.757</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Internalization</td>
<td>1.582</td>
<td>0.291</td>
<td>3.12</td>
<td>0.002</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Body Shape Score.
Both the pressures and internalisation scores were significantly associated with body shape score (t-value = 5.757, p-value < 0.001) and (t-value = 3.120, p-value = 0.002). See Figure II. An increase of one point in pressures score yielded on average an increase of 2.41 on the body shape score and an increase of 1 point on the internalisation score yielded on average an increase of 1.52 on the body shape score. The standardised beta scores indicate that the pressures score was 1.85 times more influential than the general internalisation score.
DISCUSSION

The aim of this study is to explore how the media influences people’s body image. The influence of the media will be discussed in relation to culture and body dissatisfaction. A cross-section questionnaire study was carried out using independent samples. One hundred participants were involved. A wider implication of this study in line with previous findings is that beauty ideals in the media need to be changed. This could lead to improvements in women’s and men’s body image. The study supports a cultivation effect on body images. By applying cultivation theory, this relationship can be explained more thoroughly by perceptional biases. Although in contrast to cultivation theory it is not the perceptions related to the social reality but the perceptions related to the self that results in body dissatisfaction. This finding is particularly true in females hence the gender differences found in this study. It was found that as participants individual media scores increased there was also an increase in participants body shape score hence the null hypothesis was rejected. Therefore media internalisation was found to be a predictor of an increase in body image dissatisfaction.

A meta analysis of cross sectional studies by Cafri et al., 2005 support this finding and also several longitudinal studies by Knauss et al., 2008. Research from Watson & Vaughn found the greatest amount of pressure to conform to an ideal body image came from the media which supports the current finding. The ways in which
men and women are portrayed in our society may contribute to body dissatisfaction for both males and females.

This finding may be looked at from a retrospective point of view because participants were asked how they felt in the past four weeks for the body shape questionnaire. The finding can also be looked at from a prospective point of view regarding the Sociocultural Attitudes Towards Appearance Questionnaire 3 because it measured participants current feelings. One specific dimension of media influence was pressure to respond to media influences which was found to be the most influential in both male participants and female participants. As expected females reported significantly higher average internalization of media scores than males and the null hypothesis was rejected. This finding is consistent with Ata et al., 2007 finding that males and females differ in terms of media influence.

Employed participants reported a significant difference in average athletic internalization than unemployed participants. This may be the result of unemployed participants having more time to go walking and keep fit than the employed participants. Employed people may be more likely to go to the gym due to a lack of time to go walking. In addition employed participants may have the means to pay for a gym membership. They may feel pressured at the gym to have an athletic body and may internalise it. No differences were detected with respect to the respondent’s gender. This finding suggests that males and females may be equally targeted by the media to achieve an athletic body. No significant differences were detected with respect to marital status or level of education. Marital status or educational level had no bearing on the results of athletic internalization. All participants were of similar age, the average age was 32.57 years so this may account for no difference in age in average athletic internalisation.
Educational status had no effect on average internalization scores. Most participants who were students were also employed, as such it is more likely they would be subjected to the same levels of media exposure as the employed that did not go to college, or employed participants that had previously been students. Due to their better financial circumstances the employed student participants would have the means to buy newspapers, magazines, broadband subscription and cable television. Participant’s income yielded no difference on average internalization scores. Employment status yielded the same results with no difference on average internalization scores. This finding suggests that unemployed participants may have more time to watch television although employed participants have more disposable income to spend on magazines and going to the cinema and may have access to a car so they will view more billboard ads. Participant’s age group had no difference on average internalization scores. This finding suggests that every age group can now be subjected to the media. There is now classes for pensioners on how to use the internet and in towns and cities there are internet cafes for the public to use. Broadband prices as well as laptop prices are decreasing which means the internet is more accessible for every age group to access.

A statistically significant difference in average pressure to respond to media images scores were found between male participants and female participants. A possible explanation of this gender difference is that the thin female ideal is depicted more prominently in the media than the male ideal. Another explanation is that the majority of music videos depict more female models than male models. Some of these music videos sexualise women’s bodies. Sexualisation can be defined as a person’s value being based on her or his sexual appeal or behaviour and when a person is sexually objectified. Some feminists argue that the media as well as men are culpable
for the exploitation of women, an example of this exploitation of women can be seen in some men’s magazines such as Playboy. A central question of the current study was the relationship of self-esteem to the dimensions under investigation. It may be the case that females with low self-esteem are more likely to interpret media images as inducing pressure and they are more vulnerable to these pressures than males with more self-esteem. The tie between self-esteem and physical appearance is likely to be affected by how females interpret media images and discussions with other females. Furthermore the findings suggest that males may not internalise and process sociocultural pressures of appearance through the same schema-driven processes as females. Regardless of schematicity, males may interpret these messages at face value without filtering them through previous misconceptions. Understanding more about males’ cognitive schemas of body image may help to understand why they are able to disregard media messages of attractiveness. Also males may be affected by what they view but selectively expose themselves to media content that is congruent with their existing world view. No difference was found in average pressure to respond to media images scores with respect to marital status, education status, income status employment stays or age group. This finding suggests that this pressure is felt by most women regardless of their socio economic status.

A statistically significant difference in average media as a source of information scores was found between male participants and female participant. A lot of women’s magazines contain information on what clothes to wear, diets, recipes, celebrity gossip and problem pages. Women may use this information to keep up with the latest trends and rely on it for information on how they behave. The pervasive incidence of dieting and weight concerns in females may be considered normative. If cultural emphasis on thinness has created a feeling that weight dissatisfaction is
normative then this may prevent a negative influence of weight dissatisfaction on self esteem. Research by Touyz & Beumont, 1996 found that seventy percent of their female interviewees reported that magazines likely influence their internalization to want to look like the models in the images, the findings support this research. No significant differences were found in average media as a source of information with regard to participant’s marital status, education status, income status, employment status or age group. Since nearly every home has a television regardless of income status, the target audience is widely variable.

Each of the Subscales in the Sociocultural Attitudes Towards Appearance Questionnaire 3 showed good convergent validity. A highly statistically significant difference in average body shape scores was found between female participants and male participants. Therefore the null hypothesis was rejected. This difference may be explained as a result of research by Shirao et al 2005 who found gender differences in brain activity generated by unpleasant word stimuli concerning body image “found that in women, words such as ‘obesity’, ‘corpulence’ or ‘heavy’ were accompanied by increased activation in the amygdala, while the left” medial prefrontal cortex associated with decision making and rational thought became inactive. In men the response was the reverse. Broadly speaking, females reported more negative eating attitudes and behaviours as well as more negative self perceptions. This research has helped to unveil how males pattern of negative body attitudes are different from females.

Perhaps some of these female participants are on the verge of an eating disorder or already have one and have not yet been treated for the illness. No differences in average body shape scores were found with respect to the participant’s
marital status, income status or age group. There were also no differences in average body shape scores in respect to education status. It was quite a surprising finding as Wharton et al found that women of college age were more likely to manage their weight inappropriately which may lead them to have a higher BMI which may lead to body shape dissatisfaction. Consistent with previous findings, no statistically significant relationships between the participants body shape concern and other demographic characteristics were found.

The factor analysis of the Body Shape questionnaire revealed unique sub dimensions, these sub dimensions were feelings regarding shape both physical and psychological. The average mean score on the body shape questionnaire was number three ‘sometimes’. This result may be explained by the fact that some of the participants reported their body image more positively than they actually feel, simply to appear to be satisfied with their own shape. Often participants find it easier to indicate that they are fine, not wanting to appear inadequate even though they were told when they received the questionnaire that it was anonymous. In general, the results are consistent with the idea that there is a statistically significant gender difference with regard to all subscales of both of the Body Shape Questionnaire and the Sociocultural Attitudes Towards Appearance Questionnaire 3. It was striking to find that females and males differed with regard to nearly all subscales. The results indicate that exposure to ideal images of attractiveness via television advertisements can significantly increase females body dissatisfaction. Therefore they are more at risk for depressive symptoms and dysphoria. The fact that such strong affects were found across almost nearly our entire hypothesis suggests that the affects of the media on females body image is likely to be a genuine and important factor effect and one which health professionals and the public alike need to take seriously.
As a future intervention health information in colleges could educate students on the dangers of eating disorders and depression. Scores that can discriminate between at risk and normal levels of psychological disturbance needs further study. It is possible that this gender difference that we observed was related to the fact that the topic was of little interest to the males and they may have been quick to fill it out, also they may not have wanted to appear that they were worried about their body shape perhaps because generally it is considered a feminine trait. The measures of the questionnaire even though changed to a male perspective may not have been sensitive to males body image concerns. Likely pressures for males not examined here are steroid abuse and exercise dependence and pressure to build muscle. Also asking men about whether they want their overall body to be smaller may not have meaning without reference to specific body parts.

Clearly more research needs to be undertaken to document the relative contribution of media influences on body shape as distinct from the variety of other risk factors such as peer and parental influences as stated in the sociocultural model. This preliminary study with adults does not take into account peer and parental influences therefore maybe a study with adolescents in the sample as well as adults may take this into account. Previous findings indicate that media influence may be considered the most influential of the three factors in the sociocultural model.

More research in developing countries may be a potentially fruitful avenue of research because of the interesting findings of the study in Fiji previously mentioned. This research may be helpful in identifying groups at greater risk for developing eating disorders. Knowledge about how these pressure messages are conveyed to females and males may help to promote their health and wellbeing. The area of athlete-internalisation affects both males and females and because of this it would be
of great benefit to conduct further research in this area. Future studies may also examine people diagnosed and treated for anorexia, bulimia and binge eating disorder. As mentioned previously the sample of participants were all of similar age. Another sample of participants could include children because of the recent findings of Koyunco et al., 2010 who found that pressure on achieving this perfect thin ideal can lead to social physique anxiety in both children and adults. Another area of interest for future research would be research on children of parents with eating disorders due to the modelling of parent’s behaviour in children. Research by Mc Cabe & Riccardelli 2005 could add to this future research.

The current Body shape questionnaire is all positively worded. Further research could include the reverse-key items which are negatively worded which would improve the detection of response bias on the part of some of the participants. The sample used in this study was predominantly Caucasian. Beauty ideals differ among different ethnicities as found in a study by Archibald et al., 1999 that found African American females tend to score higher on measures of body image than their Caucasian counterparts. Hence a study with a sample of different ethnicities and races would yield interesting findings. Unfortunately the samples of students were all from the same college which limits the generalization of the results. Further research could include a range of students from different colleges around Ireland. Also Dublin Business school is a private college so further research that includes public colleges will yield a wider range of participants with different socioeconomic status backgrounds. For future research the size of the sample could also be bigger and would have greater internal reliability. A longitudinal study could also yield fruitful results to identify specific long-term effects of media exposure instead of the effects
of daily exposure to beauty ideals. This future research could attempt to measure multiple time scales, short term and long term.

Future study could also take participants BMI into account to enhance the studies findings. Although BMI is correlated with body fatness it does not assess muscularity so future work should incorporate examination of desired and current muscularity. If there was adequate existing data on measured weights and heights for everyone they could be used to anchor the results. Further research regarding feelings about non weighted related body parts as well as feelings about weight-related body satisfaction would yield more interesting results. Future research could include participants that were underweight, of healthy weight and overweight.

There are a number of shortcomings to this design, one shortcoming been it been a naturalistic study rather than experimental. The compensatory aspect of a naturalistic design is that it tells you about how the world is, not just how it might be. Although this study explored trends in body image and media influence the measures used were limited in scope. Another shortcoming has been that all the students were from the same college. In addition more information is needed to understand different types of media such as television magazines and the internet effect participant’s body image, not just media as a whole. Other limitations of the study were that it used a cross-sectional survey design, which prevents the determination of a causal relationship between media influence and body shape. Well-controlled experiments could add to the studies findings. The study was on the basis of self-reported information and may be subject to participant recall bias. Also men as well as women may be satisfied with their body weight but dissatisfied with their body composition. Since this distinction could not be elucidated in this study, further investigation is warranted particularly given the strong link between body weight, body composition
and body image. A follow up study would also give this study more internal reliability. Future researchers would therefore benefit from including additional follow up data. Despite these limitations the inclusion of female, male, student and the public participants is an important feature of this study that goes beyond existing research in this field. Despite these limitations, the results of the study raise a number of important issues that future research should address which are the importances of a variety of different sized women in the media and gender differences in the media influence on body image relationship. One good aspect of this design is the random sampling of the general public.

Traditionally in Western culture people fix identity in the body/self. In contrast to this other cultures as previously mentioned in Fiji, identity is fixed not so much in the body but in community, family and relationships with others. Comparatively speaking, identity in Western culture is manipulated through personal visual props, which is experienced to a lesser degree in other cultures. Western culture may be considered an individualistic culture and other cultures such as Fiji could be seen as a collective culture. The majority of Western cultures are capitalist countries, which is based on material values and appearance.

A lack of awareness among the public and students of the efficacy of employing changes in diet and physical activity may be a reason for body image dissatisfaction. Also some people may find changes in their diet hard to implement, another challenge may be physical activity. Although this study did not examine the effect of media influence on depression and anxiety, both are linked to body image perception. Another related area that could be explored in future research is body image disturbances interfering with academic performance. Also the effect of body image on cognitive performance could be explored.
Our results suggest that self-knowledge can be an antecedent for behaviour, although body dissatisfaction as a motivational antecedent does not provoke this kind of behaviour. Students and the public could be taught how to recognize credible health information on the internet. Heath educators, health centre medical staff and authors of flyers may help direct the public and students to credible internet sources of health information. Through this communication, people can learn appropriate weight management strategies and also become aware of the health consequences associated with unhealthy dieting behaviours. Given the health risks of weighing too little or too much and its affect on body image dissatisfaction researchers should continue to examine both extremes of body weight evaluation. There is a growing body of evidence that body dissatisfaction caused by media influences is not uncommon and often harmful. There is several health risks associated with achieving this thin female ideal. Risks include infertility, ovarian cancer and osteoporosis. Also women may feel pressured to get cosmetic surgery to conform to the medias beauty ideal. For growth in cosmetic surgery procedures women need to feel unhappy with their current body shape. The current research results have implications for marketing practise also for consumer policy. Linking body image to the behaviour of consumers results in insights into the behaviour of buying beauty related products. For marketers it may be seen that television viewing can increase sales. Some of these advertisements may be detrimental to females such as plastic surgery.

Knowing about the different variables and testing them and asking the right questions in questionnaires are important steps in understanding this phenomenon. If people find it hard to avoid comparing themselves to media images, learning to focus on the attributes that one has that are superior to the models’ might prove to be helpful in counteracting body image dissatisfaction. They could also protect themselves from
body image dissatisfaction by rating the models in the images on intelligence rather than weight alone. Selecting alternative comparison models may help reduce the feelings of body image dissatisfaction. Also focusing on valued aspects of themselves and not images that distort reality may be more favourable in tackling the negative feelings. The findings between increases in participant’s body shape score and body shape dissatisfaction shows that the drive towards the attainment of societal body ideals remain strong. The lack of difference between demographic variables and all scales in both questionnaires was unexpected and quite surprising. This research can help inform weight management programs and motivate healthy behaviour change that will improve the health of students and the general public. To educate the public on media influence, programs on media literacy could be set up in schools. The persuasive effects of television may be used to benefit people to live and eat healthily.

Media influence may be weakened if people receive social support that their body shape is acceptable. To tackle the obesity epidemic companies could install gyms in their place of work which may also counteract the feelings of body dissatisfaction when internalising media images, and give people more confidence in how they look. Complimentary therapies such as self hypnosis and also self help books may be useful in combating body image disturbance helping them in ways that can improve their self image. Additionally both underweight and overweight people need to focus on a good diet and physical activity. There are also other confounding variables that are beyond the scope of this paper that may interact to affect the outcome measures. Such variables may include demand, control, hardiness, social support, self efficacy, lifestyle diet and general attitudes. More helpline numbers to tackle issues mentioned such as body image dissatisfaction, depression and anxiety would be of great benefit to the public. Children’s dolls and action figures could
include a wide range of body shapes and sizes so that children internalize the medias beauty ideal. Parents could also limit television viewing so that children don’t see television as reality. Although we cannot conclude from the present study that media influences increases eating disordered behaviours, the current findings provide evidence that media influence can impact on how strongly women endorse dysfunctional eating and body related beliefs and perceptions. The power of the media should help people make informative rational choices about behaviours and lifestyle.
REFERENCES


APPENDIX

Appendix A

Participant Information.

My name is Aisling O Reilly and I am a final year Psychology student at Dublin Business School. As part of my degree programme it is required that all students complete a final year project. My research investigates the affects of media on body image. I would be grateful if you could fill out this questionnaire as honestly as possible. Participation is voluntary and all information given is anonymous. It will take about ten minutes to complete. If you have any queries regarding the questionnaire or require more information, contact me at aorireland@yahoo.ie. Thank you.

\
Appendix B

Age__
Gender__

Please place a tick beside your answer. Thank you.

Marital status: Single__Married__Divorced__Co.habiting__

Education: Current student__Didn't go to college__Went to college__

Income: Under 25000__25000-50000__50000-75000__75000+__

Employment status: Employed__Unemployed__
Appendix C

Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

Definitely Disagree = 1  
Mostly Disagree = 2  
Neither Agree Nor Disagree = 3  
Mostly Agree = 4  
Definitely Agree = 5

1. TV programs are an important source of information about fashion and "being attractive."

2. I've felt pressure from TV or magazines to lose weight.

3. I do not care if my body looks like the body of people who are on TV.

4. I compare my body to the bodies of people who are on TV.

5. TV commercials are an important source of information about fashion and "being attractive."

6. I do not feel pressure from TV or magazines to look pretty.

7. I would like my body to look like the models who appear in magazines.

8. I compare my appearance to the appearance of TV and movie stars.

9. Music videos on TV are not an important source of information about fashion and "being attractive."

10. I've felt pressure from TV and magazines to be thin.

11. I would like my body to look like the people who are in movies.

12. I do not compare my body to the bodies of people who appear in magazine.

13. Magazine articles are not an important source of information about fashion and "being attractive."
14. I've felt pressure from TV or magazines to have a perfect body.

15. I wish I looked like the models in music videos.

16. I compare my appearance to the appearance of people in magazines.

17. Magazine advertisements are an important source of information about fashion and "being attractive."

18. I've felt pressure from TV or magazines to diet.

19. I do not wish to look as athletic as the people in magazines.

20. I compare my body to that of people in "good shape."

21. Pictures in magazines are an important source of information about fashion and "being attractive."

22. I've felt pressure from TV or magazines to exercise.

23. I wish I looked as athletic as sports stars.

24. I compare my body to that of people who are athletic.

25. Movies are an important source of information about fashion and "being attractive."

26. I've felt pressure from TV or magazines to change my appearance.

27. I do not try to look like the people on TV.

28. Movie stars are not an important source of information about fashion and "being attractive."

29. Famous people are an important source of information about fashion and "being attractive."

30. I try to look like sports athletes.
The Sociocultural Attitudes Towards Appearance Questionnaire 3 is a revision of our first two scales (Heinberg & Thompson, 1995; Thompson et al., 1999). It has subscales that assess internalization (general, athlete), pressures, and information. Reliability and validity information are contained in Thompson et al., 2004. See also Calogero et al, 2004 for data with an eating disordered sample.). This scale is provided free of cost to those who wish to use it for non-commercial (i.e., you make no money) purposes.

Internalization-General: Items: 3(r), 4, 7, 8, 11, 12(r), 15, 16, 27(r)
Internalization-Athlete: Items: 19(r), 20, 23, 24, 30
Pressures: Items: 2, 6(r), 10, 14, 18, 22, 26
Information: Items: 1, 5, 9(r), 13(r), 17, 21, 25, 28(r), 29

Reverse-keyed items: 3, 6, 9, 12, 13, 19, 27, 28
To reverse a score deduct the original answer from 6 eg an answer of ‘1’ “definitely disagree” would be reversed to ‘5’ (6-1 = 5). Similarly an answer of ‘5’ “definitely agree” would be reversed to ‘1’ (6-5=1).
Appendix D

BSQ-8A

We should like to know how you have been feeling about your appearance over the PAST FOUR WEEKS. Please read each question and circle the appropriate number to the right. Please answer all the questions.

OVER THE PAST FOUR WEEKS:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has feeling bored made you brood about your shape?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Have you thought that your thighs, hips or bottom are too large for the rest of you?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Have you felt so bad about your shape that you have cried?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Have you avoided running because your flesh might wobble?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Has being with thin women made you feel self-conscious about your shape?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Have you worried about your thighs spreading out when sitting down?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Has eating sweets, cakes, or other high calorie food made you feel fat?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Has worry about your shape made you feel you ought to exercise?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BSQ-8A

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<tbody>
<tr>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Have you thought that your thighs, hips or bottom are too large for the rest of you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Has being with thin men made you feel self-conscious about your shape?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Have you worried about your thighs spreading out when sitting down?</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>7.</td>
<td>Has eating sweets, cakes, or other high calorie food made you feel fat?</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>Has worry about your shape made you feel you ought to exercise?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
BSQ-8B

We should like to know how you have been feeling about your appearance over the past four weeks. Please read each question and circle the appropriate number to the right. Please answer all the questions.

OVER THE PAST FOUR WEEKS:

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
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<td>2</td>
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<td>6</td>
</tr>
</tbody>
</table>

1. Have you worried about your flesh being not firm enough?.................
2. Has eating even a small amount of food made you feel fat?..............
3. Have you avoided wearing clothes which make you particularly aware of the shape of your body?..................................................
4. Have you felt ashamed of your body?...........................................
5. Has worry about your shape made you diet?.................................
6. Have you felt happiest about your shape when your stomach has been empty (e.g. in the morning)?..............................................
7. Have you felt that it is not fair that other women are thinner than you?.
8. Have you worried about your flesh being dimply?..........................
BSQ-8B

We should like to know how you have been feeling about your appearance over the PAST FOUR WEEKS. Please read each question and circle the appropriate number to the right. Please answer all the questions.

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<tr>
<td>1. Have you worried about your flesh being not firm enough?</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. Has eating even a small amount of food made you feel fat?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>3. Have you avoided wearing clothes which make you particularly aware of the shape of your body?</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>4. Have you felt ashamed of your body?</td>
<td>1</td>
<td>2</td>
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<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. Has worry about your shape made you diet?</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>6</td>
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<tr>
<td>6. Have you felt happiest about your shape when your stomach has been empty (e.g. in the morning)?</td>
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<tr>
<td>7. Have you felt that it is not fair that other men are thinner than you?</td>
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<tr>
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BSQ-8C

We should like to know how you have been feeling about your appearance over the **PAST FOUR WEEKS**. Please read each question and circle the appropriate number to the right. Please answer all the questions.

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</thead>
<tbody>
<tr>
<td>1. Have you been afraid that you might become fat (or fatter)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>2. Has feeling full (e.g. after eating a large meal) made you feel fat?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>3. Has thinking about your shape interfered with your ability to concentrate (e.g. while watching television, reading, listening to conversations)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
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<tr>
<td>4. Have you imagined cutting off fleshy areas of your body?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>5. Have you felt excessively large and rounded?</td>
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<td>6</td>
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<tr>
<td>6. Have you thought that you are in the shape you are because you lack self-control?</td>
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<td>2</td>
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<tr>
<td>7. Has seeing your reflection (e.g. in a mirror or shop window) made you feel bad about your shape?</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<td>8. Have you been particularly self-conscious about your shape when in the company of other people?</td>
<td>1</td>
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BSQ-8D

We should like to know how you have been feeling about your appearance over the PAST FOUR WEEKS. Please read each question and circle the appropriate number to the right. Please answer all the questions.

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2. Have you noticed the shape of other women and felt that your own shape compared unfavourably? ......................................................... 1 2 3 4 5 6

3. Has being naked, such as when taking a bath, made you feel fat?....... 1 2 3 4 5 6

4. Have you not gone out to social occasions (e.g. parties) because you have felt bad about your shape? ......................................................... 1 2 3 4 5 6

5. Have you worried about other people seeing rolls of fat around your waist or stomach? ................................................................. 1 2 3 4 5 6

6. When in company have your worried about taking up too much room (e.g. sitting on a sofa, or a bus seat)? ......................................................... 1 2 3 4 5 6

7. Have you pinched areas of your body to see how much fat there is?.... 1 2 3 4 5 6

8. Have you avoided situations where people could see your body (e.g. communal changing rooms or swimming baths)? ................................. 1 2 3 4 5 6
BSQ-8D

We should like to know how you have been feeling about your appearance over the PAST FOUR WEEKS. Please read each question and circle the appropriate number to the right. Please answer all the questions.

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Appendix E

Useful phone numbers:

Samaritans: 1850 60 90 90.

Body Whys: 1890 200 444.

1 Life: 1800 247 100.