

Social Comparison, Situational Variation and Body Image Dissatisfaction

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I declare that this thesis is my own original work and that contributions of others have been duly acknowledged.



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Abstract

The role of the influence of the media on adolescent girls' mood and body image was examined from a social psychological perspective. A school-based sample of adolescent girls (age range 12-15 years) was recruited from public and private schools in southern Tasmania. Three separate studies were conducted involving both quantitative and qualitative methodologies. Study 1 measured body image dissatisfaction and mood after media exposure (perusal of a popular girls' magazine) to the thin ideal either in a group context or individually. The main findings suggest a positive effect of mood as a result of group membership. On the basis of these findings, a second study was conducted to examine the factors that make the group situation a more positive experience in relation to mood and body image satisfaction. Results indicated the importance of three variables which may contribute to more positive mood and body image satisfaction. Firstly, when in a group situation girls may be comparing themselves with their peers as well as the media models offering a more realistic source of comparison. Secondly, the group may serve as a distraction as it allowed them to focus on the material and its shortcomings rather than on themselves. Thirdly, reassuring comments made by peers in the group may also be a contributing factor to body satisfaction and mood state. In order to explore the possibility that recommendation was forming groups on the basis of friendship networks a third study was designed in order to address the methodological issues arising in the initial experiment. It continued investigation into the impact of brief exposure to thin ideal body shapes on mood and body satisfaction in adolescent girls. Furthermore study three aimed to explore the influence of group processes on social

comparison. As in the first study mood and body satisfaction was assessed at pre and post media exposure. Thin ideal internalization, social comparison and a measure of body mass index were also undertaken post exposure as they have been found to influence the exposure-body image relationship. Despite previous research findings of an effect for short-term exposure to thin ideal media images and body image dissatisfaction and negative mood no significant main effects were found for the primary dependent measures. These findings along with limitations of the study as well as directions for future research are discussed.

Eating disorders are regarded as a significant issue in adolescent girls and the role of the media is an area where there is increased speculation. This thesis examines the short-term effects of exposure to thin ideal media images in young adolescent girls and draws on theories from social psychology including social comparison and social identity theories.

This generation has been exposed to media images representing the thin ideal body shape significantly more than any other generation so it is not surprising that body image dissatisfaction in adolescent girls is an area that has generated a large amount of interest in both empirical studies and popular culture. However, to find a single dominant influence in the search for the cause of body image dissatisfaction in women and girls in western culture is almost impossible. Body image is a truly complex phenomenon and there are a myriad of factors that contribute to the development and maintenance of body dissatisfaction. Women and young girls exposed to western culture are more than likely to be dissatisfied with their bodies irrespective of their actual body shape or size (Neumark-Sztainer, Paxton et al., 2006). This surge in body dissatisfaction in females in the last couple of decades is believed to be a result of the thin “ideal” body type that is representative of women in the media. Underlying this desire for an ideal body is the fantasy that being thin signifies beauty and being beautiful is synonymous with happiness and success (Rodin, Silberstein & Striegel-Moore, 1985). It can be argued that this generation has been exposed to magazine images (with a focus on thinness) more than any other generation therefore it should come as no surprise that these media images are having a greater effect on the current generation of youth than any other. Through their research into body image the British Social Issues Research Centre (SIRC, 2000)

acknowledge that while women in all cultures are concerned with beauty and in particular a thin physique it is western culture that places the largest emphasis on body shape and size. They attribute a large part of this obsession with beauty to technological advances, in particular the rise of the mass media.

During the past 20 years numerous studies have documented the pervasive nature of the media's impact on women's body esteem and have shown how even non-eating disordered women are not only more concerned about their weight than men (Demarest & Langer, 1996; Garner, Garfinkel, Schwartz & Thompson 1980; Fallon & Rozzin, 1985; Kerremans, Claes & Bijttebier, 2010; Rodin, Silberstein & Striegel-Moore, 1984; Tigemann & Pennington, 1990; Vogt Yuan, 2010) but feel more dissatisfied about their weight after viewing pictures of thin women (Ogden & Munday, 1996). These gender differences where women report greater levels of body image dissatisfaction following thin ideal media exposure are still prevalent today (Kerremans, Claes & Bijttebier, 2010; Vogt Yuan, 2010). Dolan, Birtchnell, and Lacey (1987) found that 53% of 20 year old women wished to lose weight compared to 9% of 20 year old men, and women tended to judge their bodies on a part-to part basis with dissatisfaction revolving around the hips and the thighs. Mable, Balance and Galgan (1986) found that on the whole women have a more distorted body image than men. This dissatisfaction with body image, coupled with the fact that thinness is a crucial feature exhibited by women in our society, justifies women's concerns with weight control. In addition, with the number of women in today's society classified as overweight and with obesity reaching epidemic proportions, it has never been more difficult for women to match the ideal.

Chodorow (1978) claims that females define themselves predominantly in relation and in connection to other people, whereas males are more oriented toward

individuation and their own sense of agency. Cheek and Hogan (1983) support the view that people are, in general, motivated to achieve social approval and avoid social criticism; in women shame is a result of social pressure and it is this that leads to women's preoccupation with their appearance (Rodin et al., 1984). As Festinger (1954) illustrates, most of us will compare ourselves with other people on a particular attribute and we will do this with people whom we feel are most similar to ourselves. We also utilize social comparisons to gain information concerning highly valued attributes, social expectations, and norms (Jones, 2001; Ruble, 1993; Wood, 1984). Recent research has suggested that females engage in a social comparison process with media personalities such as models as they have a body shape that represents the current 'thin ideal' (Maltby, Giles, Barber & McCutcheon, 2005) and subsequently feel dissatisfied with their own appearance as their body fails to match the ideal. It is the media's repeated presentation of thin body shapes that some have argued makes these forms the standard of attractiveness in western culture (Jones, 2001) and this discrepancy between oneself and others is believed to be the foundation for body image dissatisfaction. Social comparison theory and its implications for the eating disorders are explored in greater detail in the following sections of this review.

Short-term changes in mood and body image satisfaction may be the precipitants for all kinds of unhealthy behaviour (e.g., skipping a meal, dieting, binge eating) and more enduring body image dissatisfaction is commonly considered to be a precursor of eating disorders. Body image dissatisfaction and extreme dieting is associated with depressive symptoms in adolescents and adults (Stice & Bearman, 2001). Poor body satisfaction is associated with low self-esteem in women of all ages and predicts the later development of depression, anxiety and low self-esteem (Bearman, S.K., Presnell, K., Martinez, E. & Stice, E, 2006; Benas, Uhrlas & Gibb,

2010; Hutchinson, Rapee & Taylor, 2010). Research suggests a strong causal link between body image dissatisfaction and disordered eating where body dissatisfaction predicts the development of disordered eating in adolescents (Patton, Selzer, Coffey & Wolfe, 2005) however eating disorders although serious affect a minority in the general community. In comparison the pervasiveness of low self-esteem and health injurious dieting/exercise which is related to body image dissatisfaction has been well documented in a larger number of females.

This section of the thesis aims to provide an analysis of the current literature in the area of body image dissatisfaction in adolescent girls from a social psychological perspective. This research utilizes the theory of social comparison processes (Festinger, 1954) as a basis and in addition it draws on social identity theory (Tajfel, 1972; 1978) in order to explore the social aspect of media usage and the influence this has on the mood and body satisfaction of adolescent girls. Further, it explores individual differences in media usage by controlling for level of public self-consciousness.

Definition of Body Image

The most widely used definition in the body image literature is provided by Thompson (1990) where body image is how an individual conceptualises his/her personal appearance including the size/shape and weight of his/her body. A person's body image is influenced by their own beliefs and attitudes as well as ideals in society. One's body image does not remain the same but changes in response to lifestyle events (puberty, pregnancy, disability, illness, surgery, menopause and even different stages in the menstrual cycle) (Women's Health Queensland, 2000).

One is then able to understand that unhealthy body image is a disapproving picture of one's body where low self-esteem and unhealthy behaviours are the defining features (Commonwealth Office for the Status of Women, 2003). Also, body image dissatisfaction can also change over quite a short time span where there are situations that exacerbate this, for example, trying on bathers or eating a large meal and this is referred to as state body image (Ogden, 2010; Saules, Collings, Wiedemann, Fowler & Shannon L, 2009). Therefore body image dissatisfaction can be defined and assessed in various ways and it is a construct which can be understood to be changeable, both in the short and in the long term.

Degree of Body Image Dissatisfaction and Disordered Eating

Unhealthy body image can be measured by levels of body image dissatisfaction, excessive exercise, disordered eating or prevalence of eating disorders. In this framework, the term "eating disorders" is used to describe the psychiatric disorders of anorexia nervosa, bulimia nervosa and binge eating disorder, while disordered eating is used as a broader term, encompassing unhealthy dieting and overeating (Commonwealth Office for the Status of Women, 2003).

The prevalence of body image dissatisfaction has been found to be much higher than the prevalence of eating disorders. Research carried out by Paxton through the Centre of Adolescent Health, Victoria (1995) found that more than 70% of teenage girls want to be thinner including those of low weight. Approximately two thirds of the women wanted to lose weight and only one third of them were actually overweight. On any given day about 60% of Australian women are on some sort of diet and 13% of girls thought that smoking was a good way of slimming. Recently, Neumark-Sztainer, Paxton, Hannan, Haines and Story (2006) over a five-year period

found that body dissatisfaction predicted higher levels of dieting, unhealthy and very unhealthy weight control behaviours and binge eating and lower levels of physical activity placing them at risk for weight gain and poorer overall health. Similarly, Patton, Selzer, Coffey, Carlin and Wolfe (1999) in a cohort study over three years with adolescents aged between 14 and 15 years found dieting to be the most important predictor of new eating disorders. Their study also showed that 8% of 15 year old girls dieted at a severe level and a further 60% dieted at a moderate level. Those that dieted at a severe level were 18 times more likely to develop an eating disorder within six months than those who did not diet. Even moderate dieting was found to increase the risk of eating disorders, and roughly two thirds of new cases were in those girls who dieted moderately as opposed to severely. These findings are supported by the Wesley Mission 1995-2005 study which found that the number of Australians with eating disorders has more than doubled in the past decade and that a rising number of adults are binge eating and purging to stay thin. The study found that the fastest growing group of disorder sufferers was obese young women and it is rising in all areas country and urban. Obesity puts these women at risk of developing other disorders such as binge eating.

Although there is a lesser prevalence of Anorexia than BID, eating disorders may have severe consequences for example, death. Poor body image dissatisfaction and in particular during the adolescent years has also been shown to have a strong impact on one's life. While there are variations in prevalence rates for the eating disorders the DSM-IV-TR (2000) suggests that the lifetime prevalence for anorexia nervosa among females aged 12 –19 years is approximately 0.5-1%.

The DSM-IV-TR (2000) diagnostic criteria further state that the incidence of anorexia nervosa appears to have increased in recent decades and research provided

by The Eating Disorders Association (1999) endorses this view as eating disorders in Australia have become a health problem. More recent research confirms these findings as the prevalence of body dissatisfaction in adolescence is still considerably high and occurs at the most critical time of identity formation (Keery, Van den Berg & Thompson, 2004).

Sociocultural Influences and Internalization of the Thin Ideal

In contemporary society the thin body is seen as a desirable attribute but this trend towards a slender physique is becoming alarmingly concerning because as the weight of the average western woman is increasing the weight of media personalities such as fashion models and actresses is steadily decreasing. In what is now described as a landmark study, Garner, Garfinkel, Schwartz and Thompson (1980) analysed the data from Playboy centrefolds and Miss America Pageant contestants and found that the cultural ideal body type for women had undergone rapid change during the previous 20 years and a strong preference towards a thinner body shape during the past 10 years was evident. These findings were replicated in a study by Wiseman, Gray, Mosimann and Ahrens (1992). By extending the hypothesis of Garfinkel et al., they found that the culturally defined “ideal body” had reached an even smaller shape during the preceding years. Through their analysis of body measurements which included bust, hip and waist size as well as the standard age, height and weight for playboy magazine centerfolds (1979 -1988) and the Miss America contestants (1970-1985) they found that the current models are significantly thinner. Extending this line of research Owen and Laurel-Seller (2000) explored body standards in the 1990s by comparing body measurements of playboy centerfolds and commercial models. Consistent with predictions the average weight and body shape of models has become

increasingly smaller but more disturbingly almost one third of the models met the criteria for anorexia nervosa. In comparison current statistics estimate that the average Australian woman is a size 14 (Beale, 2009).

The National Health and Medical Research Council (2006) report that in Australia since the early 1980's there has been a steady increase in the proportions of men and women who are overweight and obese. Statistics show an average increase of weight among Australian women of approximately one gram per day over a nine-year period resulting in significant increases in the proportion of women who were overweight and obese and a decrease in the proportion of women who were underweight. Children and adolescents are targeted as a group for prevention but concerns about eating disorders have been identified so as to ensure the healthy growth of children and adolescents. As previously discussed women in western culture are aspiring to meet the thin ideal when in reality research suggests that women are getting heavier hence the observed feelings of body image dissatisfaction and negative mood.

The Media's role in the Formation of Body Image Dissatisfaction

The media's ability to inspire change regarding the body ideal is an area that should not be underestimated yet has proven to be an area that is not easy to measure as direct evidence for the role of media images in the formation of eating disorders is yet to be established (Gordon, 2000; Levine & Murnen, 2009). Despite this, research has found evidence supporting the claim that "thin" media models have contributed to increased body dissatisfaction in non-eating disordered women and adolescents.

Botta (1999) conducted an experiment with 214 adolescent girls who had a mean BMI of 21.10 and utilised social comparison theory to predict their level of

body-image disturbance and thin ideal endorsement. The relevance of Social Comparison theory will be discussed in the next chapter. Participants completed measures such as frequency of television viewing, body image dissatisfaction, and endorsement of the thin ideal and bulimic behaviours. The overall results of the study suggested that the media influences body satisfaction both directly through body image processing (how women process media images) and indirectly by persuading girls to adopt what is perceived as the perfect body. Comparing themselves to media images (television) was found to be the strongest predictor of all three body image disturbance variables. Those individuals who already endorse a thin ideal and are more predisposed to the images were found to have increased body dissatisfaction after exposure.

Waller and Shaw (1992) assessed whether vulnerability to media images is linked to the degree of abnormal eating attitudes and whether it is specifically limited to anorexics and bulimics. The design of their study subjected all women (Bulimics, anorexics and controls) to the same experimental stages where they were first shown a set of pictures for 20 seconds (distraction task) and asked to rate them for attractiveness and then use callipers to estimate the size of their own waist, chest and hips. The procedure was then repeated with a second set of photographs (affective task). Interestingly media images of thin women affected both the clinical groups and controls but dissimilarly. The clinical group responded to the pictures by over estimating their own body size and as a whole the controls did not appear to be affected by the images but there was variability within the control group. The degree to which they were affected was associated with the extent of psychopathology, suggesting that magazine images affect non-eating disordered women with less healthy eating attitudes and as with the clinical group they don't appear to play a

causal role. What affect the images did have was to maintain and worsen the abnormal perception of one's body size in women with existing clinical problems namely anorexic and bulimic individuals and women with unhealthy eating attitudes.

Whilst quantitative research suggest a relationship between media representations of the thin ideal body type and eating disorder symptomatology as discussed in the previous sections there are scarcely any findings on the relationship between media culture and anorexia, which subsequently became the aim of a study by Williams et al., (2003). These researchers explored the above relationship through qualitative methods and developed a model for the dynamics of that relationship. They used a semi-structured interview protocol with 28 female outpatients receiving treatment for anorexia at an eating disorder treatment facility. This model proposes that the relationship between media usage and anorexia is not linear but rather circular which is characteristic of disorders of substance abuse and addictive behaviours. The stories gained from the interviews suggest that the media was relied on heavily after the disorder developed and it was used to perpetuate the disorder and gain guidance on problem-solving, so the media's effect will vary depending on the way messages are manipulated and interpreted by the individual (Williams et al., 2003).

Moving from the individual level to the collective, Gordon (2003) argued that eating disorders are the result of "social modeling" and it is through the mass media that behavioural modeling is fundamentally enhanced. He believes that the majority of research focuses on the role of fashion models in influencing the ideal body and not enough emphasis is placed on the way in which the media may influence the modeling of the disorder. The media may play a greater part in the shaping of anorexic symptoms as previously discussed as self-destructive behaviour may be

legitimized by the glamorisation of television particularly among susceptible individuals. Autobiographical books may have also contributed to the social modeling of the disorder because many of the descriptions provided in these personal accounts might provide at risk individuals with new weight loss strategies.

Despite considerable research on the relationship between media exposure and body dissatisfaction in adolescent girls it is still unclear why media exposure does not affect all girls in the same way. The following theories drawn from the social psychological literature may serve to bridge the gaps in our understanding by applying these theories to the body image literature in order to explore the social aspects of media usage. The theories include social comparison and social identity theory and public self-consciousness.

Social Comparison Theory

Social Psychologists have focused on the way in which individuals use the social world to explain human behaviour. Researchers have then applied these theories to the area of body image in order to understand the motivation behind young girls' desire for a thin body type as depicted in the media.

One such theory that has been applied to the body dissatisfaction literature and is now enjoying increased interest is Festinger's (1954) theory of social comparison processes. At the heart of his theory is the belief that we use each other to determine our self-worth by comparing ourselves with each other: "there exists, in the human organism, a drive to evaluate his opinions and his abilities... to the extent that objective, non-social means are not available, people evaluate their opinions and abilities by comparison respectively with the opinions and abilities of others" (Festinger, pp.117-118).

While the motivation itself is not social the feeling of satisfaction makes it social as people are not able to evaluate their opinions and abilities directly by testing them against physical reality (Hogg, 2000). This process of learning from others by comparing oneself with others is highly dependent on how similar the model is to the observer (Innes, 1981). Individuals make social comparisons with those that they perceive as most like themselves. They do this because if the other person's ability is too different (either higher or lower) their interpretation of their ability will be inaccurate due to comparison with a dissimilar other (Festinger, 1954). A key aspect here is that comparison with someone very dissimilar with regard to the attribute of comparison is less informative. The same is true of opinions – whether an opinion is true or not cannot be determined by reference to the physical world so individuals compare their opinions with those whose views are not too divergent from their own. As Festinger succinctly states, “there is a self-imposed restriction in the range of opinion or ability with which a person compares himself” (p.121). To appreciate this theory the role of two other components of the comparison process (nature of the dimensions of social comparison) needs to be introduced. These components are firstly the nature of the dimension under evaluation and secondly the dimensions that surround the dimension under evaluation. The dimension under evaluation refers to the attribute such as shyness, beauty or productivity-on which one is making a comparison. The nature of the dimension under evaluation varies in important ways, such as its familiarity and importance and these variations have critical consequences for comparison processes (Wood, 1989).

The similarity hypothesis (Festinger, Gerard et al., 1954) found that when people were asked to form an opinion privately and then were presented with the consensus of opinion in the group, those that had opinions most similar to the groups

felt confident that their personal view was correct. However, those individuals that had opposing views were more likely to doubt themselves and believe that their opinion was not correct, with a reasonable number in fact changing their opinion. Those who realized that most others in the group shared their opinion were unlikely to change their view and became more confident that their view was correct. This again highlights the notion that comparing with others will most likely define what is a correct opinion therefore stabilising the evaluation: “A person will be less attracted to situations where others are very divergent from him than to situations where others are close to him for both abilities and opinions” (Festinger, 1954, p.123). A concrete example is given by Festinger – a person who is just beginning to play chess is clearly not going to evaluate his performance against masters of the game.

Another important hypothesis that is central to the theory is the “unidirectional drive upward” that functions for abilities (Festinger, 1954). In western culture individuals are motivated not only to evaluate their abilities but also to constantly better themselves so that the drive upward facilitates a need to be slightly better than the person with whom they are comparing themselves (Wood, 1989). It is the process of social comparison therefore that leads to pressures towards uniformity for individuals (Hogg, 2000).

Festinger’s social comparison theory predominantly focused on individuals making accurate self-evaluations but also alluded to the fact that individuals may not be entirely unbiased (Wood, 1989). In the case of one’s ability being below that of others “deep experiences of failure and feelings of inadequacy” may result. However Wood argues that Festinger’s theory fails to explain how feelings and motives may influence one’s comparisons and his theory gives the illusion that humans are rational and unbiased when it comes to making self-assessments. She argues that both classic

and recent research in social psychology have shown that individuals have a number of motives that concern the self which can be grouped into three broad areas: self-evaluation, self-enhancement and self-improvement.

There are as yet no data in the social psychological literature on how much of each type of comparison we typically make. Social comparisons may be a part of social interaction that is predictable (Brickman & Bulman, 1977) in so far as an individual engages in social comparison without realising it. The different types of social comparison can be conceptualised as a process all individuals demonstrate under different sets of circumstances and these processes can be triggered by some individuals when it comes to self-evaluations to a greater extent than for others. These key areas are dealt with in the following section.

Self-evaluation refers to comparisons with others who are better at, or have more of a desired attribute (e.g., a better figure). Wood argues for a stronger focus on the effects of these comparisons as they may not necessarily only occur in situations, which are explicitly evaluative (e.g., test-taking) but may occur automatically.

When a comparison is made with another who is quite dissimilar on the dimension being evaluated the outcome of the comparison will hold little weight, “one merely ceases to compare oneself with these persons” (Festinger, 1954, p?). So by self-evaluating one is looking to better the self, firstly, by comparison with others who are extremely dissimilar on the dimension under scrutiny or secondly to identify where one stands through comparison with those who are closer to the self on the dimension under scrutiny, or lastly, to clarify one’s standing on a particular dimension through comparison with others who share one’s qualities (Wood, 1989). Where a girl is attempting to judge the value or worth of her own attractiveness against that of the models comparisons are likely to result in lowered self perceptions.

Comparisons aimed at *self-improvement* have not generated as much research, yet there are findings to suggest that when people evaluate themselves by making comparisons the underlying cause may be a motivation to improve the self (Wood, 1989). According to Wood (1989) research has placed a lot of emphasis on the comparison target and has failed to take into account the concept of “dimensions” of social comparison. This is described as a component of the comparison process that has two parts: “(i) the nature of the dimension under evaluation and (ii) the dimensions that surround the dimension under evaluation” (Wood, 1989, p.234). The dimension under evaluation refers to an attribute (for example, introversion, attractiveness, motivation) for which one is making a comparison.

Wood draws on the modeling literature (Bandura, 1986) to explain how we are drawn to those that resemble us and we will be more inclined to imitate the behaviour of those most like ourselves. However, this poses a risk. If we are to compare ourselves with similar others in order to ‘better the self’ there is a strong fact that this may be demoralizing as we are faced with our own shortcomings (Wood, 1989). It is at this time that a comparison may be either inspiring or threatening depending on the surrounding dimension.

A comparison made to inspire the self, that is, one that enhances self-esteem may be thought of as a downward comparison (Wood, 1989). People may self-enhance if they feel that they have low ability and this will be made public, or they may even go to the extent of deliberately avoiding social comparisons altogether in order to preserve self-worth. In addition, Tesser (1986, as cited in Wood, 1989) found that individuals will redefine a dimension so it is not seen as essential to the self in order to avoid an upward comparison. The nature of the dimension under evaluation,

its *familiarity*, *desirability* and *self-relevance* is critical because it may determine the impact of a comparison (Wood, 1989, p. 242).

Self-enhancement can be defined as an individual's attempt to maintain positive views of herself to protect or enhance self-esteem. As previously described these processes of selection (self-evaluation, self-improvement and self-enhancement) do not occur randomly (Thompson et al., 1999) but are influenced by the other person's relative standing in comparison with the individual on a particular dimension/attribute.

Recent research has begun to incorporate adolescent girls' identification and internalization of socialised norms, as this is now believed to factor in the development and maintenance of anorexia and bulimia. Thomsen, Webber and Brown (2002) explored the relationship between motivators to use magazines and susceptibility to eating disorders with a sample of college woman in their early to mid twenties. Their findings showed that these two constructs are clearly linked but are heightened by motivational factors. They found that the strongest positive predictor of magazine reading frequency was a need for self-improvement in comparison to a desire to be entertained which produced the weakest correlation. A drive to motivate oneself through magazine exposure, gain popularity and lose weight represent to the authors that these young women have a need to focus on additional aspects of self-improvement and not solely on physical appearance alone. They further suggest that these aspects include aspects such as social and relationship building skills. The findings of this study support the results of Martin and Gentry (1997) as they suggested that women use models in magazines primarily as a source of comparison and when used for purposes of self improvement a short-term gain in the form of confidence and euphoria is gained as the reader is led to believe that their imagined

ideal self is achievable. The underlying message of the Thomsen et al (2002) study is that the uses and effects approach is important in theorising about the media's role in disordered eating and the "readers needs", not the frequency of magazine usage, should be the aim of future research.

Illustrating social comparison processes, Latner, Rosewell and Simmonds (2007) explored the messages children receive through various forms of mass media (videogames, television and magazines) in relation to childhood obesity with a sample of boys and girls (mean BMI = 19.8). Their findings indicated that greater dislike (for both genders) of obese children in comparison to peers was clearly predicted by magazine reading time. They speculated that children may learn about body dissatisfaction and obesity stigma from magazines through exposure to the belief that what is beautiful is good.

The Social Identity Approach

Social Identity Theory

Social Identity theory (SIT) extends Festinger's notion of social comparison. It explains the tendency for individuals to adopt ideas and behaviours from those that are seen as similar and thus create an ingroup where similarities are accentuated and dissimilar others form an outgroup. It has relied heavily on the concept of self-enhancement, or clarification and enhancement of identity which are the key points in Festinger's (1954) argument. The elements of SIT are as follows.

The concept of social identity originally grew out of the work of Tajfel (1972, 1978) and then in collaboration with Turner (1975), and is understood as "that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached

to the group” (Tajfel, 1978, p. 63). Tajfel and his colleagues conducted a number of experiments to determine what the minimal conditions were that created ingroup bias where one favours one’s own group over other groups. Surprisingly, the categorisation of people into quite meaningless groups was enough to create a situation where individuals looked to members of their own category more favourably (ingroup) over members of the other group (outgroup) (Tajfel, 1978). Simply being part of a group and knowing that another group in fact existed gave individuals a “social identity” which in turn gave them meaning and purpose (“minimal group paradigm” is a technique) (Tajfel, 1978). Thus social identity was understood to be that aspect of a person’s self perception based on their group memberships; it was the way in which a person defined the self in terms of some social group membership with the associated value connotations and emotional significance (Turner & Onorato, 1999).

Tajfel (1978) pointed out that social identity theory (SIT) had three essential aspects: the *psychological aspect* of the cognitive-motivational processes producing a need for positive social identity; the *elaboration of this analysis* in its application to real-world intergroup relations and the hypothesis of the “*interpersonal intergroup continuum*” (Tajfel, 1978). Tajfel proposed that social behavior varied along a continuum from *interpersonal* to *intergroup*. At the intergroup extreme, all behaviour of two or more individuals toward each other is determined by their membership in different social groups or categories (i.e., by group affiliations and loyalties to the exclusion of individual characteristics and interpersonal relationships). At the interpersonal extreme is any social encounter in which all the interaction is determined by the personal relationships between people and their individual

characteristics (i.e., idiosyncratic personal qualities are the overriding causal influences).

This continuum was used by Tajfel to explain when social identity processes were likely to come into use and how social interaction differed qualitatively between the extremes (Turner & Onorato, 1999). Tajfel proposed that as behaviour became more intergroup, attitudes to the outgroup in the ingroup tend to become more uniform and consensual and outgroup members tend more often to be seen as homogeneous and undifferentiated members of their social category.

Self-Categorisation Theory: Interpersonal and Intergroup Categorisation

Self-categorisation can be understood to be the cognitive part of social identity theory. The theory endeavors to understand the factors that make an individual identify with their group and discriminate against the outgroup in order to maintain a positive social identity (categorization process). This concept has been defined by Turner and Oakes (1986) as “a cognitive grouping of the self as identical (similar, equivalent, interchangeable) to some class of stimuli in contrast to some other class” (p.241). It was an attempt to distinguish between social identity (self-definitions in terms of social category memberships) and personal identity (self-definitions in terms of personal or idiosyncratic attributes) (Turner, 1982).

Self-categorisation leads to self-stereotyping and the depersonalization of the self (Turner & Onorato, 1999) and further transforms the self through assimilation of all aspects of an individual's identity (e.g., attitudes, feelings etc) to the ingroup prototype (Hogg & Williams, 2000). This process leads to a shift from an individualistic view of the self (“I”) to a collective self concept (“we”) where one behaves according to the ingroup prototype (Hogg & Williams, 2000). The theory

acknowledges that in any given group some people may be perceived to be more prototypical than others so the structure of groups may be based on prototypicality (Hogg & Williams). So when people define themselves in terms of a shared social category membership, there is a perceptual accentuation of intragroup similarities and intergroup differences on relevant correlated dimensions. People stereotype themselves and others in terms of salient social categorizations, and this social stereotyping leads to an enhanced perceptual identity between self and ingroup members and an enhanced perceptual contrast between ingroup and outgroup members (Turner & Oakes, 1986). It is suggested that social identity becomes more salient than personal identity when people begin to view themselves less as differing individuals and more as similar, prototypical representatives of their ingroup category (Turner & Onorato, 1999). Thus social identity is now seen as a process that changes interpersonal into intergroup behaviour.

An important part of self-categorisation theory is the concept of *metacontrast* which refers to the psychological separation of two or more groups (Turner & Onorato, 1999). Metacontrast thus produces what is referred to as “ingroup prototypes” which set the standard for the group by defining the attitudes, feelings and behaviour that characterize the group (Hogg & Williams, 2000). For social categorization to become salient on a cognitive level the category has to be accessible to the perceiver and fit both comparatively and normatively with the stimulus data. SIT supports Festinger’s proposition that we are more likely to compare ourselves with targets more similar than dissimilar to ourselves as the intergroup social comparison process is self-enhancement (Hogg & Williams, 2000) and is motivated by evaluating the ingroup more favourably than the outgroup with the aim of achieving positive social identity. The underlying motive of these processes is

positive self-esteem through self-enhancement (Turner, 1982). When examining the impact of noncompetitive peer relationships amongst adolescent girls, social identity theory is more useful than social comparison processes as it explains peer identity developing through the assimilation of peer norms (Meyer & Waller, 2001). In comparison, Festinger's (1954) social comparison hypothesis proposes that we are more likely to compare ourselves with targets more similar than dissimilar to ourselves and this viewpoint is better at explaining the competition factor in female relationships.

Prototypicality of the Thin Ideal Body Type

The cognitive construction of in and outgroup prototypes are representative of the societally defined stereotypic differences between and similarities within groups (Hogg & Williams, 2000). Prototypes are often shared in the wider community because we all receive the same information and perspectives on which to base our categorisations. In western culture female attractiveness, where thinness is the defining feature can be viewed as a prototype that is very familiar to many women. From that viewpoint western culture's obsession with thinness has led many women and adolescent girls to believe that thinness is a characteristic of high status. This implies that the thin female group is a highly desirable group to be a part of.

As group membership is known to influence self-conception and thus self-esteem, people are motivated to maintain a positive social identity through comparisons that evaluate the ingroup (the group to which one belongs) more positively than the outgroup. However if comparisons result in negative social identity, then according to SIT an individual will adopt a number of strategies. These are social mobility (e.g. passing into the high status group), social creativity (e.g. engaging in social comparison on dimensions favourable to the ingroup) and social

competition (direct attempts to elevate the status of the ingroup) (Cameron & Lalonde, 2001). The strategy that will be implemented depends on the individual's subjective beliefs about the nature of the intergroup context; for example, if an individual believes that the difference is legitimate then this can be achieved through a focus on individual achievement (social mobility) (Cameron & Lalonde, 2001). In sum, SIT forms the basis for the present investigation as it adds to social comparison as it is a rich, complex theory and it offers a great variety of paths that the individual can be predicted to follow (e.g. the strategies).

It has been proposed that the media's portrayal of the thin body type has created a standard that is unachievable by the majority of females and research on social modeling conducted at the University of Tasmania (Eschler, 1999) supports this assumption. The study found that females showed their membership to an attractive female category by feeling connected to the attractive same-sex eating partner and thus modeling their eating behaviour and feeling disconnected with the eating behaviour of an unattractive same-sex eating partner and therefore felt reluctant to model their eating behaviour. These results support the view that the media has legitimized thinness as a characteristic of the attractive group category and modeling the food intake of attractive women may be a means of gaining membership to that group through social mobility strategy. It is important to note that many normal sized females may perceive themselves to be not part of the high status (thin) group as portrayed by celebrities. Compared with women depicted in magazines and other media to which they are exposed, they may view – and others may view – their ingroup, that is, them and the normal sized women with whom they regularly interact, as a low status group. The theoretical literature that is relevant to this thesis concerns

factors that influence body image dissatisfaction and this will be discussed in the following section.

Public Self-consciousness Theory

Current research suggests that it is important to focus on the individual differences in the extent to which people use others for comparison purposes (Buunk & Mussweiler, 2001) as not all women who are exposed to the thin ideal will acquire an eating disorder (Joshi, Herman & Polivy, 2004; Tester & Gleaves 2005). At the individual level a characteristic that has been linked with female body dissatisfaction and dietary restraint is public self-consciousness (PBSC) (Burt, 1994; Striegel-Moore, Silberstein & Rodin, 1993). Fenigstein, Scheier and Buss (1975) identified two separate aspects of self-consciousness: private and public. Private self-consciousness (PVSC) deals with a private mulling over the self and PBSC emphasises an awareness and concern over the self as a social stimulus. Fenigstein and colleagues assert that “the essence of public self-consciousness, is the self as a social object” (p.525) thus individuals high in PBSC are more likely to conform with socially derived standards and research in personality assessment implies that people’s self-images and others’ images of them are significantly linked to their social behaviour (Cheek & Hogan, 1983). Importantly, PBSC is a variable of particular significance in adolescence and as is related to the process of social comparison.

According to social analytic theory an individual will take on a social role to portray a self-image that they perceive as desirable and it is this image of themselves that they wish others to believe (Cheek & Hogan, 1983). It is during social interaction that people attempt to interpret themselves to others in the hope of being seen as desirable. This need for social approval is most evident during the adolescent

period as these are seen as the formative years especially late childhood to early adolescence. Early research has shown that feelings of self-consciousness peak at approximately age thirteen (Elkind & Bowen, 1979). Rankin, Lane, Gibbons and Gerrard (2004) conceptualise PBSC as a normative developmental response to the new social challenges of early and middle adolescence, with girls higher levels attributed to their closer social engagement. The concept of “self” constantly changes during adolescence and therefore does not stabilise until early adulthood.

The following section reviews supportive evidence in non clinical and clinical populations. In their longitudinal study of the developmental course of adolescent self-consciousness Rankin et al., (2004) found that PBSC was highest amongst younger adolescents (13-15 years) and decreased with age while PVSC increased with age. The observed increase in PVSC can be attributed to having the ability to describe themselves in terms of higher order self-descriptive attributes. Additionally, personal beliefs, values and morals are being further developed (Rankin et al., 2004) so older adolescents begin to envision future or possible selves. The findings of Rankin et al., are consistent with Rosenberg’s (1986) view of early adolescence being a time for increased focus on the self as a social stimulus thus requiring reflected appraisals in order to shape their self-concept. Linked to Public self-consciousness is social comparison-how we use others to make sense of ourselves and the world (Festinger, 1954). It is a focal human concern and as a result has been incorporated into the body image literature (Martin & Gentry, 1997, Wilcox & Laird, 2000) to explain individual variation in body image appraisal. An example is a social modeling study of snack tasting conducted by Burt (1994) which incorporated individual difference factors. Results showed that those participants high in PBSC were more susceptible to modeling effects than those low in PBSC. More recent

research (Wojslawowicz, 2005) that has explored self-consciousness (public and private) in young adolescents (mean age = 13.98 years) and specifically focused on friendship quality as a moderator of the relation between self-consciousness and maladjustment. The results supported the distinction between the two types of self-consciousness in early adolescence however indicate more similarities than differences in the psychosocial correlates of PBSC and PVSC. They also suggest that the part that self-consciousness plays in shyness and internalization of problems is of significance as is friendship quality and the negative effects they can have on self-appraisal i.e., the “dark side” of friendships.

The above studies highlight the need to look at PBSC more closely in early adolescence as there have been very few studies (in comparison to the adult literature on self-consciousness) that have explored self-consciousness as a trait during childhood and adolescence (Wojslawowicz, 2005). While there is some evidence for a link between self-consciousness and depression in childhood and adolescence it is far from definitive thus the need for this variable to be explored further at this developmental stage. It is important because both PVSC and PBSC have been linked to psychosocial maladjustment in adults suggesting that adolescents high on these variables may too be at risk for psychosocial difficulties. As previously stated self-consciousness in early adolescence is common and normative (Wojslawowicz, 2005) yet the extent to which trait PBSC exacerbates thin ideal internalisation in adolescent girls has not been clearly demonstrated in the literature to date. Accordingly, this thesis explores the role of PBSC on exposure to thin ideal media images in the presence of peers given the relationship between PBSC and self-presentation concerns.

Social Comparisons and Social Identity in Adolescence

The following section adds to the proceeding literature by emphasising the significance of social comparison in adolescence and particularly SIT and prototypicality in groups. The special relevance of the group context in the development of identity during adolescence will be discussed.

It has been established that from the age of approximately seven years old children draw upon social comparison information to form an opinion about the self (Bennett & Sani, 2004) and Ruble (1983) has argued that in essence it is a vital process that occurs during early socialization. Empirical work has supported this proposition as female preadolescents' and adolescents' self perceptions were found to decrease over time suggesting that the socialization period between the fourth and twelfth grades is crucial in terms of developing healthy views of oneself (Martin & Kennedy, 1993). A recent empirical study by Dohnt and Tiggemann (2005) investigated peer influence in the development of body dissatisfaction in young girls (aged 5-8 years). They found that all girls in the sample favoured the thin ideal body shape and girls in grade two were more dissatisfied with their body shape than their younger peers. The only significant predictor of dieting awareness was grade, as older girls were more aware about dieting than their younger peers. A crucial finding from this study was that the girls' perception of their peers' body image dissatisfaction was found to be the strongest predictor of their own level of body dissatisfaction. This highlights the need for research to explore the peer group more closely as body dissatisfaction in girls is emerging in very young age groups.

Recent research by Durkin, Paxton and Sorbello (2007) explored the relationship between individual characteristics such as body comparison tendency and its relationship with body dissatisfaction as a result of exposure to thin ideal media

images. Using social comparison as a framework, this study was conducted with the view that the girls would make greater upward comparisons after exposure to thin ideal images as they represented an unrealistic target. Consequently, comparison with these females would result in a negative perception of one's body and negative mood and in addition girls who made the most body comparisons would experience greater negativity on those dimensions.

Adolescence and Risk for Body Image Dissatisfaction

Research into risk factors for body image dissatisfaction has frequently identified adolescence as being a time when individuals are most vulnerable to sociocultural influence as this is a time of turmoil and change as an individual is struggling with their new identity. It is during the social and physical development of adolescence that anorexic tendencies most often begin to manifest themselves (Thomsen, McCoy, Gustafson & Williams, 2002). Piran (2001) highlights the role of social power by focusing on adolescent girls critical interpretations of their experiences implying "you need to have power to accept yourself" (p.173). Her findings show that adolescents frequently stated that distressing experiences such as idealized images of women (powerless or anger-free) during and following puberty made them feel uncomfortable in their changing bodies.

Early research by Abramowitz, Peterson and Schulenberg (1984) utilised a multidimensional self-image questionnaire to tap different aspects of adolescent life, including psychological functioning, family and peer relations, school and appearance. They found that adolescent girls generally had a lower self-image during early adolescence as the two specific scales that were found to significantly decrease were body image and superior adjustment. A central feature of both these scales is social comparison as the body image scale taps satisfaction with appearance and

physical development and the superior adjustment scale assesses an individual's sense of self as excelling in the eyes of significant others and themselves. Abramowitz et al. (1984) found that the self-view of girls is more negative than the self-view of boys and attribute body image, due to the major changes that accompany puberty, as a major cause for this difference. Seymour (1986) argues that stereotypes of body configurations (mesomorph, endomorph and ectomorph) are quite rigid and highly generalised.

Levine and Smolak (1996) suggest that middle school and younger high school girls (ages 11-15) read magazines more frequently than do older adolescents, and that they express greater interest in the magazines' messages about beauty, style and fitness. They propose three associated facts for better understanding (and preventing) negative effects of media. First, this high level of involvement with one type of medium occurs at approximately the same age as do peak levels of exposure and attentiveness to another medium, TV, which also places a great degree of importance on physical appearance and slenderness for young women. Second, this peak in magazine reading occurs not too long after social comparison begins to be used for purposes of self-evaluation (Ruble, 1983). Third, this also coincides with the period during which girl's self-perceptions of physical attractiveness (and self-esteem in general) is in full decline. Research has established early on that because girls experience puberty earlier than boys they enter adolescence with lower levels of self-esteem and higher levels of self-consciousness than boys (Rosenberg & Simmons, 1975).

This has been demonstrated in a study by Maltby, Giles, Barber and McCutcheon (2005) as they explored the relationship between celebrity worship and body image in both males and females using a design that examined correlation and

multiple regression analyses between celebrity worship and body image. They found that the association between intense-personal reasons and attention to body shape appears at age 14, increases at age 15 and diminishes by age 17 onwards.

Furthermore this relationship only holds for females despite research findings (Dittmar et al., 2000) suggesting that boys are now becoming more body conscious. These recent findings highlight the vulnerability of adolescence and the need for further research in this area as an association was found between adolescent girls and intense personal celebrity worship where perceiving a celebrity to have a good body shape (perhaps developing an obsession) leads to poor female body image. The findings derived from the study aid clinicians in identifying individual differences (i.e., poor body image) among those girls who may be at risk of suffering from low self-esteem and body image dissatisfaction and may indicate the onset or presence of an eating disorder (Maltby et al., 2005).

There is now ample evidence that the prototypical female appearing in fashion layouts and advertisements in women's magazines during the past 20-25 years is young (under 30 years old), tall, long-legged and very slender (Levine & Smolak, 1996). In an attempt to establish whether college students were more influenced by thin ideal messages through magazine reading or television viewing Harrison and Cantor (1997) drew on social learning theory. Their prediction was that through modeling, girls acquire thin ideal messages and learn restrained eating and this effect is stronger for magazine reading than television viewing as magazines contain a larger amount of information on dieting that may be drowned out on television. Their results showed a more consistent relationship between media use and eating disorder symptomatology for magazines as they offer more information about dieting than

television entertainment. In addition, the images in print media are so pervasive that their perception as being the ideal is supported (Jambor, 2001 & Park, 2005).

According to Groesz, Levine and Mernin (2002) there is a need for more experimental research with girls at various developmental levels and importantly, with various pre-existing levels of negative body image and weight concerns. Similarly, Hargreaves and Tiggemann (2003) argue that despite adolescence being identified as a crucial period for body image formation, previous research has essentially failed to take into account the effect of idealised televised images of female attractiveness on early adolescents. It needs to be emphasized that future research needs to focus on the adolescent stage as these are the formative years and can factor in the development of disordered eating (Hargreaves & Tiggemann (2003) because this is when they are most influenced and vulnerable to outside messages concerning physical appearance in particular. Adolescence is clearly a time of vulnerability and there are a number of mechanisms operating during this period such as media exposure – through the sheer amount of information input. The peer culture is also significant in this connection and although developmental theorists argue for the importance of friends as potential sources of subcultural influence, research focusing on body image concerns is limited (Paxton et al., 1999). The following discussion emphasises the importance of peer and friendship networks in adolescence as research suggests that peer influence and criticism is pronounced in this age group. Dunkely, Wertheim and Paxton (2001) found that the most accurate predictor of body dissatisfaction in adolescent girls was being heavier (BMI) than one's peers and consequently the most accurate predictor of dietary restraint was body dissatisfaction. Adding to these findings, Schutz and Paxton (2007) explored the relationship between adolescent girls' body dissatisfaction and a number of variables such as disordered

eating, friendship quality (same-sex relationship) and beliefs about thinness in interpersonal relationships while controlling for depressive symptomatology.

Utilising an adolescent sample (grade 10 girls) the researchers asked the girls to complete self-report questionnaires and found that contrary to their hypothesis those with high and low levels of body dissatisfaction, dieting and bulimic symptoms were found to have comparable levels of positive friendship characteristics. Consistent with their hypothesis they found that high levels of body image and eating concerns brought with it negative aspects of friendships in the form of conflict and alienation and increased social concerns such as social anxiety and insecurity however when levels of depression were controlled the relationships generally diminished.

Peer Influences on Body Image Dissatisfaction

A major influence in this age group (young women) is the influence of peer groups. Peer influences on body image dissatisfaction are maintained by many factors including competition where competition between young women is an important factor (Paxton, Schutz, Wertheim & Muir, 1999). Research into body image can be used to explain how competition between females operates. Tiggemann and colleagues (Tiggemann & Wilson-Barrett, 1999) have shown that when females are asked to select the body shape that they find desirable it is always smaller than what they believe a male will find attractive suggesting that the motivation to meet the thin ideal body type is not to attract male interest but to compete with other women. That is, women will aspire to meet society's expectations of a thin-ideal body as represented by models and celebrities.

Peers have been found to influence the level of body satisfaction experienced by individuals where more frequent exposure to peers who display overt signs of

dissatisfaction with their own bodies contributes to their level of body esteem, especially regarding thinness (Vartanian, Giant, & Passino, 2001). Vartanian et al., (2001) found that personal experiences with teasing and criticism predicted women's concerns about thinness suggesting that those who have instrumental traits such as assertiveness and self-confidence appear less likely to report negative appearance-related feedback and less inclined to internalize thin ideal media messages (Vartanian et al., 2001). As research has failed to consider the frequency with which adolescents select peers as targets of social comparison compared with models and celebrities, Jones (2001) explored the frequency with which adolescents compared themselves to models/celebrities or peers and in addition the relationship between social comparison and body image satisfaction. Her findings showed that social comparisons to peers and to models/celebrities share a similar relationship to body dissatisfaction where those individuals who are more inclined to compare themselves to either peers or models experience greater body image dissatisfaction. These results imply that girls appear trapped in a more negative process whether they look at media images or look to their peers in their daily lives.

Meyer and Waller (2001) explored the role of peer influence on eating disturbance drawing from social identity theory. Their research was based on the premise that peer influence begins in early adolescence and continues well into adulthood where peers play a vital role in promoting the "thin ideal" however they argue that the research doesn't clearly identify the mechanisms in which these ideas are passed on to the individual as all individuals are not influenced in the same way. Thompson, Coover and Stormer (1999) have proven that peer criticism and teasing has a significant impact on poor body esteem and pathological eating however Meyer and Waller (2001) suggest that not all peer relationships are destructive and that they

can in fact serve to develop social identity through assimilation of peer norms. As discussed previously, Tajfel's (1978) theory posited that individuals who form a group (ingroup) have a tendency to take on behaviours and ideals similar to members of their own group with the aim of differentiating between ingroup and outgroup. They found that restrictive attitudes (drive for thinness) converge over the first 10 weeks of a group forming and do not substantially diverge over the following 14 weeks suggesting that the impact of social identity formation may be longer lasting for some attitudes than others.

Social Comparison Processes and Body Image Disturbance

Early studies that have applied social comparison theory to body image research found that the degree to which women compared their own weight to that of other women was significantly related to body dissatisfaction (Botta, 1999; Faith, Leone & Allison, 1997; Thompson, Covert & Stormer, 1999). Studies in this area typically use descriptive correlational and controlled experiments.

Descriptive correlational studies have primarily focused on the relationship between body image and characterological inclination to compare one's body to that of others (Faith, Leone & Allison, 1997). Thompson et al. (1999) extended previous correlational studies and supported the role of appearance-based comparisons as a mediational link between social feedback in the form of teasing and body image and eating disturbance.

More recent laboratory investigations in this area have explored the underlying mechanisms. Cattarin, Williams and Thompson (2001) manipulated social comparison motives demonstrating a moderating role of social comparison in the relationship between media exposure and transitory changes in body image. Female

undergraduates viewed a videotape containing either commercials representative of the thin attractive ideal or commercials with no appearance-related messages. They were told to compare themselves to the people in the video, to pay close attention to the products in the advertisement, or else given neutral instructions. Women given the comparison instruction and who saw the appearance-related videotape reported greater decreases in appearance satisfaction than did those in the other groups (Cattarin et al., 2001).

The following have manipulated social comparison and observed its effects on body image with studies generally gaining a pre and post measure of body satisfaction in order to determine whether thin ideal exposure has had an influence (Thompson et al., 1999). Martin and Gentry (1997) found that girls aged 9-14 instructed to compare their own physical attractiveness to that of slender models for self-evaluation purposes, felt less physically attractive afterwards. Conversely girls instructed to think about slender models in ways that enhanced the girls' perceptions of their own personal beauty felt more physically attractive. One aspect ignored by Martin and Gentry (1997) was that adolescent girls often look at magazines together and more recent research in the body image area has yet to explore the social aspect of girls use of magazines. This is an important area to explore as social psychological theory has shown that adolescence is a time where there is an increased focus on the social self and the notion of using peers who may be similar to the self for comparison is embedded. As previously discussed a social comparison motive plays a significant role amongst adolescent girls (Wojslawowicz, 2005).

Martin and Kennedy (1993) assessed the impact of advertising beauty images on preadolescent (grade 4) and adolescent (grade 8 & 12) females at different stages of development. Their findings suggested that female preadolescents and adolescents

self-perceptions of physical attractiveness actually reduced over time, suggesting that the socialization period between 4th and 12th grades is most important in terms of positive self-esteem. Importantly, their research highlights the issue that although female and male college students do not differ in terms of self-esteem and self-perceptions of physical attractiveness females appeared to have a greater tendency to compare themselves with models in ads. The studies cited in the earlier section about the influence of the media have used descriptive correlational designs whereas the above studies have used controlled laboratory experiments.

In another study investigating media influence in non-eating disordered male and female college students Kalodner (1997) found a significant effect for viewing pictures of thin models for females only. Their findings indicated that a single brief exposure was adequate to trigger an internal self-awareness which subsequently resulted in increased trait anxiety, private self-consciousness and greater body competence. The observed increase in confidence that was found for girls viewing pictures of thin models in comparison to controls may be related to that initial euphoric feeling that comes with viewing magazines (Kalodner, 1997). These girls may have felt optimistic about their physical appearance and felt that with motivation this ideal body type could be achieved. Greenwood and Pietromonaco (2004) refer to these findings as a double-edged reaction to idealized images and explain this reaction by drawing on two different social comparison processes: assimilation and contrast. Contrast comparisons refer to the previously discussed process of upward comparisons where individuals will compare themselves to an idealized image and subsequently report feelings of shame and dissatisfaction with their own bodies. However this process cannot account for that initial euphoric feeling that previous research has found. According to Greenwood and Pietromonaco assimilative

comparisons incorporate features of the idealised image into the self-concept so that an increase in observed similarity to the model (i.e., slimness) would result in a greater tendency to assimilate.

Stice, Spangler and Agras (2001) using private school girls as participants randomly assigned them to a fashion magazine subscription condition or a no-subscription condition and followed them for a period of 20 months. They manipulated media portrayed thin-ideal images to assess long-term effects on body dissatisfaction, dieting, negative affect and bulimic symptoms. Although the manipulation check showed that exposure to fashion magazines had increased there was an absence of main effects for all dependent measures. They did however find significant results when individual differences were taken into account. Vulnerable adolescents showed greater negative affect characterized by initial elevations in pressures to be thin and body dissatisfaction and an increase in body image dissatisfaction, dieting and bulimic symptoms for those where reasonable social support was absent. The above study highlights the importance of taking individual differences into consideration such as public self-consciousness when evaluating the effect of thin ideal media exposure on body image dissatisfaction in adolescent girls.

Recently there have been a large number of studies exploring social comparison processes and the link with internalization of thin ideal media images specifically with adolescent samples, and consequently examining the effects on self-esteem and body dissatisfaction. A series of detailed studies (Trampe, Stapel & Siero, 2007) exploring body dissatisfaction and proneness to the effects of social comparison in young women endeavored to find out when and why thin, attractive females in the media affect perceivers' self-evaluations. The studies utilising young women as participants aimed to explore the notion that "if people only compare themselves with

similar others, why are women making these comparisons (with media images of highly attractive females) if in essence they are unattainable?" They proposed that it is the degree to which women are dissatisfied with their bodies that predicts whether or not media exposure will have an impact on the self-evaluations of the perceiver (Trampe et al., 2007). The literature to date is still unable to offer a strong theory-based explanation as to why some women are more susceptible to the effects of social comparison evaluation when confronted with thin female body shapes. Their research aimed to answer the question as to what moderates the relationship between viewing thin ideal body shapes and engaging in self-evaluation comparison. They consider social comparison to be a trait and a trait which can be influenced by the environment so that the more body dissatisfied an individual is the more influenced they will be by thin ideal images.

Preliminary findings suggested that social comparisons occur when a physically attractive target was presented as a non-model as opposed to a professional model offering support for the similarity hypothesis. It claims that an individual is more likely to make comparisons with someone who they perceive as having characteristics that are attainable hence a model would be seen as being less relevant. They then tested the hypothesis that body dissatisfied women compared to body satisfied women will engage in social comparison more readily and at a greater frequency and consequently have a greater effect on self-evaluations. The prediction was supported as correlational data showed that the more body-dissatisfied one is the greater the chances of comparisons with the bodies of professional others including models (Trampe et al., 2007). In the following study they showed that body-dissatisfied women are more vulnerable to the effects of thin-ideal images than body-satisfied women. Body-dissatisfied women's self-evaluations were negatively

affected after exposure to both attractive models and nonmodels. In contrast body satisfied experienced lowered self-evaluations after exposure to an attractive nonmodel whereas exposure to an attractive model did not have the same effect. This then led the researchers to explore the boundaries of the finding and hypothesised that the social component of social comparison is largely defined by the social-cognitive nature of perceivers and not necessarily by the social nature of the target. Supporting this proposition that comparison targets are not necessarily perceived consciously, body dissatisfied women evaluated themselves more negatively following exposure to a thin rather than a fat vase. By confirming their view that body dissatisfaction broadens the range of targets for social comparison which in turn affects self-evaluations the final study by Trampe et al., (2007) tested the hypothesis that body-dissatisfaction increases proneness to social comparison effects because it increases self-activation. That is, women that are body-dissatisfied are concerned about meeting society's standards and expectations of thinness and attractiveness and so their thoughts about themselves tend to be highly accessible. Study six manipulated self-activation and showed that body-dissatisfaction increases the accessibility of self-related cognitions which in turn increases the tendency to engage in social comparisons.

This issue as to why females have a greater tendency to engage in social comparison with thin ideal media images still lacks strong empirical support. Trampe et al., (2007) in their concluding comments posed the question as to whether body dissatisfied and body satisfied women differ in their motives whilst looking through a magazine and the need to expand on current ideas in this area. In line with this current thinking this thesis aimed to explore the processes of internalisation and whether social influences such as the peer group impact on the mood and body

dissatisfaction of young adolescent girls. As previously discussed Dohnt and Tiggemann (2005) found that the strongest predictor of the girls own level of body image dissatisfaction was the girls' perception of their peers body image dissatisfaction. This thesis also used degree of public self-consciousness and motives for social comparison as mediators between the media influence - body dissatisfaction relationship. It advanced on the current literature by exploring the relationship between peer influences and internalisation of the thin-ideal and utilised social identity theory to do this as the importance of the peer environment in body image and eating psychopathology needs further exploration (Hutchinson & Rapee, 2007). It draws on social identity theory because this theory explains the tendency of individuals to adopt ideas and behaviours from those that are seen as similar (that is the peer group) and thus create an ingroup where similarities are highlighted and dissimilar others form an outgroup.

Summary of the Literature

In sum, a body of literature (Grabe, Ward & Hyde, 2008; Heinberg & Thompson, 1995; Levine and Murnen, 2009; Roberts & Good, 2010; Stice, 1998; Tiggemann & Polivy, 2010) now exists, demonstrating the effect of experimental manipulations of the media body ideal on body image dissatisfaction. The main findings are that body image is more negative after viewing thin media images and that this effect is stronger for women under the age of 20 and for those with pre-existing body concerns. The cumulative effect of repeated short-term negative response to the thin-ideal physique is a matter of theoretical and empirical debate but may feature in the development of eating disorders (Hargreaves & Tiggemann, 2003; Kilbourne, 2004; Tiggemann & McGill, 2004). The theoretical impact (in terms of

social identity theory) of having the peer group as a condition in this thesis stems from the research on the significance of the peer group in relation to body image and eating pathology in adolescence (Hutchinson & Rapee, 2007). Dunkley et al., (2001) have shown that when a girl's BMI is been considered the most significant pressure to be thin comes from her peers and research by Schutz and Paxton (2007) suggests focusing on the peer group when looking at prevention and treatment programs for body dissatisfaction, disordered eating and depressive symptoms.

Accordingly, the first study in the present series assessed the short-term effects on the mood and body satisfaction of adolescent girls of exposure to thin-ideal media images, and compared the impact of different kinds of social comparison (self-enhancement and self-evaluation) in group or individual situations. Specifically, Study 1 extends the methodology used by Martin and Gentry by including an added group factor.

Study 1

The first study in the present series assessed the short-term effects on mood and state body satisfaction of adolescent girls on exposure to thin-ideal media images. It explored individual differences such as public self-consciousness and compared social comparison motives such as self-enhancement and self-evaluation in a group context or individually.

Adolescent girls participated in the study either on their own or in small groups. The manipulation of instructional set involved girls comparing themselves to magazine images of models portraying the thin ideal with either a self-evaluation (critical comparison of self) or a self-enhancement instruction (positive comparison of self). Girls completed measures of mood and body satisfaction immediately before

and after media exposure. A number of other measures administered post-media exposure assessed degree of habitual social comparison and sociocultural internalisation of appearance.

As previously discussed, recent research (Joshi et al. 2004; Tester & Gleaves, 2005) suggests that individual differences such as public self-consciousness have been linked with female body dissatisfaction and dietary restraint. Early research on self-consciousness suggests that it peaks at approximately age thirteen (Elkind & Bowen, 1979) however there are still very few studies that have explored self-consciousness during childhood and adolescence.

The hypotheses for Study 1 were as follows. Following exposure to the thin ideal stimulus, it was predicted that individuals given self-evaluation instructions would report a drop in body image satisfaction. Furthermore, those given self-enhancement instructions would show improved body image satisfaction.

It was also predicted that participants high in PBSC would report greater body image dissatisfaction after viewing the magazines than those low in PBSC, and this effect would be stronger for those under self-evaluation instructions. An interaction was predicted for condition x PBSC where individuals high in PBSC would show further body image dissatisfaction compared to those low in PBSC. Those in the group condition would show higher levels of body image dissatisfaction than those in the individual condition.

Following exposure to the thin ideal stimulus it was predicted that participants under self-evaluation instructions would show a greater decline in mood than those under self-enhancement instructions. Those given instructions in terms of self-enhancement would show little change.

Those individuals high in PBSC would report more negative mood after viewing images of the thin ideal stimulus than those low in PBSC. Following exposure to the thin ideal stimulus girls in the group condition would experience a further drop in mood, compared to those in the individual condition and this effect would be stronger for those high in PBSC. A group/individual difference was predicted based on the research suggesting that peer influence and criticism (Benas et al. 2010; Nelson & Nelson, 2010) is pronounced in this age group.

Method

Design

The study utilised a between groups 2 (Degree of PBSC: high, low) x 2 (Condition: Individual/ Group) x 2 (Instruction: Self-evaluation/ Self-enhancement) x 2 (Pre/ Post) mixed design. The primary dependent variables were measures of body image satisfaction and mood state. Other dependent measures included social comparison and sociocultural internalisation of appearance and were presented in a questionnaire format following media exposure. They were subjected to the same type of analysis as mood and body image satisfaction.

Participants

Eighty-nine adolescent girls from public and private schools (single sex and co-educational) in Southern Tasmania voluntarily participated in this study. Ages ranged from 12.05 years to 15.03 years ($M = 13.47$, $SD = 0.67$) and grades ranged from 7 to 10. The median score on the PBSC scale was used to determine PBSC status. Participants were classified as either Low on PBSC ($N = 45$) or High on PBSC ($N = 44$). Of the 89 participants, 45 were in the individual condition (23 = self-

evaluation, 22 = self-enhancement) and 44 were in the group condition (23 self-evaluation and 21 = self-enhancement). Approximately 7% of participants indicated that they always viewed magazines on their own, 52% more on their own than with friends, 34% as much with friends as on their own, 6% more with friends than on their own and 2% always with friends. This background influence was not equally distributed over the various experimental conditions.

Materials

Media Images. Experimental Stimuli consisted of magazine images representing the thin ideal (See Appendix A). Participants were presented with 18 photographs of a variety of female models and celebrities who feature in age appropriate popular fashion magazines (e.g. Dolly, Girlfriend and Cleo). Some images contained more than one person in each picture, but there was clearly a central female figure on which the viewer was likely to focus and make a comparison. The criteria for picture selection included minimal text in the background, colour photo and in a variety of settings. Pictures were approximately 30 x 20 cm and presented in a folder simulating a magazine. The images were a mixture of actions and passive poses.

Pre-experimental Measure

Public Self-consciousness Subscale of the Revised Self-consciousness Scale (PBSC: Fenigstein et al., 1975). The PBSC (See Appendix B1) is a commonly used scale in this area of research (Burt, 1994; Rankin et al., 2004; Tester & Gleaves 2005). Fenigstein et al., (1975) define PBSC as being aware of the self as a social object that has influence on others. The Public self-consciousness subscale employs a 5-point response format ranging from 1 (extremely uncharacteristic of me) to 5

(extremely characteristic of me). Sample items are “I’m concerned about what other people think of me” and “I usually worry about making a good impression”. Single scores range from 0-28 and test-retest reliability for the scale is 0.84. The Cronbach’s α reliability estimate for the present sample is 0.87.

Pre and Post Experimental Measures

Mood and Body Image Satisfaction were assessed pre and post media exposure.

Body Image Ideals Questionnaire (BIQ: Cash, 1995). The BIQ (See Appendix B2) is commonly used in body image research (McKee, 2007). This instrument was administered pre and post exposure as a measure of body image satisfaction. Each item on this questionnaire deals with a different physical characteristic (10 attributes) related to weight. For each characteristic individuals are asked to indicate the degree to which they deviate from their ideal (a measure of body dissatisfaction) and also the importance of this ideal, yielding a global satisfaction score. Cronbach’s α for this study were 0.87 for the pre experimental measure and 0.91 for the post experimental measure.

Visual Analogue Scales (VAS). VAS have been demonstrated to be reliable and valid measures in a range of psychological studies (Wewers & Lowe, 1990). A series of VAS derived from the Profile of Mood States (POMS: McNair, Lorr, & Dropplemann 1971) were also administered pre and post media exposure, to assess mood. They included affective states such as depression, worthlessness, anxiety, hopelessness and unhappiness. For this study the Cronbach’s α was estimated to be .78 for pre test and .89 for post test. The VAS can be found in Appendix B3.

Post Experimental Measures

Several measures were administered post exposure in order to assess participant characteristics considered likely to influence the relationship between exposure and body dissatisfaction; susceptibility to media influence and tendency to engage in social comparison.

Manipulation Check Items. A number of items were administered to assess the effectiveness of the social comparison manipulation and are displayed in Appendix (B4).

Sociocultural Internalization of Appearance Questionnaire – Adolescents (SIAQ-A: Keery, Shroff, Thompson, Wertheim & Smolak, 2004). The SIAQ-A (See Appendix B5) is a recent measure that explores the role of internalisation as a potential risk factor for body image problems and eating disturbances in adolescents. It comprises five items reflecting different aspects of media influence including internalization of media images and messages. The awareness items reflect appearance as an important part of social existence and pressures. Lastly, the comparison items specifically refer to a tendency to engage in appearance comparison with media images and feeling pressured after exposure to movies, television or magazines. The authors focused on including specific language designed to reflect the incorporation or internalization of media images and messages, by including phrases such as “makes me want to change my appearance”. Items are all worded in a positive direction as previous studies with adolescents have found that reverse-keyed items tend to cause interpretation difficulties and compromise internal consistency levels. Internal consistency levels for this scale range from .83-.92. For this study the Cronbach’s α was estimated to be .91.

The Physical Appearance Comparison Scale (PACS: Thompson, Heinberg & Tantleff, 1991). The PACS (See Appendix B6) has been commonly used in research exploring social comparison effects on body dissatisfaction (Tigemann & McGill, 2003). The PACS consists of five items that deal specifically with the tendency to compare one's own appearance with that of other individuals. Items are answered on a five point scale, ranging from never to always and an overall score is obtained. The Cronbach's α for the current sample was estimated to be 0.76.

Procedure

Following approval from the Social Sciences Ethics committee of UTAS and the Tasmanian-Department of Education two sessions of contact were arranged with each of the schools (See Appendix C1). Parental consent was obtained (See Appendices C2 & C3) and participants were informed that they could withdraw from the study at any time (See Appendices C4 & C5). At the first session approximately one week before the experimental session, the participants completed the PBSC questionnaire which was handed out by the experimenter during class time. The participants filled out the questionnaire without conferring with each other.

Each question on this measure was read out aloud by the experimenter and was explained in language appropriate to adolescents. At the outset of the study participants were told that the purpose of the study was to assess "factors influencing body image in adolescent girls".

Immediately prior to the experimental manipulation, participants completed the BIQ and a set of visual mood analogue scales. Participants were told by the experimenter that it was very important to fill in the questionnaires based on how they were feeling "right now", "at this moment".

For the experimental session, participants were randomly allocated to one of two experimental conditions, group (four or five girls) or individual (on their own). The experimental session took place in a quiet classroom with minimal distraction. They were then given instructions in terms of either self-enhancement or self-evaluation, based on the study conducted by Martin and Gentry (1997). In the self-enhancement condition, participants were given the following instructions, “I want you to look at the following pictures and comment on the way models are disadvantaged compared to yourself”, I want you to focus on the good things about yourself”. In the self-evaluation condition the instructions were, “I want you to look at the following pictures and critically compare yourselves to the models in these pictures, do you look as good as these models?” In the group condition participants were seated in a circle and were asked to flick through the magazines as they normally did with their friends while keeping in mind the instructions given therefore exposure to the experimental stimulus was not controlled. Participants were able to talk among themselves and they may or may not have had a friend in the group. Similarly, those participants in the Individual condition were told to flick through the magazines as they normally did when by themselves while keeping in mind the instructions they had been given.

Following exposure to the magazine pictures all participants whether in the group or individual condition then completed once again the BIQ, VAS, SIAQ-A, PACS and the manipulation check items alone. Again participants were told to answer the questions based on how they were feeling “right now”. Once the above measures were completed participants were then debriefed and the purpose of the study was fully explained. Those in the self-evaluation condition were given the

opportunity to complete the experimental task again with self-enhancement instructions if they wished.

Results

Data analysis

The difference between the pre and post measures was used as the dependent variable. Each dependent variable was submitted to separate 2(PBSC: High, Low) x 2 (Condition: group, individual) x 2 (Instruction: self-evaluation, self-enhancement) univariate ANOVAs unless otherwise indicated. In all analyses the alpha level was set at .05. There were no missing values for any dependent measure.

Effectiveness of Experimental Manipulation

A number of items were administered post exposure to assess the effectiveness of the experimental manipulation. When asked to recall the instructions they were given in their own words all participants were able to accurately recall the instructions they were given before media exposure. When asked to indicate whether they made any other kinds of comparisons (other than the instructions they were given) approximately half of the participants indicated that they did make other comparisons, (yes: $N = 43$, no: $N = 46$). Of those participants who engaged in other forms of comparison 26 were in the Self-evaluation condition and 17 in the self-enhancement condition. As responses were categorical a 2 x 2 Chi-square analysis was performed and found to be non-significant $\chi^2(1, N = 89) = 2.57, p > .05$, odds ratio = 1.99, indicating that the frequency of reported other comparisons for those given self-

evaluation instruction was not significantly higher than those given self-enhancement instruction.

When asked to indicate whether their reaction was the same as usual when looking at the magazine images on their own or in the group the majority of participants indicated that the experience was the same (same: $N = 77$, not the same, $N = 12$).

Participants in the group condition were then asked to reflect on whether their experience was different to when they normally look at magazine images on their own and those in the individual condition were asked to reflect on whether their experience was different to when they look at magazine images with their friends. Similarly, the majority of participants indicated that the experience in this study was the same (same: $N = 76$, not the same $N = 13$).

Experimental Effects

Mood State

Mood was measured pre and post media exposure and the intercorrelations between the affective states are displayed in Appendix D. As all alpha coefficients show that the mood composites (depressed, worthless, anxious, hopeless, unhappy) were all highly correlated at pre and post media exposure, they were therefore analysed as one construct, mood.

A three-way ANOVA (PBSC status x Condition x Instruction) was performed for mood. A highly significant main effect was evident for condition $F(1,81) = 12.56$, $MSE = 104.78$, $p < .001$, $\eta_p^2 = .14$ indicating that participants in the group ($M = 1.04$, $SD = 10.97$) reported more positive overall mood than those in the individual condition ($M = 5.43$). There was also a significant main effect for instruction $F(1,81) = 6.28$, $MSE = 104.78$, $p < .05$, $\eta_p^2 = .06$, with those participants receiving instructions

in terms of self-enhancement reporting more positive mood relative to those receiving self-evaluation instructions (See Figure 1). As predicted a significant interaction between degree of self-consciousness and instruction, $F(1, 81) = 6.20$, $MSE = 104.78$, $p < .05$, $\eta_p^2 = .08$ was found. The interaction was followed up with independent sample t- tests using Bonferroni adjustment and showed that type of instruction given had no effect on mood for those low in PBSC, yet those high in PBSC reported significantly more negative mood when given instructions in terms of self-evaluation as opposed to self-enhancement (See Figure 1). The three-way interaction was non significant [$F(1,81) = 1.06$, $MSE = 104.78$, $p > .05$, $\eta_p^2 = .009$].

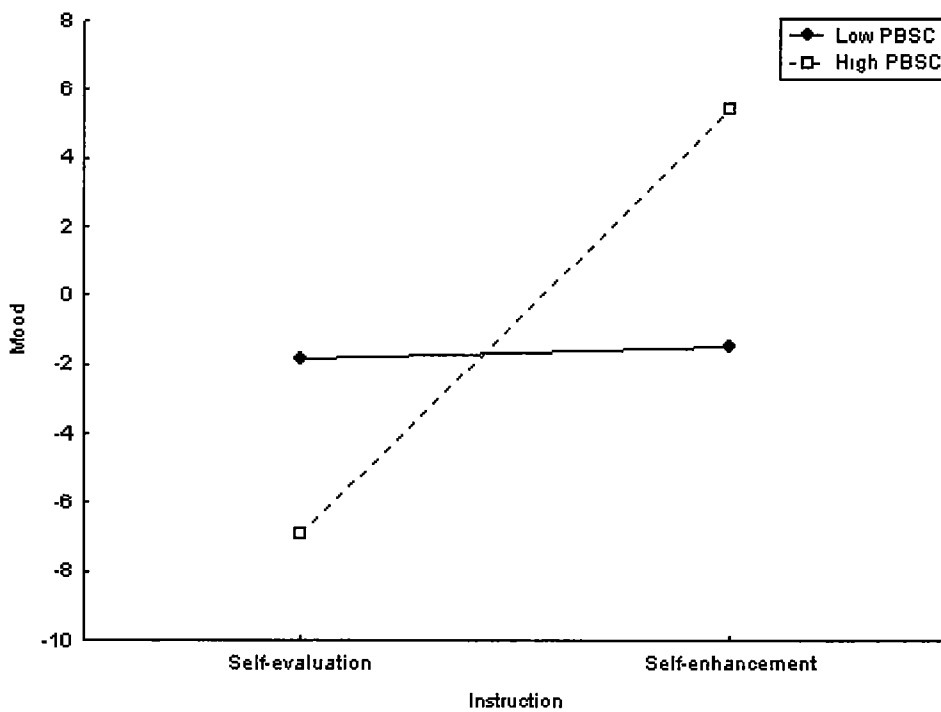


Figure 1. Mean ratings of mood for degree of public self-consciousness with self-evaluation and self-enhancement instructions.

Body Image Satisfaction

There was a highly significant main effect for instruction, $F(1,86) = 6.98$, $MSE = 42.60$, $p < .01$, $\eta_p^2 = .08$ indicating that participants given instructions in terms of self-evaluation were significantly more dissatisfied about their body image than those given instructions in terms of self-enhancement as illustrated in Figure 2. The main effect of Condition was not found to be significant $F(1,81) = 2.44$, $MSE = 42.60$, $p > .05$, $\eta_p^2 = .03$. In contrast to the hypothesis a PBSC status x instruction interaction was non-significant for the body image satisfaction variable [$F(1,81) = .099$, $MSE = 104.78$, $p > .05$, $\eta_p^2 = .01$].

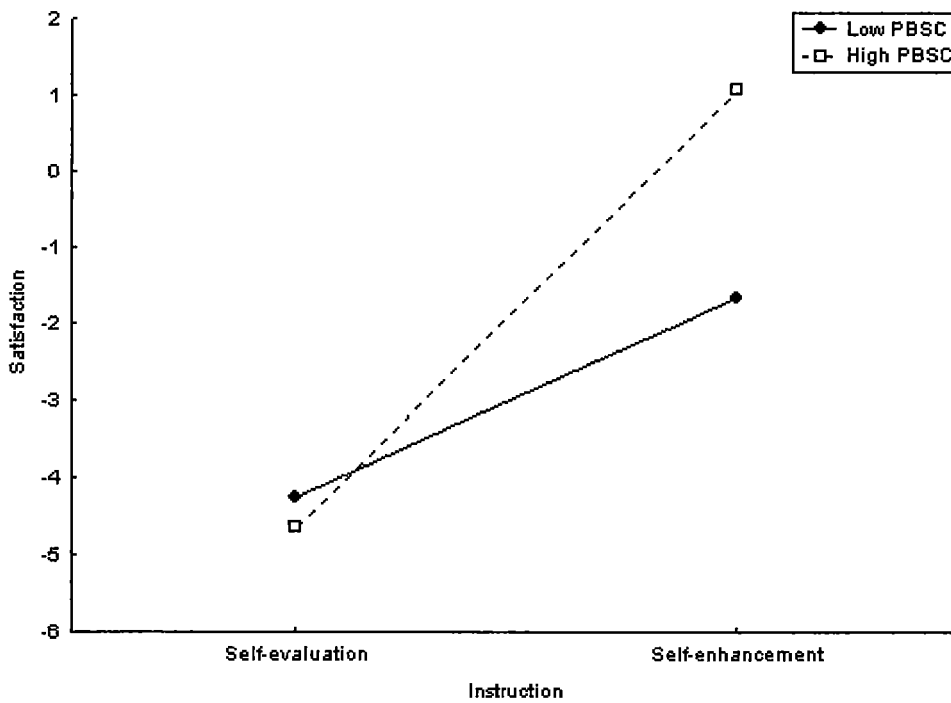


Figure 2. Mean ratings of body image dissatisfaction for level of public self-consciousness with self-evaluation and self-enhancement instructions.

Sociocultural Internalization

A highly significant main effect was found for PBSC status $F(1,81) = 10.94$, $MSE = 23.09$, $p < .01$, $\eta_p^2 = .12$, in which participants high in PBSC reported that they were more likely than those low in PBSC to internalise sociocultural ideals. A highly significant main effect was also found for instruction $F(1,81) = 6.88$, $MSE = 23.09$, $p < .01$, $\eta_p^2 = .08$, indicating that participants given self-evaluation instructions internalised thin ideal media messages to a greater extent than those given self-enhancement instructions. A nonsignificant trend was found for condition indicating that participants in the individual condition were influenced by the media to a greater extent than those in the group condition $F(1,81) = 3.05$, $MSE = 23.09$, $p = .085$, $\eta_p^2 = .04$ (Figure 3). In contrast to the hypothesis, no significant interaction between PBSC status, instruction and condition was found $F(1,81) = 0.98$, $MSE = 23.09$, $p = 0.33$, $\eta_p^2 = .01$.

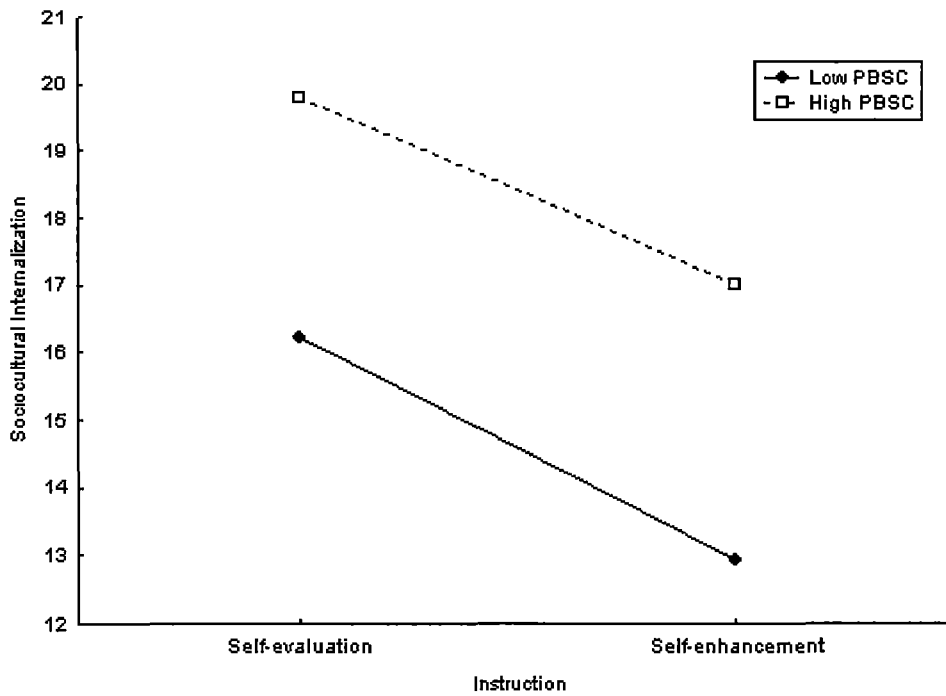


Figure 3. Mean ratings of sociocultural internalisation of appearance for degree of public self-consciousness with self-evaluation and self-enhancement instructions.

Physical Appearance Comparison

The main effect for condition was almost significant $F(1,81) = 3.77$, $MSE = 13.12$, $p = .056$, $\eta_p^2 = .04$ suggesting that participants in the individual condition ($M = 16.44$, $SD = 4.15$) had a greater tendency to compare themselves to the media images than those in the group condition ($M = 14.61$, $SD = 4.50$). Furthermore, a highly significant main effect for instruction, $F(1,81) = 25.74$, $MSE = 13.12$, $p < .001$, $\eta_p^2 = .24$, showed that those individuals given instructions that encouraged self-enhancement were less likely to compare themselves to media images than those given self-evaluation instructions (Figure 4). A trend towards significance was found for degree of public self-consciousness $F(1, 81) = 3.64$, $MSE = 13.12$, $p = .060$, $\eta_p^2 = .04$ suggesting that individuals high in PBSC were more inclined to engage in social

comparison than those low in PBSC. In contrast to the hypothesis, no significant interactions between PBSC status, instruction and condition were found.

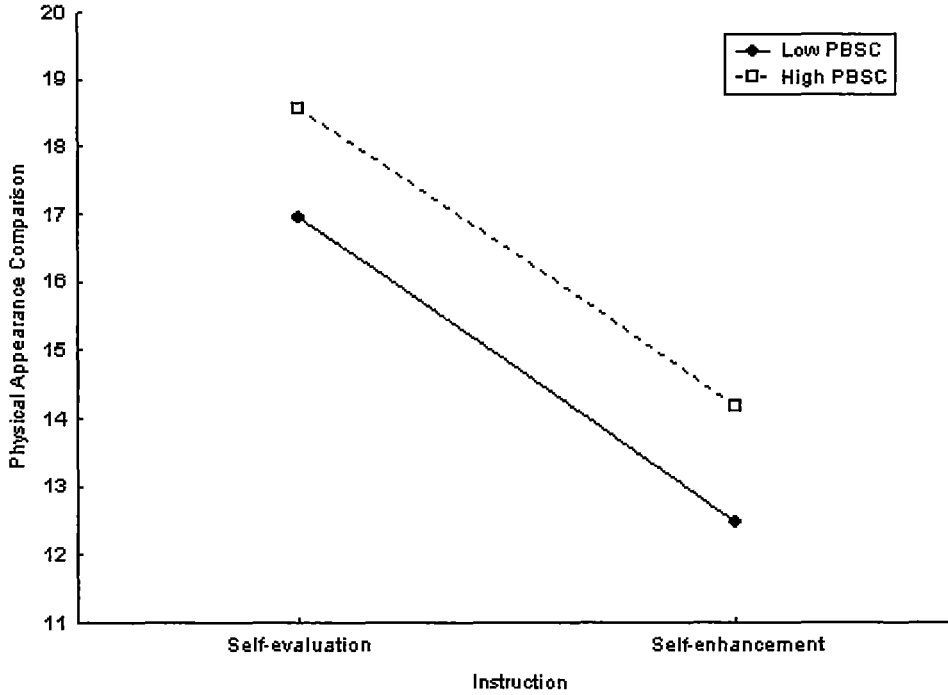


Figure 4. Mean ratings of physical appearance comparison for degree of public self-consciousness with self-evaluation and self-enhancement instructions.

Discussion

The objective of this study was to elucidate whether the media's portrayal of the thin body shape as an 'ideal' was significantly related to the primary dependent measures of body satisfaction and mood state in adolescent girls by means of a social comparison manipulation. This investigation replicated the design of Martin and Gentry (1997) and included a group factor so as to explore the social aspect of adolescent girls' magazine usage. The addition of a group variable was important as adolescence is seen as a time of increased focus on the self as a social being and identity with a peer group is of central focus (Hutchinson & Rapee, 2007). Social

identity theory was used to explore the notion that possessing a similar identity in the form of a peer group may influence an individual's level of dissatisfaction with their own body.

A number of predictions were made for the primary dependent measures body image satisfaction and mood state. It was hypothesised that the degree of body image satisfaction would be lower for those high in PBSC than those low in PBSC and for those in the group condition in comparison to those in the individual condition. The results of this experiment failed to support these predictions for body satisfaction. A possible explanation for a lack of significance in the results is that the measure used was not suitable for an adolescent sample. In addition, the way in which the items on the satisfaction scale were phrased may have contributed to the observed differences – the satisfaction items were more cognitive than affective.

The results of this study support the prediction that those individuals given self-evaluation instruction would show a drop in mood compared to those given self-enhancement instruction who showed no change.

Additionally, a public self-consciousness x instruction interaction confirmed the hypothesis that those individuals high on the self-consciousness scale would show a greater drop in mood when instructed to critically compare themselves to the models in the images relative to those with low levels of public self-consciousness. These results demonstrate that adolescent girls who are highly concerned about how they present and how they are perceived socially experience more negative mood after viewing thin ideal media images in comparison to girls who are low on public self-consciousness when they are instructed to compare themselves critically. The above finding supports previous research (Joshi et al. 2004; Wojslawowicz, 2005) suggesting a link between self-consciousness and depressed mood in adolescence. In

comparison, the results failed to show a significant difference if given the instruction to self enhance. The results for the physical comparison and internalisation variables were also non- significant.

In addition the above findings confirm previous studies that have suggested that PBSC may play a significant role in the development of eating disorder symptomatology. Cooley and Toray (2001) found the public self-consciousness variable most important as increasing levels of bulimia and dietary restraint were associated with greater levels of concern about others' views and the impressions they have on others.

Findings from this experiment also corroborate previous studies suggesting that individual differences should be considered when studying body dissatisfaction (Burt, 1994; Mori, Chaiken & Pliner, 1987; Striegel-Moore et al., 1993) as not all women are affected to the same extent by idealised representations of women (Hendersen-King & Henderson-King, 1997). This significant interaction provided continued support for this line of argument. Henderson-King and Henderson-King (1997) found by including social and individual difference factors that some women's body esteem was lowered by such images while others was enhanced.

There is a general consensus as indicated in the present literature review that images of undernourished females portrayed in the mass media represent the pinnacle of perfect womanhood and thus create body dissatisfaction and negative mood in women who would like to emulate this body shape. (Dittmar, Halliwell & Stirling, 2009; Tiggemann, Polivy & Hargreaves, 2009) Therefore there is a strong need for the use of more normal female representatives such as women with a body mass index in the healthy range rather than thin bodies that are classified in the underweight range. Furthermore, a number of authors have posited that short-term repeated

exposure of these images may have a cumulative effect and the finding from this study showed that the mood of susceptible adolescent girls became significantly worse after only ten minutes of exposure, suggesting that with frequent repetition, these individuals may suffer adverse effects in the long-term.

Although no significant interactions were found in the data set for either condition (individual versus group) and instruction or condition and PBSC for the measures mood, body satisfaction, social comparison and sociocultural internalization, significant main effects were observed. These findings indicate that different types of social comparison (self-evaluation or self-enhancement) and specific situations (individual or group) may be having an effect on the above measures.

Contrary to the hypothesis, participants in the group condition were found to have more positive mood and greater body satisfaction than those in the individual condition. However, as the interactions between public self-consciousness, condition and instruction for the measures were not statistically significant it is not possible to draw definitive conclusions about the relationship between motives for social comparison and peer group influence. Social Identity Theory can be utilised to explain this finding. It can be speculated that the effect of being in a group provides the girls with an opportunity to broaden the range for comparison and enhance their own self-esteem and those around them by comparing favourably with each other and criticising the images they were given. As previously stated the above finding offers support for the literature on Social Identity Theory (Hogg & Williams, 2000; Meyer & Waller, 2001) suggesting that an individual is more likely to compare oneself with similar others (ingroup) rather than dissimilar others (outgroup) so as to achieve self-enhancement.

These results raise a number of issues. One possibility is that adolescent girls may be looking to the media celebrities as a prototype of the ingroup and someone to whom they can aspire through social mobility. Alternatively, the girls may view media celebrities as members of an outgroup, as dissimilar to themselves and thus persons to whom they do not wish to aspire as an upward comparison would be detrimental to self-esteem. The latter suggestion appears more plausible as Hogg (2000) posits that it is quite difficult to psychologically de-identify and move between groups especially into a group that is perceived by the individual as of a higher status. The results of this study suggest that there is a need to demonstrate the relationship between social comparison and body dissatisfaction experimentally. However further research is needed to closely examine the role peers play in a group situation.

Some individuals are more susceptible to cultural pressures to meet the thin ideal, perhaps because of a greater disposition to engage in social comparison or a tendency to engage in different forms of social comparison (Rankin et al., 2004). In research that has manipulated social comparison motives a moderating role of social comparison in the relationship between media exposure and transitory changes in body image has been found (Cattarin et al., 2001). The findings from this study support previous research suggesting that social comparison motive plays a significant role among adolescent girls as the results show that depressed mood was evident for self-conscious girls following thin ideal media exposure.

It can therefore be argued that the media ideal body shape has inevitably become globalised as the media has become globalised so that a typical teenage girl in Auckland is as likely to compare herself with a model or celebrity in New York as with one in her own city. This view is supported by Trampe et al. (2007) who explored the idea that if people only compare themselves with similar others why do

women continue to make comparisons with thin ideal media images if in fact they are unattainable. They found that it is the degree to which women are dissatisfied with their bodies that predicts whether or not media exposure will have an impact on their self-evaluations. This study therefore used degree of public self-consciousness and motives for social comparison as mediators between the media influence – body dissatisfaction relationship. In the context of fashion magazines it is expected that this comparison will be generally upwards, because the models represent an ideal image of beauty, and so the comparison can be termed *Self-evaluation*. As previously stated, social comparison theory asserts that when objective standards are unavailable, as in the case of beauty, people tend to compare themselves with similar others however the issue as to why females have a greater tendency to engage in social comparison with thin ideal media images still lacks strong empirical support.

Study 2

Based on the results of the first investigation this study employed focus group methodology with 18 school girls who had participated in either the individual or group condition in Study 1. The groups were not homogeneous with respect to their previous condition. Participants were divided into two groups ($N = 9$) and the focus groups were conducted in a quiet classroom with minimal distractions. It was intended that the focus groups would provide an opportunity to explore the group experience further. Focus groups provide access to participants' own language use and concepts and as a result are extremely sensitive to cultural and sub-cultural values, especially that of adolescents who use very different language from that of adult researchers (Tiggemann et al., 2000). Kitzinger and Barbour (1999) argue that focus groups assess not only what people think but how they think and why they think

that way. This is particularly helpful for concepts such as body image which may be so well established that they have not undergone much conscious processing and articulation (Tiggemann et al., 2000).

Participants in the focus group study were given feedback as to the results of the first study and informed of the unexpected findings and new questions arising. The results indicated that group membership might be having a positive effect such that the presence of other girls in the group may have a protective role on exposure to thin ideal media images. This interesting finding needed to be explored further by asking girls to reflect on their peer group and the influence they may be having when confronted with thin ideal media images. Specifically, the girls were provided with the following statement: *“The results of the study which you participated in suggested to us that being in a group with your peers while looking at the magazine images might make you feel better about yourself and in particular your body shape. We would now like to discuss these ideas with you to help us better understand the media and body image dissatisfaction”*. They were then informed that this was going to be addressed in the form of a group discussion.

Method

Participants

The participants in this study were 18 schoolgirls ($M = 13.4$ years) who had participated in either the individual or the group condition in Study 1. They were divided into two groups with nine girls in each group.

Materials

The stimulus material utilised in this study was an interview schedule (See Appendix E) consisting of 12 questions designed by the researchers to provide more

information about the feelings associated with being a part of a group and the factors that make the group a more positive experience.

Procedure

Informed Consent was obtained from Parents/Guardians (See Appendices F1 & F2) prior to participation. Girls also read the information sheets and signed the consent forms prior to their involvement in the focus groups (See Appendices F3, F4 & F5).

Two focus groups were conducted in a quiet classroom and lasted approximately 45 minutes. The participants were all given a general introduction to the study by the researcher, involving feedback of the results of the first study and the unexpected findings and new questions arising from the study. They were then told that this was going to be addressed by group discussion and were then split into two groups with one facilitator for each group (Both facilitators were registered Intern Clinical Psychologists). The participants were told that they would have to abide by the following rules for a focus group. Firstly, participants were told that everyone should have chance to speak if they wished but they did not have to contribute in the group discussion. Confidentiality issues were also discussed. The girls were informed that they should show respect for others' opinions even if they disagreed, and that each individual's opinion would be valuable. Finally, prohibited behaviours such as name calling were also highlighted. The general format of the group discussion was then outlined. The girls were told that there would be twelve specific questions from the facilitator that needed to be addressed but that it would be acceptable to diverge and bring in a new topic or answer unasked questions. They were then told that the time frame for the activity was roughly sixty minutes and informed of the facilitator's role in the proceedings. The facilitator was there to ask

the list of questions formulated and to act as a summariser, mediator, time-keeper and to keep group members on track etc. At the end of the session participants were invited to scribble their thoughts on paper and submit them individually. Facilitators then checked out the comfort level of participants by asking them to describe how they were currently feeling and their expectations and then invited questions.

The facilitators then summarised the main themes of the discussion and indicated the availability of later feedback. It was important for the facilitators to keep in mind that no individual participant had experienced both the group and the individual conditions, so they could not make any direct comparisons. Consequently the facilitators had to outline the group/individual differences and asked them to reflect on what they thought the reasons for these differences might be.

Prior to the group discussion both facilitators discussed how to deal with the possibility of discussion drying up and how much prompting they would give to obtain responses to any given question and when they would intervene to move discussion on to the next question and how they would invite alternative other views when one response to a question had been given by part of the group. At the conclusion of the groups the facilitators again asked the girls to describe how they were feeling having disclosed personal information in a group setting. No problems arose in conducting the groups, such as the discussion drying up and at no time during the group session or at debrief did any girls show distress.

Data Analysis

The focus groups were audio-recorded, transcribed by a research assistant and checked for accuracy by the researcher. The transcripts were then analysed using N6 qualitative data analysis package (Richards, 2002). The analyses involved the researcher reading through the transcripts and, once they became familiar with the

records, creating categories based on the emerging themes. Each statement was assigned to a category (a quote was allocated to more than one category if applicable) and where there was overlap the categories were merged. Analysis using qualitative methodology (for example, N6) in the body image area has been well documented (McCabe, Ricciardelli & Ridge, 2006; Mooney, Farley & Strugnell, 2009; Nichter, 2000) and is considered reliable and valid.

Results

The final results of the analyses revealed three main areas to explore in a subsequent study. The girls agreed that while in a group setting the experience of the Study 1 task might well be more positive and the reasons put forward were as follows. Firstly, there would be a range of normal body shapes in a group, in contrast to the overwhelmingly thin ideal physique presented in the media material, suggesting that peers were used for social comparison and not only the media images. Secondly, the group might serve as a distraction from self-focus, and finally the group could provide the opportunity for peers to reassure each other if self-doubt were evident in relation to ones' shape or size.

Peers for Social Comparison

The girls frequently alluded to the fact that in the group they used other girls and not just the models as comparisons because there were more normal shapes and sizes in the group.

GIRL 1: Because when you are in a group you have other people to compare yourself to as well as well as models in the magazines.

FAC: OK, so when you are in a group you've got other people around you that you can actually compare to which might not be looking like models... What about other people, was that what you expected?

GIRL 2: Yeah, yeah.

GIRL 3: Yeah,

GIRL 2: pretty much.

GIRL 5: Instead of going like oh they're really skinny and I'm not because you are in a group and it doesn't matter as much.

GIRL 2:...and you could compare yourself to other people.

GIRL 10: I thought it would be better in a group

GIRL 8: In a group yeah

GIRL 11: Yeah that's what I thought

GIRL: 3: We respond differently to whoever's around us so when we are by ourselves we think about how they look more than we would with others because we like talking about other things and that kind of thing so we actually have when we are by ourselves have more time to actually think about what's in pictures.

The following comment suggests that normal people in the group provide a balance for the thin ideal media images and it is implied that peers are able to have a positive influence.

GIRL 2: Oh, when we were in the group like other people because no-one there was perfect like in the magazines and some people like didn't care about it and then so the other people started not caring about how they look either so that... Yeah, so when you were with other people you knew that no-one else was perfect like the people you were listening to.

In a sense, peers provide a reality check as they confirm to the girls that they are in the real world. It provides opportunity to think about the pictures of fashion models and celebrities in a more realistic way. For example, such pictures are airbrushed and therefore conceal any of the models' flaws. In addition it enables them to ask

questions and explore ideas such as that the models may have personal trainers and assistants to aid them in looking the way they do.

GIRL 3: When we were discussing it you've got these people around you who are normal but sometimes when you leave the room and then you see someone walk past and then see the same person you're going well I don't know. You don't know whether it's good to be normal or whether you want to be this perfect person – you're kind of stuck in the middle of what you really... what you think.

This comment suggests that notwithstanding having other individuals in the group condition with different body shapes and hence broadening the range of possible shapes and sizes as comparison targets, individuals may find themselves still questioning their own appearance. This in turn increases self-doubt and dissatisfaction with one self.

GIRL 10: I think also because this is just a group of people in a magazine that look like that but when you look around every single day there isn't this supermodel walking down at school

GIRL 7: You look at your class and you all look the same and you just you know I think because you with normal people every day

GIRL 8: Everyone has got all different figures amongst us so there's people that you look at and think, oh she's way like way skinnier than me like I wish was like that then you might look at people like who are bigger people than you and you're like oh well I suppose I'm lucky to not be that big.

FAC: As women we have a view of ourselves that is very distorted because we've always got this ideal that we think have to be like

GIRL 9: Like you want to be normal but there isn't a normal.

GIRL 10: Yeah, what is normal and normal would be boring

GIRL 9: I'd like to be normal.

FAC: Yes, what is normal? It's different for everyone.

GIRL 10: Yeah

GIRL 7: You look at your class and you all look the same and you just you know I think because you're with normal people every day.

Questioning normal body shapes and the notion of trying to understand what constitutes a normal body provides a very clear example of using peers for comparison – to gauge their current weight and then determine if it is perhaps acceptable or unacceptable and whether or not it fits the thin ideal. In line with this mode of thinking one of the girls summed it up quite succinctly and suggested that the group experience allowed girls to make social comparisons with each other. If they did not meet society's ideal as dictated by the media they could feel reassured knowing that they were like their peers. As there were a number of different physiques to compare with the girls had a greater chance of feeling good about themselves.

GIRL 11: With my group specifically we were all three quite different shapes and – well four of us – yeah, there were four of us – we were all different shapes so seeing all the one shape in the magazine it'd make you feel a lot better being in the group because you didn't have to compare yourself just to that one style and shape you had the other people that were there too.

FAC: So that's what we are trying to look at. Like there's always that shape in the magazine and how realistic is it ... compared to women in the general population?

GIRL 10: Not very

Again there was suggestion that the portrayal of the thin ideal body shape in society leads to a misperception of the self.

GIRL 9: I think it's really hard to actually gauge what shape you are because you think you're so much bigger or smaller than you actually are.

Girl: 4: And you think you are really, really fat but other people are like oh my God I wish I was that skinny or

GIRL 10: Yeah

GIRL 9: It's really hard

The above is an illustration of the girls questioning their weight and shows that they were in fact using the models to determine whether or not they were an acceptable weight. It shows that they were unable to rely on their own judgement and need to seek it elsewhere.

Distraction from focusing on oneself

In the individual condition there were no other people present to laugh and joke and divert the attention away from the images. There was much more time to focus on oneself.

GIRL 3: Well, you don't really hear your friends comparing themselves so you don't then want to bring it up. It's kind of like they're not talking about it oh well I don't want to bring them into that kind of thing which is like stick with the joking it's easier.

GIRL 2: I guess you do have time to focus on the images so much more because there isn't that conversation going on around you that you want to join in you can just sit there and focus totally on the images, there's nothing to take your mind away from it.

GIRL 3: If you were with friends and you were talking about stuff and then somebody brought up the issue then you wouldn't exactly keep joking and laughing you couldn't really because most people think of themselves as not perfect.

GIRL 2: When you are by yourself, it's like when you compare yourself to that person you think I should be like that but when you are with other people you see that other people can actually have a life and can actually be happy with who they are and so like when you are by yourself you just judge it by them but then when you might walk outside or something you might realise that other people like are happy with who they are.

FAC: So when you are on your own you are going to be more critical?

GIRL 2: Yeah, and you might think oh it would be really good if I did look like that or something but then you just see other people being happy when you are in the group.

GIRL 5: Because you can't joke and laugh at yourself. I mean I do it but not all people don't.

FAC: Yeah, OK.

GIRL 5: Like normal people don't stand in their bedroom laughing at themselves.

This section follows on from the proceeding section discussing how having friends in the group is a distraction.

GIRL 3: I think it's just the whole like you have the freedom to think through all these other things. As you think more about it and you think more about other issues as well it makes you feel worse.

GIRL 5: And also the only person you have discussed it with is yourself and like you meant to have one view like if you discuss it with someone else they actually look at you more objectively and say how it's OK. But if when you can only discuss it with yourself it's a very subjective kind of view and therefore you are going to be like oh I don't look good enough or whatever but when you are with your friends they'd be like hang on you do.

GIRL 4: Because when you are with your friends like at lunch or something and you're talking about it if they want to talk about it you talk about it if they feel comfortable about talking about it. But when like you were in the group here or like when you are by yourself you sort of like talk about it, think about it because that's really the only thing to do. They might choose to talk about it or they might choose to talk about something else.

FAC: So again you are being distracted

GIRL 4: And everyone's got different feelings about what they would like and you feel like you can talk about it.

FAC: So when you are on your own you don't get the distraction from your friends that you normally get. You can sort of focus on it a lot and you don't get other people's opinions and so all those sorts of things that's why it might make it a more negative situation. Right near the end. Just a couple left. Did we ask you about important aspects of your response to the magazines but did we ask in the wrong sort of way. OK. So did we ask you about important aspects of your response to the magazines but did we ask it in the wrong sort

of way. In a way that made it difficult for you to appreciate what we were getting at.

The following exchange suggests that there are social rules governing the way body image is discussed.

GIRL 3: Sometimes you just don't really want them to know like because if you've got like these feelings and you don't really want them to know that because it's something you want to work through yourself and work out exactly what your thoughts on it are and it's also because you've got all these pretty people around you sometimes you don't want to discuss it because they are the pretty people you are comparing yourself to.

GIRL 5: A lot of it also is in our society like if you tell someone oh I'm real skinny oh and they'd be like you're so up yourself

FAC: If you say to them you want to be skinny?

GIRL 5: Oh no, if you say to them you think you are they think that you're up yourself but then if you say that you think you're fat they'll tell you you're skinny. It's like what you are socially expected to do I guess so discussing body image is kind of pointless.

FAC: Is it just sort of a topic that you don't really touch on like one of those topics you just...

GIRL 3: Like you would touch on it with like your closest friends when you are like in big groups and stuff you don't really want to touch on it much.

FAC:..... You know my thighs are a bit fat and I think

GIRL 3: Sometimes we make comments like that but nothing which you are actually really feeling deep down.

GIRL 4: It's always surface stuff in groups more

GIRL 4: Jokes and stuff

The following relates to the idea that there are rules governing discussion of body image and the dialogue in the group condition was surface comments. It is not perceived to be socially appropriate to talk about body image in a group situation.

FAC: So why wouldn't you talk about body image when you are in a group

GIRL 3: Sometimes you just don't really want them to know like because if you've got like these feelings and you don't really want them to know that because it's something you want to work through yourself and work out exactly what your thoughts on it are and it's also because you've got all these pretty people around you sometimes you don't want to discuss it because they are the pretty people you are comparing yourself to.

GIRL 3: Well, you don't really hear your friends comparing themselves so you don't then want to bring it up. It's kind of like they're not talking about it oh well I don't want to bring them into that kind of thing which is like stick with the joking it's easier.

GIRL 5: It's the whole what you are comfortable talking about what you feel you allowed almost to bring up in a conversation and because people don't compare themselves to models a lot. It's like in a conversation you know you just don't compare yourself to models so if someone did it would feel really strange.

The following shows how one of the girls has the confidence to raise this and take the concept further by relating it to how the girls might be feeling right then and there.

GIRL 3: I think that what we are seeing now is how uncomfortable people are in talking about it

FAC: Ah, so this might be an example of being in a group. No but that's a good point maybe this is a tough thing to talk about because maybe it's a bit embarrassing or it's showing that you might have feelings about that sort of thing you know you might be worried that you are too skinny or you are too big or you know whatever.

GIRL 1: I've never met anyone who is worried about being too skinny.

GIRL 5: It's the whole what you are comfortable talking about what you feel you allowed almost to bring up in a conversation and because people don't compare themselves to models a lot. It's like in a conversation you know you just don't compare yourself to models so if someone did it would feel really strange.

The group experience was consistently described as being less serious and more fun than perhaps being on one's own.

GIRL 4: When you were in your group you sort of can make fun of things and you are not really thinking of yourself so much.

GIRL 5: Sort of like bagging out the models

GIRL 3: Yeah, yeah

GIRL 10: I think that out of the group of people and they just thought oh look at that yeah that looks cool, and blah, blah. It wasn't like you know these people are sitting there looking at magazines. It was actually with fun people that makes a big influence on how the mood was – it wasn't just like oh awkward or anything.

The personalities in the group and thus group dynamics appear to play a significant part in terms of how one feels.

FAC: So you think that if you were with other kinds of people who were more critical of themselves...?

GIRL 10: Yeah possibly

GIRL 10: I suppose that is one way that it could have turned out if you were there really but I just think the atmosphere of looking through it back in that group was just you know fun and everything – no, I don't think we felt pressured.

GIRL 3: Well, you don't really hear your friends comparing themselves so you don't then want to bring it up. It's kind of like they're not talking about it oh well I don't want to bring them into that kind of thing which is like stick with the joking it's easier.

The above dialogue suggests that the girls appear to be taking cues from each other as to whether it is acceptable to voice opinions regarding one's body. The following illustrates that simply by 'being alone' one has more time to process information and be aware of thoughts in relation to body image. Time alone allows an individual to interpret their thoughts and perhaps over-generalise or exaggerate the extent to which other people focus on body size and shape.

GIRL 3: Also when you are on your own you get to think about other things which bring your body image down. Like when you are walking through town in walking with your friends you see all these guys [speaker appears to refer to males] with your friends and you don't think they are looking at you and then you think more on that because you think they turn the conversation around. So you think its like how guys see you and you think of how you see yourself and get some magazine and things like all these different things and you're also comparing yourself to friends. So when you are with your friends you don't actually go into that because you've got other conversation around so you don't have time to think. When you are by yourself you have time to think and then you bring in all these other ideas with it.

Here the group experience can be seen to have enhanced self-esteem.

GIRL 11: I think that the group is more fun and a lot easier and a bit more fun to be with which would make you feel better about yourself so you wouldn't be quite as critical whereas while you are by yourself you try to pick out all the bad things about yourself.

It was suggested that in the group or at school in general the girls do not focus on themselves to the same extent as they would at home. They offered the example of having mirrors at home where they can focus solely on themselves and in essence have the visual reinforcement that they do not have at school.

GIRL 1: Like at home you can, like in a group at school and that you don't really have the mirrors around to compare like I look that good. At home you've got the mirrors there to

As previously discussed in the individual condition one is more critical of oneself and more inclined to compare the self with the models as it is more subjective.

GIRL 2: I guess you do have time to focus on the images so much more because there isn't that conversation going on around you that you want to join in you can just sit there and focus totally on the images, there's nothing to take your mind away from it.

GIRL 3: If you were with friends and you were talking about stuff and then somebody brought up the issue then you wouldn't exactly keep joking and

laughing you couldn't really ... because most people think of themselves as not perfect.

Again the group experience seems to have allowed the girls not to get caught up in their thoughts as such and provided them with an opportunity to see that striving for the ideal body that is presented in the media is striving for perfection and not accepting flaws.

GIRL 2: When you are by yourself, it's like when you compare yourself to that person you think I should be like that but when you are with other people you see that other people can actually have a life and can actually be happy with who they are and so like when you are by yourself you just judge it by them but then when you might walk outside or something you might realise that other people like are happy with who they are.

FAC: So when you are on your own you are going to be more critical?

GIRL 2: Yeah, and you might think oh it would be really good if I did look like that or something but then you just see other people being happy when you are in the group.

GIRL 5: When you are on your own you feel more pressure like because there's no-one there to dampen it down you're making things bigger in your mind that you think no-one will be my friend if I'm not that thin or whatever. Whereas if you are in a group of friends they're your friends even if you are not that thin and then you are not going to have all this stuff on your mind because you'll be able to see that they're still there they're still my friends you know.

GIRL 5: Because you can't joke and laugh at yourself, I mean I do it but not, all people don't.

FAC: Yeah, OK.

GIRL 2: Yeah, and you might think oh it would be really good if I did look like that or something but then you just see other people being happy when you are in the group.

It was further implied that friends in fact offer alternative views to one's own beliefs and interpretations of their thoughts.

GIRL 3: I think it's just the whole like you have the freedom to think through all these other things. As you think more about it and you think more about other issues as well it makes you feel worse.

GIRL 5: And also the only person you have discussed it with is yourself and like you meant to have one view like if you discuss it with someone else they actually look at you more objectively and say how it's OK. But if when you can only discuss it with yourself it's a very subjective kind of view and therefore you are going to be like oh I don't look good enough or whatever but when you are with your friends they'd be like hang on you do.

GIRL 4: Like when you are with friends you sort of like you're talking about it then five minutes later you are on a totally different subject and you can forget about it. But when you are by yourself you just sort of like think about it all day.

FAC: Kind of ruminate or whatever, think about it, keep thinking about it.

Different types of Comparison

A distinct theme emerged from the data concerning the capacity to focus on different types of comparison. In a group situation, the girls suggested, that they could bypass the pictures and focus on the clothes and accessories as opposed to bodies. It gave them an opportunity to discuss the latest gossip pertaining to that celebrity or general information about hair and clothes.

FAC: So when you are on your own you are focusing more

GIRL 3: Yeah, and you are thinking more on how it relates to you but when you are in a group you can like flick past the pictures more into like the gossip, you don't really think about that kind of thing.

GIRL 10: I look more at what they're wearing.

GIRL 9: How the hair is or something like that.

The girls also suggested that the study differed from "real life" viewing magazines because they were asked to focus specifically on the thin ideal body shape.

FAC: OK. As opposed to their physical appearance or their weight. So our experiment was different in that we asked you to focus really specifically on weight but normally you don't do that?

GIRL 9: No not really

GIRL 10: Sometimes

GIRL 8: We do sometimes, we're like oh she's fat.

GIRL 7: Or she's really pretty

GIRL 11: Your attention gets drawn to the large people but it doesn't really worry you all that much like it just looks pretty normal so you just pass by it so you just look at what we are actually there to look which are the clothes and that kind of thing. But if someone is a bigger size or a smaller size you would most likely pick that up first before you'd actually look at their clothes.

FAC: So if they were significantly bigger or smaller.

GIRL 9: Yep

GIRL 11: Yep

The following dialogue describes how there was less focus on body shape in the group.

GIRL 4: When you were in your group you sort of can make fun of things and you are not really thinking of yourself so much.

GIRL 5: Sort of like bagging out the models

GIRL 3: Yeah, yeah

GIRL 11: I think that the group is more fun and a lot easier and a bit more fun to be with which would make you feel better about yourself so you wouldn't be quite as critical whereas while you are by yourself you try to pick out all the bad things about yourself.

FAC: So when you are on your own you are focusing more

GIRL 3: Yeah, and you are thinking more on how it relates to you but when you are in a group you can like flick past the pictures more into like the gossip, you don't really think about that kind of thing.

GIRL: 3: We respond differently to whoever's around us so when we are by ourselves we think about how they look more than we would with others because we like talking about other things and that kind of thing so we

actually have when we are by ourselves have more time to actually think about what's in pictures.

FAC: You think more about what they are wearing and those sorts of things

GIRL 3: ... things that you would like to discuss with friends like if you are going out somewhere like what you would wear and that kind of thing.

GIRL 7: Well, I suppose I don't really pay much attention to their weight unless they're like – I mean some people might like sometimes I do, like you look at really pretty people and think oh how can I be sort of like them or something but you don't really pay much attention to their weight you think like oh she's too skinny they should have real size models or something not like – really, it's not good because they try and influence other girls that they have to be that way and they have to look that have that certain figure or something which isn't right at all.

There was indication from the discussion that when in the individual condition one may be more inclined to self-evaluate as opposed to focusing on hair and make up in the group.

GIRL 4: I think both, when you are in the group you're sitting there reading going oh I wouldn't wear them clothes ever

GIRL 3: It's more like critical on your own

GIRL 4: But it's not as critical in the group

GIRL 3: In the group it's more like the clothes and the hair, not being critical about yourself and your body

Reassurance from Peers

The last main area that emerged from the data as to why the group may serve as a positive experience is in relation to the reassurance that girls provide each other. The girls implied that being part of the group provided them with support and offered alternative views, an alternative frame of reference.

GIRL 2: We could all chat and

GIRL 3: we all had the same opinion, it was nice

GIRL 2: and someone agreed with you

FAC: Oh, OK. So you could kind of get reassurance or backup from someone else that your idea was right

GIRL 3: Yeah, and you could also hear how different people see it so it can make you see things differently as well check out all these other ideas on how some all these other people see something and it can make you change how you sound or something like that

FAC: Yep, to widen your opinion about things.

GIRL 3: Yes.

FAC: That's good.

GIRL 11: I think the fact that you had people there to all back you up. If you thought yeah that looked nice, but if you also commented that you never wanted thin or something like that and they also picked it up and that made you feel better.

FAC: So friends tend to reassure you.

GIRL 11: Yeah

Being a part of the group and receiving feedback from peers led to irrational thoughts and self-doubt (that may be present when one is alone) diminishing.

GIRL 10: Whereas, if you were there by yourself saying well I don't want to be that thin there was no one there to say oh same here. So you just stay by yourself thinking, your thinking well if I don't want to be that thin well maybe that's not normal. Maybe everyone else does want to be that's why it's so different.

GIRL 11: But being in the group was a lot more comfortable because everyone was talking and there just wasn't great big silences. Just like that yeah that kind of thing.

FAC: Back to your point it was more reassuring.

GIRL 11: Yeah. Like you felt more comfortable when everyone else was on the same level as you and they were commenting and being exactly the same as you, you felt like oh OK then that was better.

GIRL 9: What would happen after you were the only person that thought that thing you would feel a bit better in the group.

GIRL 10: Exactly

GIRL 8: If you were the only person that oh I wouldn't want to be that thin but everyone else was like I would. Or maybe like oh I wish was like that and everyone was like no that

GIRL 10: Well, that did happen in our group so. Yes that did happen in our group. I'm not sure but if that did happen then yeah it would be awful if everyone's going oh yeah I would like to be that thin you're like I wouldn't. I'd probably say I wouldn't and everyone would go oh

FAC: Yes, something like ...

GIRL 11: Anyway it would also depend on if people were actually just saying it to go along with everyone else.

GIRL 11: Well, the people that I was in the group with I don't really talk too much but the actual group, it was like it didn't really matter how well we knew them and that kind of thing because we all had fairly similar opinions on it so it was like yeah

FAC: So do you think people were tending to go more with one person?

GIRL 11: Yeah

FAC: Yeah. So there was one dominant person in the group. Someone who's a little bit more opinionated. OK. And what about the friendship groups. How would you compare our group to your friendship group

GIRL 5: When you are on your own you feel more pressure like because there's no-one there to dampen it down you're making things bigger in your mind that you think no-one will be my friend if I'm not that thin or whatever. Whereas if you are in a group of friends they're your friends even if you are not that thin and then you are not going to have all this stuff on your mind because you'll be able to see that they're still there they're still my friends you know?

GIRL 11: I think the fact that you had people there to all back you up. If you thought yeah that looked nice, but if you also commented that you never wanted thin or something like that and they also picked it up and that made you feel better.

Group formation on the basis of friendship

The girls discussed the need for friends in the group condition for the purpose of moral support and showing the importance of having a similar identity. The

friendship versus non-friendship group distinction was clearly going to be an important variable to be taken into consideration in designing a further study.

GIRL 5: With friends you can like tell them anything but with people you don't know you can't really tell them anything.

GIRL 3: Because you really don't want them to know.

GIRL 5: Especially if you think they are going to laugh at you or like make a fool of you or you think they might like sort of not necessarily tell someone but spread that kind of image about you.

GIRL 5: The fact of not actually having a friend in the group. Like everyone else in the group were friends or so I thought like yeah OK.

FAC: So you felt a bit out of it or bit less comfortable

GIRL 5: Yeah

GIRL 3: It would be always easier for people to compare themselves or whatever when they are in a group of their friends because they know each other.

The girls followed on this discussion by referring to pressure to agree with those girls seen as "popular" in the group.

GIRL 5: Or ignore how they feel I guess with me most of them were people - I was in the group with like the popular group. It was even worse looking at pictures and discussing them with the popular group, not that I have anything against the popular group.

GIRL 3: But you kind of like see them and then you compare yourself to them and so it's not as easy to discuss it then like if you have your friends there with the people who you would consider just like you

GIRL 5: I think you are almost pressured to agree with the popular group more like if they like that piece of clothing then you can't really say well it's a disgusting piece of clothing

GIRL 3: And you can't really say oh I like that piece because they might think you know

GIRL 5: They'll all laugh at you or something and it's like OK.

FAC: So the thing about the group was it was threatening or whatever if it was people you didn't feel comfortable with or people you didn't know that well.

GIRL 5: Yeah

GIRL 3: Because you didn't want to express some of the stuff you were really feeling about them and that's why it was different in the group thing.

The following illustrates how some girls felt that they were not as willing to divulge their opinion with those that were not close to them.

GIRL 3: Because you didn't want them to know as much like you wouldn't mind your friends knowing but you wouldn't want people who you weren't close to.

FAC: So it became more like a fun thing where you are kind of making jokes about the models or whatever. So maybe you are not taking it as seriously ... yeah. OK that's very good. All right, are there any other thoughts about the results? What about the next question? What do you think might account for the differences in the group and individual conditions? We sort of talked about that, didn't we? Yeah. So, we talked about group condition was because you were with friends and it was less serious.

GIRL 2: ... and you could compare yourself to other people.

The influence of peers was raised in the following dialogue and was described as having a positive effect. It describes how in fact the groups per se are not positive but rather it is the type of group. This relates to the previous section about the "reassurance theme" and adds to that by suggesting that reassurance is available in a group but only if it is a friendship group.

GIRL 5: Instead of going like oh they're really skinny and I'm not because you are in a group and it doesn't matter as much.

GIRL 7: Probably higher because they would influence you I suppose like in a group – I don't know – just think like

GIRL 8: Like maybe say something to like make you like sort of agree with them to see their point of view I suppose.

FAC: So if you think some girls in the group condition might have said they feel good about themselves but really they didn't, they were more influenced by other people.

GIRL 8: Yeah

GIRL 10: Yeah

GIRL 11: Maybe

FAC: Does everyone else agree with that?

GIRL 8: Yeah

GIRL 10: Yeah

GIRL 8: If you were the only person that oh I wouldn't want to be that thin but everyone else was like I would. Or maybe like oh I wish was like that and everyone was like no that

GIRL 10: Well, that did happen in our group so. Yes that did happen in our group. I'm not sure but if that did happen then yeah it would be awful if everyone's going oh yeah I would like to be that thin you're like I wouldn't. I'd probably say I wouldn't and everyone would go oh

FAC: Yes, something like ...

GIRL 11: Anyway it would also depend on if people were actually just saying it to go along with everyone else.

Additional themes were raised in the focus groups as to how this type of research could be improved. The areas that generated discussion were the idea of friendship groups as opposed to groups constructed by the researcher, self-improvement as a motive for comparison and the influence of peers. Additional points made reference to the scale used to measure body satisfaction as being ambiguous and that girls perceived as "popular" were seen as having a strong presence/influence in the group. These points will be developed in the following section.

Friendship groups

The issue of peer group versus friendship group was a significant factor as the girls shared that they did not feel as comfortable in a group situation divulging personal opinions with people with whom they weren't friends. The friendship group also offers a sense of security.

GIRL 5: With friends you can like tell them anything but with people you don't know you can't really tell them anything.

GIRL 3: Because you really don't want them to know.

GIRL 5: Especially if you think they are going to laugh at you or like make a fool of you or you think they might like sort of not necessarily tell someone but spread that kind of image about you.

Again the following highlights the strong influence of the peer group and the subsequent impact it may have on how one feels about their physical appearance.

GIRL 9: Like tonight we have our social and I will be looking at like all my friends

GIRL 8: It depends, it depends how your friends are, say my group of friends, I notice are really judgemental whereas compared to Jane's group of friends they might be a lot more accepting. So it's kind of like a tough situation in our friends like you ...

GIRL 10: My group of friends we are not like that. We don't just say oh Emily I hate your hair like that.

GIRL 9: I know.

GIRL 10: We don't say that.

GIRL 8: Whereas my friends would come out straight away and say my God your hair's so ugly.

GIRL 10: I just couldn't say that to someone my God your hair looks so ugly I mean you know and then no say I'm joking. If I wasn't joking

GIRL 8: Sometimes it's positive criticism. Like they could say oh you know what you're wearing looks awful we can change it

GIRL 9: like when you're shopping, it's really annoying.

GIRL 9: and they say yeah, it looks so nice.

FAC: so you are less likely to be influenced by me saying look at these pictures critically if you are with your friends, you'd be more supportive of each other and less likely to be influenced.

GIRL 10: Well, when some friends tried some top on that I actually really didn't like and I don't think it looks very good on them I don't want to say it does not look good but just like try the next size down or the next size up or a different colour, they might go oh yeah I like the colour or this colour would look good too. You know help them maybe find something better but ...

GIRL 8: Without saying straight away ...

GIRL 10: If she said oh I really like this top I don't want to say oh you know it looks horrible. I'd help them maybe choose a different colour or something if you think it looks ...

GIRL 8: Like say that looks good but I think this would suit you better.

GIRL 10: And then they go no no I like this one and you go oh cool.

The dialogue that follows takes this concept further by suggesting that although friends are supportive and comforting they can be critical and judgmental but this is in fact acceptable and is taken within the context of friendship.

GIRL 9: We bag each other we only do it for like jokes like Meg's so large she'll be like sometimes like you might take it is as a joke

GIRL 8: sometimes you might take offence like...

FAC: So you don't really mean it?

GIRL 8: Yeah, like we'll be bagging each other out but sometimes like say, I might get bagged out for my teeth again or like having pimples or something like that you think like if they – people don't really care anyway about my teeth or my pimples or anything like, but like I'll be going home thinking oh my God like everyone notices and then what can I do to change it and how awful do I feel now and stuff. So I suppose it depends on how accepting your group of friends are like.

GIRL 9: We love our friends like packs and everything but like we're very judgmental towards each other.

GIRL 9: But we don't really mean it this is because we're so open we just like say didn't mean it guys and they're like yeah and we're kind of like yeah it's OK don't worry about. But then it kind of does hurt.

GIRL 8: Yeah, you're thinking to yourself like that was really mean.

GIRL 9: Like it depends who you're around sometimes you can be more comfortable ...

GIRL 8: It's just that we're really open I guess we're just like Emily come on that looks bad.

GIRL 9: Yeah, we're joking around ...

GIRL 10: But if Emily likes it – what if Emily likes it.

GIRL 9: Yeah, that's the thing

GIRL 10: Then you've got to say I like it.

GIRL 8: Yeah, I do I'm like well guys that was an awful thing to say then like only joking, only joking.

FAC: So from what you said it would be different if you did this with different groups?

GIRL 8: Yep

GIRL 10: Yes, definitely.

FAC: Because your friends are a bit more critical and you wouldn't have been critical with the other girls in your group. Is that right

GIRL 11: It would depend on how critical they are actually being of you because some group of friends they just don't criticise you because they want you to, like they know that you'll take it personally or they know it will upset them or they'll feel really out of everything if they are told that yeah that looks really bad. So they don't say anything but they might just make a few comments to try and improve things or if you get this you'll look really cool that kind of thing. Whereas in some groups straight out yeah that looks really bad and that kind of thing.

GIRL 10: And if somebody was like that you could just say it's just a piece of clothing. And I say gee I like that top and Sarah comes in and says gee I hate that well then depending on your personality I might say how I like that. But some people go oh thanks.

GIRL 8: If it was me, I'm pretty outgoing and stuff like – if someone said they didn't like something I'd probably go out and wear it because they didn't like it. Like if it was one person but say my group of friends. Like if it was my

mum I'd definitely go and wear it but if it was my group of friends saying that then I most likely actually, I probably wouldn't wear it all or buy it.

GIRL 9: You would not even try it on.

The ensuing dialogue is about criticism to protect a friend from worse treatment from others.

GIRL 8: Whereas if it was my mum I'd go and buy it straight away.

GIRL 9: Like the closer you are to someone, let's say you'd been friends with someone for years you are just more open to each other.

GIRL 10: You just know each other you just know what they're going to say

GIRL 9: Even though you know it might hurt them you still just tell them because you know you've been friends for so long you just think that they will forgive you for it.

FAC: so you are less likely to be influenced by me saying look at these pictures critically if you are with your friends, you'd be more supportive of each other and less likely to be influenced

GIRL 10: Well, when some friends tried some top on that I actually really didn't like and I don't think it looks very good on them I don't want to say it does not look good but just like try the next size down or the next size up or a different colour, they might go oh yeah I like the colour or this colour would look good too. You know help them maybe find something better but ...

GIRL 8: Without saying straight away ...

GIRL 10: If she said oh I really like this top I don't want to say oh you know it looks horrible. I'd help them maybe choose a different colour or something if you think it looks ...

GIRL 8: Like say that looks good but I think this would suit you better.

GIRL 10: And then they go no no I like this one and you go oh cool.

GIRL 9: I would rather my friends like hurt my feelings temporarily by telling me oh yeah that looks really really bad get something else than have, like walk down street and have people talking behind my back oh my God did you see what that girl was wearing and how ugly did she look.

Self-improvement as a Motive for Comparison

The girls suggested that they do look to their friends in order to see how they can improve their self-image so this in fact may be a very important motive for social comparison.

GIRL 8: We ended up I think critical way over ways over more positive I think anyway on

GIRL 8: Oh that's what I tend to think, self improvement

FAC: The self-improvement?

GIRL 8: Not ... not positive, sometimes critical, sometimes positive as well like someone might give you a compliment and you're like oh maybe you know it is all right or something.

GIRL 11: I'm a lot self-critical because I don't know I just am and when I receive a compliment - that didn't come out right, yeah that one. I feel a lot better about myself but then you think if they're pointing that out then what about this and then you kind of feel like well if they think this is good then something else just isn't.

FAC: So self-improvement is an important one ...

GIRL 8: Yeah

GIRL 9: I don't look at myself at all. Maybe I should improve that.

GIRL 9: I do more critical but I try - like because I try to put on weight but I can't, it's really annoying and I kind of judge myself because people call me anorexic or something, which isn't true and it really makes you angry

FAC: It's hard for somebody naturally smaller.

GIRL 10: But then we go and eat a whole lot.

GIRL 8: But don't you look at yourself and think oh - I look at myself all the time and say I've got awful teeth like your braces could improve that or like Natasha might look at herself and think a fake tan could improve my legs or something cause I'm really white or something like that. So, don't you do that?

GIRL 9: No

GIRL 8: Really?

The following example indicates an exaggerated sense of how much other people take notice.

GIRL 8: Yeah but what you just said, see I think about that all the time like if you are walking down the street people must be standing behind you thinking like look what she's wearing. Even if you're like – I wear my trackies around everywhere so you probably think everyone's talking about me wearing my track pants in town or something.

FAC: They're probably not even thinking about it

GIRL 9: Yeah, exactly, they're probably not even paying attention

GIRL 10: Also like when you just said your trackies I've been wearing like my tracksuit pants the whole time to the school rehearsal and people must be thinking gee does she have any other clothes because that's just a nice thing, comfortable to wear all the time but you know.

Issues Relating to Assessment Measures

The body image ideals scale that was utilised as a pre and post measure of body image satisfaction received criticism by the girls as it was seen as ambiguous.

GIRL 2: Like.. what's your mood?

GIRL 5: And you just had a scale

GIRL 2: It should have yeah like each person has a different about ... when you were just asking like what's your mood maybe it should have been more like how do you feel about yourself now ...

GIRL 3: Like writing out what were your feelings and drawing it up on a scale

GIRL 5: A scale's very like ambiguous

FAC: Sort of pick a number

GIRL 5: Yeah it's like OK I'll just go

FAC: So maybe more specific questions about how you felt about yourself?

GIRL 2: And like maybe if we like discussed it with other people so then you will actually say like how you feel like not just like I feel all right about myself now it's just like the different things you are thinking about yourself now.

The following section makes reference to the how the figure rating scale may have been problematic as it was difficult to visualise their preferred shape and weight.

FAC: Really, OK. Did we ask it in the wrong kind of way? Like giving you the lines to fill in and the numbers to circle, because there's another way we can ask and that's presenting you with outlines of different body shapes, so starting from really small to a lot bigger and you just circle which one you think. Would that be better than asking directly how you feel?

GIRL 10: Yeah

GIRL 11: Yeah

GIRL 9: Yeah

FAC: That might have been better?

GIRL 9: Yeah because then you actually visualise it.

FAC: ... as opposed to circling a number from 0 to 4

GIRL 10: Yeah

GIRL 9: Because when you do like 1 to 4 you don't really get it. Well, you do but your like yeah 2's like...

FAC: It's hard to put a number on it?

GIRL 9: Yeah

GIRL 10: You circle 4 and say oh actually you know is it lower or higher.

GIRL 9: Is that big or is that kind of big

GIRL 10: Yeah

GIRL 8: Yeah

Discussion

On the basis of the Study 1 findings and in an attempt to extend them, Study 2 employed focus group methodology with 18 school-girls who had participated in Study 1 and were divided into two groups ($N = 9$). It was intended that the focus groups would provide a richer idea about the factors that make the group a more positive experience than the individual condition in that study. The aim of this study was to closely investigate the role of the peer group in relation to body image satisfaction and mood. The factors that serve to protect and possibly enhance self-esteem in relation to one's body image are of central importance. Analysis of the transcripts revealed a number of main areas that may account for the differences between the individual and group conditions. The main findings of the focus groups were (a) that being a part of the group has a positive effect on body esteem as there are a range of body shapes in the group to compare to, (b) that the group environment may be serving as a distraction from focusing specifically on the media images, and (c) that being part of the group provides support and has the potential to encourage self-enhancement as peers are able to offer reassurance to each other. The focus group also provided information on the assessment instruments and ways to measure the dependent variables more appropriately, given that the sample consisted of young adolescents. The main factors that arose from the discussions will be elaborated on in the following section.

The friendship group is a safe and helpful place for an individual to be in but for the researcher to assign the girls to the groups (as done in Study 1) subjected the girls to scrutiny and a lack of security which might lead them to engage only in superficial talk. However, if individuals were placed in friendship groups it could

eliminate any need for superficial talk. Being in a group therefore can have a downside and the importance of being in the right group was a consistent theme in their remarks. The findings of this study appear to contrast with previous research (Benas et al. 2010; Hutchinson et al. 2010; Rudiger, 2010) regarding negative peer influences and fat talk as the friendship group may have a protective role by enabling individuals to make more realistic comparisons when presented with thin ideal media images.

Another factor that arose revolved around how we choose targets for comparison. Firstly, using other girls in the group as comparison targets serves to enhance body esteem, as there is a range of body shapes and weight to compare with. This suggests that when faced with this range of body shapes girls may choose to compare their own physique with their peers, as there is a greater similarity with their own figures. This is consistent with social comparison theory which has shown that from early childhood we are drawn to individuals most like ourselves (Erwin, 1993; Festinger, 1954).

Erwin suggests that it is this process that leads to the formation of social identity during adolescence. Developmental literature suggests that this age group is most reliant on feedback from peers and this information contributes to self-esteem level. What was frequently expressed in the focus group discussions is that self-doubt at this stage is highly prevalent and is consistent with the findings of Schultz and Paxton (2007).

The girls indicated that they were relying heavily on their peers to determine whether or not they were of an acceptable weight and it appears that this is not just based a visual comparison of shape. This finding is consistent with previous research (Bennett & Sani, 2004) which emphasises the significance of social comparison in

adolescence and particularly SIT and prototypicality in groups. It offers support for the findings of Meyer and Waller (2001) suggesting that not all peer relationships are destructive and they can in fact serve to develop social identity through the assimilation of peer norms.

It appears that the participants disregarded instructions to compare with the models because they were perhaps unattainable and therefore not realistic comparison targets and may have been using their peers (as is common in this age group) and thus feeling that there are more avenues for comparison. Or they may have followed the instructions given and engaged in some other form of comparison. As comparison is habitual during early adolescence a different form of comparison might have allowed the girls to look at the pictures of the models, and either disregard them and compare with peers as there are a number of options available – it's not simply "one or the other", hence leaving the young adolescent with a greater chance of feeling good about themselves.

As previously stated early adolescence is a time when identity is being shaped and information/feedback that an individual is given regarding her body shapes her beliefs about herself to a large extent. The information a girl receives from her peers is crucial as girls indicated that they do not trust their own judgment. Again, a number of girls indicated that they were fat or that they were confused about what constitutes normal weight, so it is additional evidence that they are relying on such as comparisons with media images even though they may be in the healthy BMI range. This strongly suggests that they may be using subjective and not objective measures for comparison.

The girls suggested that the group experience and simply having others there might distract them from focusing on the images and perhaps internalizing or over-

interpreting the feelings that may arise. The varied personalities in the group and thus group dynamics appear to play a significant part in terms of how one feels. The presence of others may serve to override the specific instructions that were given at the start of the group.

The peer group appears to be crucial for shaping ideas as the emphasis in the group was on using friends for controlling their train of thought or what may be described as “out of hand thinking”. The group appeared to be a powerful influence as a point of discussion, especially the mood of others, was very powerful in determining how one felt. It was further implied that friends in fact offer alternative views to one’s own beliefs. Again the girls indicated that they needed their peers around in order to explore their own thoughts and offer more realistic thoughts if the need arises.

Having others in the group also allowed the girls to challenge their thoughts in a safe environment. This point raises two issues. One is the change in thinking or focus brought about by the group. The other is the provision of reassurance and support (for example, even if you are fat).

Recent literature suggests that simply being part of a focus group empowers participants and gives them a sense of control over their participation (Bagnoli & Clark, 2010). This may in turn impact on their cognition and how they are feeling and a general sense of feeling supported.

The final main finding of the focus groups was that friends offer reassurance and validation with respect to negative or irrational feelings that may arise from social comparisons with thin ideal celebrity images. The presence of others and having the opportunity to perhaps think out aloud meant that irrational thoughts were not given as much focus and attention compared to, for example, if one was on their own and had to battle with their thoughts in private.

Study 2 made more of the closeness of friendship than the BMI of others in the original group. The consistent theme was that they felt supported by having their peers around them regardless of weight and size.

An important point that was raised by the girls in the focus groups is that this study differed from “real life” viewing of magazines because they were asked to focus specifically on the thin ideal body shape (as instructed). It is interesting that the girls made this point because there is evidence from the discussions in the results section that ideal body shape is among the things that they’d normally attend to. It may be that when they view a magazine this happens without much conscious processing, regardless of whether or not they are doing this individually or in a peer group. Therefore, being asked by the examiner to just focus on their physique felt unnatural (because it was spelt out to them) and they don’t normally open up a magazine in front of their peers and say that they are only going to focus on the bodies of the models for instance.

The girls also alluded to the fact that there is a dark side to being in groups. It’s not always a place to have fun and be distracted. While the group is comforting and reassuring there are also rules and things you feel you can’t disclose in a social setting.

Study 3

In the light of Study 2, the final study in this series was designed to extend and to overcome the limitations of the initial study. The following section outlines a number of refinements of the Study 1 procedure. Firstly, the introduction of a figure rating methodology as an assessment of body image satisfaction was adopted to provide a more accessible and age appropriate means of assessment. While

researchers in the field continue to question the reliability of this measure, Tiggemann and Wilson-Barrett (1998) argue that the schematic drawing procedure is more appropriate for younger participants as the drawings offer a concrete visual representation and do not require a sophisticated verbal response. Secondly, self-improvement (where an individual compares oneself to another in order to improve themselves) was included as an instruction in this study as it was identified in the focus groups as being an important variable. Thirdly, assessment of the impact of mean BMI in each of the groups formed may be an important control. Study 2 focus group results indicated that girls might be comparing themselves with their peers as well as the media models. Where peers are dissimilar from the models, there may be less concern about matching the ideal person.

Accordingly the BMI mean ($M = 20.99$, $SD = .75$) and range in the groups of this study was used for analysis to track the impact of body mass as body mass was not controlled or assessed in Study 1. Specifically the degree to which each participant deviated from their group mean body size was of particular interest (i.e., where each girl sits in the group in terms of her BMI). A second modification of the groups was the formation on the basis of friendship networks in order to facilitate honesty in self-disclosure and minimise self-censorship and to enhance ecological validity. The study did not manipulate friendship level but assumed a similar level of friendship. However, forming friendship groups per se was not adequate to address all the methodological issues arising from Study 1. Additional manipulations were warranted.

In order for girls to focus solely on the material and on themselves, they were required to complete a structured rating task, i.e., the group members were given a self-evaluation or self-enhancement or self-improvement rating scale which they

completed on their own whilst in the group. This was designed to address the distraction from task and the addition of other types of comparison that participants seemed to have been using in the first study. The data were not intended for analysis but as a way of getting the girls to focus on the task. Furthermore, independent ratings of the amount of time the group was on task and/or the amount of time they focused on the material versus comparison with others in the group were made.

As the previous findings indicated that the girls may have compared themselves with others and not the media images or moderated the effect of media images in comparison with others, the range of BMI in the group and individual participant divergence from the average should have a predictable impact on mood and body image dissatisfaction ratings. Discounting media image as a result of comments (reassurance) from others suggests that another form of social comparison was taking place despite instructions. Accordingly, instruction regarding additional comments or independent rating of such comments was used in attempted control for this variable.

On this basis the final study continued investigation into the impact of brief exposure to thin ideal body shapes on mood and state body satisfaction in adolescent females in a nonclinical population. While a number of studies have examined thin ideal internalisation using social comparison theory this study adds a more comprehensive manipulation of motives for social comparison to the current literature in the body image area. It further aimed to explore the influence of, specifically, dynamic group processes on social comparison. It seeks to mimic the everyday, normal group situations that young women naturally create for themselves. It was predicted that those individuals whose BMI deviates from their group mean body size will report higher levels of body dissatisfaction and this effect will be stronger for

those given self-evaluation instruction. It was further predicted that there would be a positive correlation between time on task and level of both body dissatisfaction and negative mood.

Method

Design

The design of the study employed a between groups 2 [PBSC status: high, low] x 3 (Instruction: self-evaluation, self-enhancement, self-improvement) mixed design. The Primary dependent variables were body dissatisfaction and mood state. Body mass index was recorded as a covariate.

Participants

The participants comprised 76 adolescent girls (Low PBSC, $N = 35$ & High PBSC $N = 41$) aged between 12.07 and 15.04 years ($M = 13.25$, $SD = 0.72$) (grades 7-10) and they were selected on a voluntary basis from schools in Southern Tasmania (both single sex and coeducational). The participants were from working class and middle class backgrounds in southern Tasmania. Furthermore, the participants came from different schools to those in studies 1 and 2. Participants completed the experiment in friendship groups of 3 - 5 girls in each group under self-enhancement ($N = 25$), self-evaluation ($N = 26$) or self-improvement ($N = 25$) instructions. Approximately 3% of participants indicated that they always viewed magazines on their own, 32% more on their own than with friends, 36% as much with friends as on their own, 20% more with friends than on their own and 7% always with friends. Three groups comprising a total of 11 participants were excluded from all analyses as they did not communicate as a group (self-improvement: $n = 3$; self-enhancement: $n = 4$ and self-evaluation: $n = 8$).

Materials

Media Images. Participants were presented with twenty-seven photographs of a variety of female models featuring in fashion magazines that are age appropriate. Pictures were approximately 30 x 20 cm and presented in a folder simulating a magazine. The photo set included all the images of Study 1 plus an additional 7 photos as the participants in Study 1 flicked through the original twenty images quite quickly. Each girl had her own folder of photographs and the photographs appeared in the same order in all folders.

Friendship Group Formation

Friendship/cliq membership was identified using the Friendship Network Identification Questionnaire devised by Paxton et al., (1996) (See Appendix G1). Girls were asked to write down the names of their best friends, that is the girls that they “hang around” most and were closest to. Girls were asked to indicate whether there was one particular “group” of girls that they normally hang around with, whether they hang around with a number of different groups, whether they spend their time alone or whether they spend their most of their time with one other friend. If they indicated that they were only a part of one particular group they were asked to write down the names of the girls in the group. If they indicated that they had a number of different friends they were asked to write down the names of the girls from the “different groups” that they hang around with. The process of selection involved the researcher allocating girls to groups based on the names that the girls had provided.

Pre-experimental Measure

Public Self-consciousness Subscale of the Revised Self-consciousness Scale (PBSC: Fenigstein et al., 1975). Refer to Study 1 for description of this measure. The internal reliability (Cronbach's α) for the present sample was found to be 0.79.

Pre and post Measures

Figure Rating Scale (Thompson & Altabe, 1991). The figure rating scale was utilised as a pre and post measure of body satisfaction (Refer to Appendix G2). The scale comprises nine outline figures of women which vary in size from very underweight to very overweight. Participants were asked to select the figure that most closely corresponded to their current size and the figure corresponding most to their ideal size. The difference between these ratings provides in a discrepancy index and is considered to represent the individual's level of body image dissatisfaction. In this study the participants were given cognitive instructions.

Mood State: Visual Analogue Scales. A series of VAS derived from the Profile Of Mood States were also administered pre and post media exposure, to assess mood as described in the materials section of Study 1. For this study the Cronbach's α was estimated to be .88 for pre test and .91 for post test.

Thin-ideal Internalisation: Sociocultural Internalization of Appearance

Questionnaire – Adolescents (SLAQ-A: Keery, Shroff, Thompson, Wertheim & Smolak, 2004). As described in Study 1. Internal consistency levels for this scale range from .83-.92. The Cronbach's α reliability estimate for this study was found to be 0.90.

Social Comparison. The Physical Appearance Comparison Scale (PACS: Thompson, Heinberg & Tantleff, 1991). As described in Study 1. Internal consistency level for this scale is .78. For the present study the internal reliability (Cronbach's α) was estimated to be 0.71.

Social Comparison Rating Task (adapted from Tiggemann & McGill, 2004). The social comparison rating task was modified from the paradigm developed by Tiggemann & McGill (2004) and it was designed to encourage participants to compare themselves with the images as described in the rationale for Study 3. The items were changed so that they were consistent with the experimental manipulation (self-evaluation, self-enhancement and self-improvement) (See Appendix G3).

Manipulation Check. Items Assessing the Effectiveness of the Experimental Manipulation. A follow-up questionnaire was administered to assess the degree to which participants were able to adhere to the requirements of the task as per Study 1. A number of the questions were modified in line with the design of this study (See Appendix F4).

Measure of Body Mass post measure

Body Mass Index was calculated from the heights and weights of participants (BMI: kg/m²). The measurements from each girl were obtained objectively and confidentially by the researcher and this was done in a quiet place away from the group. All participants agreed to have their height and weight measured by the researcher. BMI is generally considered to be an acceptable index of body fatness.

Procedure

Participants were recruited through schools. Principals from schools were approached via letter (See Appendix H1) including information about the purpose and procedure of the study. Following the principals' agreement to the study they were asked to provide information to possible participants and their parents. Volunteers were provided with an information sheet and consent form and were required to return a signed consent form to school (by a Parent or Guardian) (See Appendices H2 & H3) before participating in the study (See Appendices H4 & H5). All girls participated at school in a quiet classroom with no teachers present.

The self-consciousness scale (PBSC) and the friendship network identification questionnaire were administered one week before the experimental session during class time. The participants were asked to complete the figure rating scale and visual analogue scales on their own before the experiment began.

Participants were then given specific instructions by the experimenter as one of the major manipulations in this study was presenting the girls with the instructions below. The experimenter, a registered Psychologist with training and experience in counselling and group work was present during the group sessions. This was to ensure that an ambiguous situation did not develop and to be able to identify any signs of discomfort and respond appropriately if required.

In the Self-enhancement condition the girls were told the following, "I want you to look at the following pictures and comment on the way models are disadvantaged compared to yourself", I want you to focus on the good things about yourself". In the Self-evaluation condition they were told, "I want you to look at the following pictures and critically compare yourselves to the models in these pictures, do you look as good as these models?" and in the Self-improvement condition they

were told, “I want you to look at the following pictures and focus on how you can improve yourself by comparing yourself to the models in these pictures”.

The experimental task required participants to complete together a questionnaire about the media images using items which encouraged self-evaluation, self-enhancement or self-improvement. A bell was rung by the experimenter every three minutes and the girls were required to complete the rating scale on their own without talking. This was done to keep participants focused on their designated task and not any other activity. The proportion of writing time was minimal.

Participants were then asked to complete post-experimental comparison checks indicating how much of the time they were able to stay focused on themselves. For example: “How much time were you distracted from yourself, how much time did you spend on yourself, other girls in the group, media images of the thin ideal?”. At the conclusion of the study participants’ height and weight measures were obtained. The groups were audio recorded with participants’ consent in order to track the amount of reassurance and distraction in the group.

Results

Analysis Strategy

As in Study 1 the difference between the pre and post measures was used as the dependent variable. Univariate ANOVAs were conducted on each dependent variable with appropriate corrections for type 1 error rate inflations. A number of items were administered following the group task to assess the effectiveness of the experimental manipulation. As in Study 2 the tape recordings of the group discussions were transcribed by a research assistant who was unaware of the conditions and hypotheses and were checked for accuracy by the researcher.

Independent raters who were in their final year of undergraduate study in Psychology and had completed a social psychology course rated the transcripts for each of the groups to assess the for self-enhancement, self-evaluation and self-improvement for the group. Similarly, the raters were not aware of the conditions or hypotheses of the design.

Items assessing the Effectiveness of the Experimental Manipulation

As in Study 1, following the experimental manipulation of social comparison (self-evaluation, self-enhancement and self-improvement instructions), a number of items were used to assess its effectiveness. Specifically, the participants were asked to recall whether they had been able to follow the instructions given and the majority of participants indicated that they were able to follow them all of the time (all of the time = 62%, most of the time = 35%, a little of the time = 1%). As a group 57% of participants felt that the group was able to adhere to the instructions all of the time and 42% felt that as a group they were following them most of the time. When asked to indicate whether their reaction was the same as usual when looking at the magazine images in a group the majority of participants indicated that the experience was the same (same = 87%, not the same, $N = 12\%$).

Participants were asked to indicate whether they made any comparisons other than as instructed while completing the group task and the majority of the participants indicated that they did make other comparisons (yes: 66%, no: 34%). As most of the participants indicated that they were not following fully the instructions that they were given the types of other comparisons that they were making were examined.

Social Comparison Instruction

As the above results showed that the majority of the participants made other types of comparisons, an analysis was carried out to determine if there was a difference

between the groups depending on the type of instruction that they were given (self-evaluation, self-enhancement, self-improvement).

There was a significant main effect for focus on oneself: $F(2, 73) = 3.84$, $MSE = 519.82$, $p < .05$, $\eta_p^2 = .11$. Post Hoc tests (Ryan-Einot-Gabriel-Welsch Range) showed that those participants in the self-improvement ($M = 36.13$, $SD = 4.56$) condition were significantly more focused on themselves than those in the self-enhancement ($M = 18.48$) and self-evaluation ($M = 29.69$, $SD = 4.47$) conditions. The main effect for friend was non-significant $F(2,73) = 1.413$, $MSE = 532.62$, $p > .05$, $\eta_p^2 = .01$ and the main effect for models was non-significant $F(2,73) = .383$, $MSE = 883.74$, $p > .05$, $\eta_p^2 = .04$.

Public Self-consciousness

An analysis was carried to determine whether there was a significant difference in levels of PBSC between the friendship groups and between the social comparison instructions (self-evaluation, self-enhancement, self-improvement).

There was a significant main effect for friendship group when comparing all the groups on PBSC, $F(18,57) = 2.16$, $MSE = 27.84$, $p = .014$, $\eta_p^2 = .49$. Post Hoc tests (Ryan-Einot-Gabriel-Welsch Range) showed that group 14 was significantly lower than group 15. All other groups were not significantly different from each other.

Univariate ANOVAs were performed on mean PBSC within each of the social comparison instructions. In the Self-enhancement condition there were no significant differences between the friendship groups, $F(6, 18) = 1.23$, $MSE = 20.92$, $p > .05$, $\eta_p^2 = .29$. In comparison the Self-evaluation condition showed significant differences

between the groups, $F(6,19) = 2.99$, $MSE = 21.32$, $p < .05$, $\eta_p^2 = .49$. Post Hoc tests showed that group 22 was significantly higher than group 14 and that group 5 was significantly higher than group 2. In the Self-Improvement condition there were no significant differences between the friendship groups $F(5, 25) = .46$, $MSE = 40.79$, $p > .05$, $\eta_p^2 = .48$.

Primary Dependent Measures

Analysis of covariance (ANCOVA) was used to examine differences between self-consciousness (PBSC) and social comparison instruction (self-evaluation, self-enhancement and self-improvement) for the primary dependent variables state mood (VAS), body satisfaction (Figure rating scale), thin ideal internalisation (SIAQ-A) and social comparison (PACS). Body mass index was used as the covariate.

State Mood

The intercorrelations between the affective states can be seen in Appendix I. As all of the intercorrelations were statistically significant at the .01 level they were combined to form one construct, mood. Results of the ANCOVA with BMI as a covariate showed that the main effects for Instruction, $F(2,69) = .99$, $MSE = 48.32$, $p > .05$, $\eta_p^2 = .03$ and public self-consciousness were non-significant $F(1,69) = 1.56$, $MSE = 48.32$, $p > .05$, $\eta_p^2 = .02$. In contrast to the hypothesis the Instruction x public self-consciousness interaction was also found to be non-significant, $F(2, 69) = .030$, $MSE = 48.32$, $p > .05$, $\eta_p^2 = .001$.

Body Satisfaction

Using ANCOVA to control for BMI, the main effects of Instruction, $F(2,69) = 1.60$, $MSE = 0.41$, $p > .05$, $\eta_p^2 = .04$ and public self-consciousness, $F(1,69) = .68$, MSE

$= 0.41, p > .05, \eta_p^2 = .01$ were non-significant. In contrast to the hypothesis, the Instruction x public self-consciousness interaction was also non-significant, $F(2,69) = .27, MSE = 0.41, p > .05, \eta_p^2 = .008$.

Thin Ideal Internalisation

Using ANCOVA to control for BMI, the main effect for Instruction was non-significant, $F(2, 69) = .042, MSE = 20.31, p > .05, \eta_p^2 = .001$. There was a highly significant effect of public self-consciousness on thin ideal internalisation after controlling for level of BMI, $F(1, 69) = 9.60, MSE = 20.31, p < .01, \eta_p^2 = .12$. The analysis revealed that those individuals high in PBSC ($M = 17.42, SD = .75$) were more inclined to internalise the thin ideal than low in PBSC ($M = 14.00, SD = .81$). In contrast to the hypothesis, the Instruction x public self-consciousness interaction was found to be non-significant $F(2, 69) = 1.17, MSE = 20.31, p > .05, \eta_p^2 = .03$.

Social Comparison

Using ANCOVA to control for BMI the main effect for instruction was non-significant $F(2,69) = .11, MSE = 14.16, p > .05, \eta_p^2 = .003$. Public self-consciousness was significantly related to social comparison, $F(1,69) = 8.82, MSE = 14.16, p < .01, \eta_p^2 = .11$: those high in PBSC ($M = 14.94, SD = .62$) were more inclined to compare their physical appearance to the media images than those low in PBSC ($M = 12.21, SD = .67$). In contrast to the hypothesis, the predicted instruction x public self-consciousness interaction was non-significant, $F(2,69) = 2.27, MSE = 14.16, p > .05, \eta_p^2 = .06$.

Further analyses were conducted in which the difference between each individual's BMI and their group mean was calculated. The difference in BMI was utilised as an independent variable however no significant effects were found for Instruction or public self-consciousness for any dependent measures. In addition, BMI group where an individual's BMI was calculated as being average, smaller or larger than the group mean was utilised as an independent variable. In contrast to the hypothesis no significant differences were found for public self-consciousness or Instruction for all dependent measures.

Independent rater's estimation of Time on Task

Independent raters were required to rate the transcripts from each group so as to determine the average statements for self-enhancement, self-evaluation and self-improvement. The inter-rater reliability for the three independent raters was calculated and found to be fairly low ($r = .60$). At the .05 level separate univariate ANOVAs were performed and no significant difference between the instructions (self-enhancement, self-evaluation & self-improvement) was found for either rater. As the outcome was the same for all raters the ratings were combined. The results are displayed in Table 1.

For the following analysis the percentage of time spent on each of the instructions was combined for body and other to increase statistical power (Refer to Table 5 for means and standard deviations). A 3x3 mixed factor ANOVA was conducted on the transcripts with the instruction condition (self-evaluation, self-enhancement and self-improvement) as the between-subjects factor and the raters' estimations of self-evaluation, self-enhancement and self-improvement as the within-

subjects factor. In contrast to the hypothesis, there was a significant main effect for rated percentage time spent on each of the instruction activities: all groups used self-improvement significantly more than self-enhancement or self-evaluation $F(1.52, 3.05), 36.37, p < .001, \eta_p^2 = .132$. Paired sample t-tests showed that for participants in the self-enhancement condition the amount of time spent on self-improvement was significantly more than self-evaluation ($p = .015$), and the time spent self-enhancing was significantly higher than the amount of time spent self-evaluating ($p = .026$). For those in the self-evaluation condition the amount of time spent on self-enhancement was significantly higher than self-evaluation ($p = .005$) and the difference between time spent on self-improvement and time spent on self-enhancement was non significant. For the self-improvement condition the amount of time spent on self-enhancement was higher than the amount of time spent on self-evaluation ($p = .007$) and the amount of time spent on self-improvement was not significantly higher than the amount of time spent on self-improvement. The effect of condition was non-significant and the condition x raters estimation interaction was non-significant.

Additional Analyses

Following these analyses the degree to which each individual's BMI differed from the friendship group mean (BMI difference) was used as a covariate and in contrast to the hypotheses, the results from the final analyses were non significant across all dependent measures.

Table 1. Independent raters mean estimation of statements for all variables for self-enhancement, self-evaluation and self-improvement instruction.

	<u>Instruction</u>		
	Self-enhancement	Self-evaluation	Self-improvement
<u>Variables %</u>			
Self-enhancement Body	4.2	7.9	6.4
Self-enhancement Other	7.6	9.1	8.3
Self-evaluation Body	1.8	1.8	2.6
Self-evaluation Other	3.5	1.1	4.3
Self-improvement Body	5.4	4.5	2.9
Self-improvement Other	18.5	16.7	16.3
Comparison to friends	1.5	1.7	1.3
Reassurance	7.9	7.4	9.0
Distraction	49.2	50.0	47.6

Discussion

The final study was designed to evaluate the relationship between exposure to thin-ideal media images and state body satisfaction and mood in adolescent girls by addressing the methodological limitations of the first study. Further, it aimed to explore the role of social comparison processes and social identity theory in body image dissatisfaction by manipulating social comparison in a way that extends previous studies in this area.

Firstly, it did this by specifically focusing on the role of the peer group in the development of body image dissatisfaction, as the results of the first study showed that peers may be serving to reduce the effects of media exposure on mood and satisfaction. Secondly, it used existing friendship groups to enhance ecological validity and honesty in self-disclosure. Thirdly, it included self-improvement instruction as a motive for social comparison and tightened the social comparison manipulation by employing a number of strategies to keep the participants engaged and focused on the task. It utilised the methodology of Tiggemann and McGill (2004) to keep participants focused on the instructions and tailored the task to fit the requirements of this study. The girls were required to independently complete a rating scale at the sound of a bell so that they could be subtly reminded of the instructions. In Study 1 it was assumed that the girls were following the instructions given. However, this could not be guaranteed and the rating scale proved to be a more objective measure of assessing whether or not they adhered to the requirements of the task. In addition, this study employed independent raters to code the transcripts of each of the friendship groups and this data provided an estimation of

time spent on the task (by coding each of the statements) for all variables for self-enhancement, self-evaluation and self-improvement instruction. Analyses of the independent raters' estimations of percentage of time spent on self-enhancement, self-evaluation and self-improvement showed that regardless of their group's instructional set, participants engaged in self-improvement related/focused activity significantly more than self-enhancement and self-evaluation. This means that regardless of the instructions they were given all girls were looking at the images that appeared associated with the motive to improve themselves.

It was hypothesised that those individuals whose BMI deviated from their group mean body size would report higher levels of body dissatisfaction and that this effect would be stronger for those given the self-evaluation instruction. This prediction was based on the findings from Study 2 as the girls reported that having other girls in the group with quite different physiques offered a large range of targets for comparison which in effect enhanced their mood. These results are consistent with studies that have found that the peer group can be self-enhancing and offer support for social identity theory (Hogg, 2000; Meyer & Waller, 2001).

This study failed to find an interaction between BMI and motive for social comparison across all dependent measures. A plausible explanation is that the girls may not actually be very sensitive to their 'BMI rank' in the group (BMI was measured by the examiner providing an accurate measure on the spot).

The predictions for body dissatisfaction and negative mood were not supported despite the strategies that were put into place for keeping the girls on track and following the instructions given. The results show that the distraction variable was high for all

three conditions suggesting that the girls spent a significant amount of their time not following the instructions they were provided with and hence they did not have the desired effect on mood and body dissatisfaction.

As stated earlier the group may have a self-enhancing effect on the participants and this is consistent with elements of Tajfel's social identity theory where psychologically passing through groups may not be realistic as in this study. Therefore participants may have felt that it is not possible to dis-identify with their ingroup (friendship group) and psychologically move into the outgroup (models) (Hogg, 2000).

Additional analyses (additional comparisons) were run and although these tests indicated less than total inter-group homogeneity of focus it appears that differences indicated just a small number of individual outlier groups on particular measures, and that the data from the groups can fairly safely be combined.

A criticism of this study is that although the girls selected groups based on friendship groups they still may not have felt comfortable in the group for a number of reasons. It would have been beneficial to ask participants to rate the degree of comfort in their present group and the degree of closeness of friendship. Future research may wish to address these points as they may have had a significant effect on the findings of this study.

In conclusion, the hypotheses indicating that the peer group is self-enhancing and offers protection against the effects of internalisation of thin ideal media images was not supported in this study. Despite the lack of significant findings, this study's findings are consistent with the findings of Study 1 and has clearly come closer to effectively

measuring social comparison motives and the impact on mood and body dissatisfaction through manipulating social comparison in a way that no previous research has. Ample research has shown that adolescence is a time of altered body perception (Laufer, 1996; Seymour, 1986) and hence greater susceptibility to body dissatisfaction and associated effects on mood implying that greater research in this area is needed.

General Discussion and Conclusions

This thesis aimed to advance on current understanding of the short-term effects of exposure to thin ideal media images in young adolescent girls. Embedded in social comparison and social identity theories it explored individual differences (PBSC) by manipulating motive for comparison (eg., self-improvement) and observing the effects on state mood, body image dissatisfaction, thin-ideal internalisation and comparison tendencies. It further aimed to examine how collectivism, and more specifically possessing a similar identity in the form of friendship groups (ingroup), may serve as a buffer for those individuals vulnerable to the negative effects of thin-ideal media images (outgroup).

It did this in a series of carefully controlled designs where each study added insight and further understanding to the research questions posed. Study 1 used the design of Martin and Gentry (1997) as a basis in its exploration of social comparison tendencies by manipulating the motives for comparison (self-enhancement & self-evaluation) and including an added group factor to explore the effects of peer influence. Results suggested that the peers might perhaps be facilitating self-enhancement by

shifting the focus from the media images onto the collective group. Study 2 aimed to offer insight into group dynamics by delving into the function of the group. It did this by conducting focus groups with girls who had taken part in the individual and group conditions of Study 1 and tailoring the questions to elicit as much information as possible about their experiences in the study, then asking the girls to reflect on the factors that might have contributed to these results.

Study 3 was designed to address the methodological issues that arose in Study 1 and it did this through the information gained in Study 2. It explored the social side of young girls' usage of print media drawing on social identity theory and the process of self-enhancement. It further explored the effect of media usage on their mood and levels of satisfaction with their own bodies.

The three studies in this thesis had a number of differences in comparison to previous experiments in the body image area. To begin with they explored social comparison motives (self-evaluation, self-enhancement, self-improvement) and the effect this has when in the peer group as in Study 1 and then extended that in Study 3 to friendship groups by looking at the social aspect of media usage. The studies also looked at individual differences such as public self-consciousness in order to determine the effect on mood and body satisfaction.

These three studies used young female adolescents as participants (mean age of 13) as the literature consistently shows that it is a critical time in one's development (Laufer, 1996; McCabe & Ricciardelli, 2001; Sherwood & Neumark-Sztainer, 2001) and a time when girls are very susceptible to external influences including peers and the mass media (Schultz & Paxton, 2007).

The results of Study 1 and Study 3 failed to support a link between the usage of magazines and short-term changes on mood and body image dissatisfaction in the young girls. Furthermore the results of Study 3 failed to produce a successful manipulation of social comparison instruction (self-evaluation, self-improvement & self-enhancement) as participants in all groups used self-improvement significantly more than self-evaluation and self-enhancement. If there had been a control group not given any instruction it may have helped clarify the manipulation of social comparison instruction. The results however do suggest that more vulnerable individuals (e.g. high on PBSC scale) are sensitive to information such as magazine images depicting thin ideal physiques, and these images may have negative effects on their mood and create feelings of body image dissatisfaction. This finding may be used to inform preventative strategies for body image dissatisfaction in young adolescent girls by providing them with the skills to develop new coping strategies to enhance body esteem. Repeated media exposure is inevitable therefore improving their problem-solving skills and raising their awareness in a safe group situation (friendship group) may help them recognize and cope with the negative feelings that may arise. The above studies therefore justify continued research in this area to explore adolescent girls' friendship groups more closely in relation to the media. Future researchers may wish to clarify the manipulation of social comparison instruction (self-evaluation, self-enhancement and self-improvement) on body image dissatisfaction as the instructions are crucial variables that add to the current body image literature that is driven by social psychological theory (Durkin, Paxton & Sorbello, 2007). Furthermore it would be interesting to replicate the present studies with a clinical population, as this sample may be more sensitive to the measures used.

Analysis of the Study 2 transcripts showed that it was most valuable to use the qualitative approach despite many arguments against its usage as it offered valuable insight into the thoughts and feelings around body image of young girls.

Future research may wish to explore an individual's socioeconomic status (SES) especially in relation to BMI and levels of body image satisfaction. SES was not treated as a factor in this study, but sampling included girls of varied social backgrounds.

Examination of the manipulation check items in Study 1 when participants were apparently making multiple types of comparison showed that they also rated this as "the same as usual", so one has to wonder about the accuracy with which participants can answer this question. Or may it be that they never do what is asked of them? Could it also be that they always do what they always do? Another explanation may be that they didn't understand what was being asked of them well enough to be able to comply.

The above studies have a number of limitations that need to be noted. Firstly, the experimenter was present during the running of the groups and was seated towards the back of the room. It was deemed crucial that the experimenter was there while the girls were engaged in the task because the participants were of a vulnerable age and due to the sensitivity of the questions that was posed to them, especially those girls in the self-evaluation condition, who were being asked to critically compare themselves to the models in the pictures. The experimenter's presence was therefore crucial to make sure that the group discussion didn't get out of hand and evoke negative emotions in participants. This may however have contributed to the lack of significant findings in the studies by inhibiting behaviour and expressions of opinions, so future research might perhaps monitor the girls' discussion from a separate viewing room where the examiner

can intervene if necessary. This minor modification may make the process a little more natural for the girls without an adult present physically. An additional limitation may be that 15 minutes was perhaps too brief an exposure time and there may have not been enough images used in the materials. Such further modifications may also yield more promising results.

An additional limitation pertains to the questionnaire used to measure state body image. The SIAQ-A was used as a dependent variable in both studies. It is reasonable to assume that repeated exposure to media images (for example, magazines) over a period of years will affect trait body image (Ogden, 2010; Saules, Collings, Wiedemann, Fowler & Shannon, 2009) however the use of the SIAQ-A may not have been the best measure for use in these studies where the focus was on state body image.

In conclusion, the results of the three studies in this thesis have made a significant contribution to the literature examining body image dissatisfaction on exposure to thin ideal image in adolescent girls and have clinical implications as previously discussed. It has explored these important issues and it has done so at time in their development when girls are most susceptible to external messages (McCabe & Ricciardelli, 2001). It has also drawn on theories from social psychology including public self-consciousness, social comparison processes and social identity theory in order to understand and explain the impact of one's friendship group on their mood (e.g., depression and anxiety) and level of body satisfaction.

The findings from these studies offer some support for social comparison processes and Social Identity Theory which are the principal foci of this thesis. The results explain the theoretical basis of Social Identity Theory where the tendency for

individuals to adopt ideas and behaviours from those that are seen as similar and thus create an ingroup and where similarities are accentuated and dissimilar others form an outgroup. On this basis, the friendship group may in fact be a very powerful factor in ultimately determining how much of an impact these negative media messages will have on how they feel about themselves and how they perceive their bodies.

References

- Abramowitz, R.H., Peterson, A.C., & Schulenberg, J.E. (1984). Changes in self-image during early adolescence. In Offer, D., Ostrow, E., & Howards, K. I (Eds.), *Patterns of Adolescent Self-Image. New Directions for Mental Health Services, no 22* (pp. 19-28). San Francisco: Jossey-Bass.
- Bagnoli, A., & Clark, A. (2010). Focus groups with young people: a participatory approach to research planning. *Journal of Youth Studies, 13*(1), 101-119.
- Bandura, A. (1994). Social cognitive theory of mass communication. In J. Bryant & D. Zillmann (Eds.), *Media Effects: Advances in Theory and Research* (pp. 61-90). Mahwah, NJ: Erlbaum.
- Bearman, S.K., Presnell, K., Martinez, E. & Stice, E. (2006). The skinny on body dissatisfaction: a longitudinal study of adolescent girls and boys. *Journal of Youth and Adolescence, 35*, 229-241.
- Benas, J., Uhrlass, D. & Gibb, B. (2010). Body dissatisfaction and weight-related teasing: A model of cognitive vulnerability to depression among women. *Journal of Behavior Therapy and Experimental Psychiatry. 41*(4), 352-356.
- Bennett, M. & Sani, F. (2004). *The Development of the Social Self*. Sussex: Psychology Press.

- Blowers, L.C., Loxton, N.J., Grady-Flessner, M., Occhipinti, S., & Dawe, S. (2003). The relationship between sociocultural pressure to be thin and body dissatisfaction in preadolescent girls. *Eating Behaviours, 4*, 229-244.
- Botta, R. (1999). Television images and adolescent girls' body image disturbance. *Journal of Communication, Spring*, 22-41.
- Brickman, P., & (Janoff-) Bulman, R. (1977). Pleasure and pain in social comparison. In R. L. Miller and J. M. Suls (Eds.), *Social Comparison Processes: Theoretical and Empirical Perspectives*. Washington, DC: Hemisphere.
- Bruch, H. (1962). Perceptual and conceptual disturbances in anorexia nervosa. *Psychosomatic Medicine, 24*, 235-243.
- Buunk, B. P., & Mussweiler, T. (2001). New directions in social comparison research. *European Journal of Social Psychology, 31*, 467-475.
- Burt, D. (1994). *Psychosocial influences upon female eating behaviour*. Unpublished Honours Thesis, University of Tasmania.
- Cameron, J. E., & Lalonde, R. N. (2001). Social identification and gender-related ideology in women and men. *British Journal of Social Psychology, 40*, 59-77.

- Cash, T.F. (1995). Developmental teasing about physical appearance: Retrospective descriptions and relationships with body image. *Personality and Social Behavior: An International Journal*, 23, 123-130.
- Cash, T.F., & Pruzinsky, T. (1990). *Body Images: Development Deviance and Change*. New York, Guilford Press.
- Cattarin, J. A., Thompson, J. K., Thomas, C. M., & Williams, R. (2000). Body image, mood, and televised images of attractiveness: The role of social comparison. *Journal of Social and Clinical Psychology*, 19, 220-239.
- Champion, H & Furnham, A. (1999). The effects of the media on body satisfaction in adolescent girls. *European Eating Disorders Review*, 7, 213-228.
- Cheek, J. M. & Hogan, R. (1983). Self-concepts, self-presentations and moral judgements. In J. Suls & G. Greenwald (Eds), *Psychological Perspectives on the Self*, (Vol. 2, pp. 249-273). Hillsdale: NJ Erlbaum.
- Chodorow, N. (1978), *The Reproduction of Mothering: Psychoanalysis and the Reproduction of Gender*. Berkeley: University of California Press.
- Commonwealth Office for the Status of Women. (2003). *Key issues Affecting Women Focus on Women*, 6, 1-16.

- Crisp, A.H., (1974). Aspects of the perceptual disorder in anorexia nervosa. *British Journal of Medical Psychiatry*, 47, 349-361?
- Demarest, J., & Langer, E. (1996). Perception of body shape by underweight, average, and overweight men and women. *Perceptual and Motor Skills*, 83, 569–570.
- Dittmar, H., Lloyd, B., Dugan, S., Halliwell, E., Jacobs, N., & Cramer, H. (2000). The body beautiful: English adolescents' images of ideal bodies. *Sex Roles*, 42(9/10), 887-915.
- Dittmar, H., Halliwell, E., & Stirling, E. (2009). Understanding the impact of thin media models on women's body-focused affect: The roles of thin-ideal internalization and weight-related self-discrepancy activation in experimental exposure effects. *Journal of Social and Clinical Psychology*, 28, 43-72.
- Dohnt, H. K., & Tiggemann, M. (2005). Peer influences on body dissatisfaction and dieting awareness in young girls. *British Journal of Developmental Psychology*, 23(1), 103-116.
- Dolan, B. M., Birtchnell, S.A., & Lacey, J. H. (1987). Body image distortion in non-eating disordered women and men. *Journal of Psychosomatic Research*. 31(4), 513-520.
- Dunkely, T. L., Wertheim, E. H., & Paxton, S. J. (2001). Examination of a model of multiple sociocultural influences on adolescent girls' body dissatisfaction and dietary restraint. *Adolescence*, 36(142), 265-279.

- Durkin, S., Paxton, S., & Sorbello, M. (2007). An integrative model of the impact of exposure to idealized female images on adolescent girls' body satisfaction. *Journal of Applied Social Psychology*, 37(5), 1092-1117.
- Escheler, F. (1999). Social Influences on Dietary Choice. Unpublished Honours Thesis, University of Tasmania.
- Faith, M.S., Leone, M.A., & Allison, D.B. (1997). The effects of self-generated comparison targets, BMI, and social comparison tendencies on body image appraisal. *Eating Disorders*, 5(2), 128-140.
- Fallon, A. E., & Rozin, P. (1985). Sex differences in perceptions of desirable body shape. *Journal of Abnormal Psychology*, 94, 102-105.
- Fenigstein, A., Scheier, M.F., & Buss, A.H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, 43, 437-448.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- Festinger, L., Gerard, H. B., Hymovitch, B., Kelley, H. H., & Raven, B. (1954). The influence process in the presence of extreme deviates. *Human Relations*, 5(4), 327-346.
- Garner, D. M., Garfinkel, P. E., Schwartz, D., & Thompson, M. (1980). Cultural expectations of thinness in women. *Psychological Report*, 47, 483-491.

- Gordon, R.A. (2000). *Eating Disorders: Anatomy of a Social Epidemic*. Oxford: Blackwell Publishers Ltd.
- Grabe, S., Ward., & Hyde, J.S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134, 460-476.
- Greenwood, D. N., & Pietromonaco, P. R. (2004). The interplay among attachment orientation, idealized media images of women, and body dissatisfaction: A social psychological analysis. In L. J. Shrum (Ed.), *The Psychology of Entertainment Media* (pp. 291-308). Lawrence Erlbaum Associates: Mahwah NJ.
- Groesz, L.M., Levine, M.P., & 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.
- Hargreaves, D., & Tiggemann, M. (2003). The role of appearance schematicity in the development of adolescent body dissatisfaction. *Cognitive Therapy and Research*, 26(6), 691-700.
- Harrison, K., & Cantor, J. (1997). The relationship between media consumption and eating disorders. *Journal of Communication*, 47(1), 40-67.
- Hogg. M.A. (2000). Social identity and social comparison. In Suls. J. & Wheeler, L. (Eds.). *Handbook of social comparison*. Kluwer Academic/Plenum Publishers: New York.

- Heinberg, L. J., & Thompson, K. J. (1995). Body image and television images of thinness and attractiveness: A controlled laboratory investigation. *Journal of Social and Clinical Psychology, 14*(4), 325-338.
- Hendersen-King, E., & Henderson-King, D. (1997). Media effects on women's body esteem: Social and individual difference factors. *Journal of Applied Social Psychology, 27*, 399-417.
- Hogg, M. A., & Williams, D. K. (2000). From I to we: Social identity and the collective self. *Group Dynamics, 4*(1), 81-97.
- Hutchinson, D. M., & Rapee, R. M. (2007). Do friends share similar body image and eating problems? The role of social networks and peer influences in early adolescence. *Behaviour Research and Therapy, 45*, 1557-1577.
- Jambor, E. (2001). Media involvement and the idea of beauty. *Eating Disorders in Women and Children: Prevention, Stress, Management and Treatment*. (pp. 179-183). London: Lawrence Erlbaum.
- Jones, D. C. (2001). Social comparison and body image: Attractiveness comparisons to models and peers among adolescent girls and boys. *Sex Roles, 45*, 645-664.
- Joshi, R., Herman, P., Polivy, J. (2004). Self-enhancing effects of exposure to thin-body images. *International Journal of Eating Disorders, 35*, 333-341.

- Kalodner, C.R. (1997). Media influences on male and female non-eating disordered college students: A significant issue. *Eating Disorders: The Journal of Treatment and Prevention*, 5, 47-57.
- Keery, H., Shroff, H., Thompson, J. K., Wertheim, E., & Smolak, L. (2004). The sociocultural internalisation of appearance questionnaire – adolescents (SIAQ-A): Psychometric analysis and normative data for three countries. *Eating Weight Disorder*, 9, 56-61.
- Keery, H., Van den Berg, P., Thompson J. K. (2004). An evaluation of the Tripartite Influence Model of body dissatisfaction and eating disturbance with adolescent girls. *Body image*, 1(3), 237-51.
- Kerremans, A., Claes. L., & Bijttebier. (2010). Disordered eating in adolescent males and females: Associations with temperament, emotional and behavioral problems and perceived self-competence. *Personality and Individual Differences*, 49(8), 955-960.
- Kilbourne, J. (2004). The more you subtract the more you add: Cutting girls down to size. In Kasser, T & Kanner, A.D (Eds.). *Psychology and Consumer Culture: the Struggle for a good life in a Materialistic World*. American Psychological Association: Washington, DC.
- Kitzinger, J. & Barbour, R. S. (1999). Introduction: The challenge and promise of focus groups. In Barbour, R. S. & Kitzinger, J (Eds). *Developing focus group research: Politics, theory and practice* (pp. 1-20). London, England: Sage

- Latner, J. D., Rosewell, J. K., & Simmonds. (2007). Childhood obesity stigma: Association with television, videogame, and magazine exposure. *Body Image*, 4, 147-155.
- Laufer, M.E. (1996). The role of passivity in the relationship to the body in adolescence. 348-364.
- Levine, M.P., & Smolak, L. (1996). Media as a context for the development of disordered eating. In L. Smolak, M.P. Levine & R. Striegel-Moore (Eds.), *The developmental psychopathology of eating disorders* (pp. 235-257). Hillsdale, NJ Erlbaum.
- Levine, M. P., & Murnen, S. K. (2009). Eveybody knows that the mass media are/are not a cause of eating disorders. A critical review of evidence for a causal link between media, negative body image, and disordered eating in females. *Journal of Social and Clinical Psychology*, 29, 9-42.
- Mable, H. M., Balance, W. D. G., & Galgan, R. J. (1986). Body-image distortion and dissatisfaction in university students. *Perception and Motor Skills*, 63, 907-911.
- Maltby, J., Giles, D. C., Barber, L., & McCutcheon, L. E. (2005). Intense-personal celebrity worship and body image: Evidence of a link among female adolescents. *British Journal of Health Psychology*, 10, 17-32.
- Martin, M.C., & Kennedy, P.F. (1993). Advertising and social comparison: Consequences for female pre-adolescents and adolescents. *Psychology and Marketing*, 10, 513-530.

- Martin, M.C. & Gentry, J.W. (1997). Stuck in the model trap: The effects of beautiful models on in ads on female pre-adolescents and adolescents. *The Journal of Advertising*, 26, 19-33.
- McCabe, P. & Ricciardelli, L.A. (2001). Parent, peer, and media influences on body image and strategies to both increase and decrease body size among adolescent boys and girls. *Adolescence*, 36(142), 225-240.
- McNair, D. M., Lorr, M., & Droppleman, L. F. (1971). *Manual for the Profile of Mood States*. San Diego, CA: Educational and Industrial Testing Services.
- Meyer, C., & Waller, G. (2001). Social convergence of disturbed eating attitudes in young adult women. *The Journal of Nervous and Mental Diseases*, 189(2), 114-119.
- Mori, D., Chaiken, S., & Pliner, P. (1987). "Eating lightly" and the self presentation of femininity. *Journal of Personality and Social Psychology*, 53 693-702.
- Nelson., & Nelson. (2010). Evidence-based practice and the culture of adolescence. *Professional Psychology: Research and Practice*, 41(4), 305-311.
- Neumark-Sztainer, D., Paxton, S. J., Haines, P. J., & Story, M. (2006). Does body satisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviours in adolescent females and males. *Journal of Adolescent Health*, 39, 244-251.

- Ogden, J. (2010). *The psychology of eating: From healthy to disordered behavior* (2nd ed.) Wiley-Blackwell: United Kingdom.
- Ogden, J., & Munday, K. (1996). The effect of the media on body satisfaction: the role of gender and size. *European Eating Disorders Review*, 4(3), 171-182.
- Owen, P. R., & Laurel-Seller, E. (2000). Weight and shape ideals. *Journal of Applied Social Psychology*, 30(5), 979-990.
- Patton, G. C., Selzer, C. C., Coffey, J. B., & Wolfe, R. (1999). Onset of adolescent eating disorders: population based cohort study over 3 years. *British Medical Journal*, 318, 765-768.
- Paxton, S. (1996). Prevention implications of peer influences on body image dissatisfaction and disturbed eating in adolescent girls. *Eating Disorders*, 4(4), 334-347.
- Paxton, S., Schutz, H. K., Wertheim, E. H. & Muir, S. L. (1996). Friendship clique and peer influences on body image attitudes and dietary restraint, extreme weight loss behaviours and binge eating in adolescent girls. *Journal of Abnormal Psychology*, 108, 255-266.
- Piran, N. (2001). V. Reinhabiting the body. *Feminism and Psychology*, 11(2), 172-176.
- Rankin, J.L., Lane, D.J., Gibbons, F.X., & Gerrard, M. (2004). Adolescent self-consciousness: Longitudinal age changes and gender differences in two cohorts. *Journal of Research on Adolescence*, 14(1), 1-21.

- Richards, L. (2002). QSR N6 – *The Latest Version of the NUD*IST Software for Qualitative Data Analysis*. QSR International: Pty Ltd.
- Roberts, A., & Good, E. (2010). Media images and female body dissatisfaction: The moderating effects of the Five-Factor traits. *Eating Behaviors*, 11(4), 211-216
- Rodin, J., Silberstein, L., & Striegel-Moore, R. (1985). Women and weight: A normative discontent. In T. B. Sanderegger (Ed.), *Psychology and Gender*, (pp. 267-307). Lincoln: University of Nebraska Press.
- Rosenberg, M. (1986). Self-concept from middle childhood through adolescence. In J. Suls, & A.G. Greenwald (Eds), *Psychological perspectives on the self* (vol. 3., pp. 107-136). Hillsdale, NJ: Erlbaum.
- Rosenberg, F. R., & Simmons, R. G. (1975). Sex differences in the self-concept of adolescence. *Sex Roles*, 1, 147-159.
- Rozin, P., & Fallon, A. (1988). Body image attitudes to weight and misperceptions of figure preferences of the opposite sex: A comparison of men and women in two generations. *Journal of Abnormal Psychology*, 97(3), 342-345.
- Ruble, D. N. (1983). The development of social-comparison processes and their role in achievement-related self-socialization. In E. T. Higgins, D. N. Ruble, & W. W. Hartup(Eds.), *Social cognition and social development: A sociocultural perspective* (pp. 134–157). London: Cambridge University Press.

- Saules, K., Collings, A., Wiedemann, A., Fowler, S. (2009). The relationship of body image to body mass index and binge eating: The role of cross-situational body image dissatisfaction versus situational reactivity. *Psychological Reports, 104*(3), 909-921.
- Schutz, H. K., & Paxton, S. J. (2007). Friendship quality, body dissatisfaction, dieting and disordered eating in adolescent girls. *British Journal of Clinical Psychology, 46*, 67-83.
- Seymour, F. (1986). *Development and structure of the body image*. Hillsdale & New Jersey: Erlbaum.
- Sherwood, N.E., & Neumark-Sztainer, D. (2001). Internalization of the sociocultural ideal: Weight-related attitudes among young adolescent girls. *American Journal of Health Promotion, 15*(4), 228-231.
- Slade, P.D. & Russell, G.F.M. (1973). Awareness of body dimensions in anorexia nervosa: cross-sectional and longitudinal studies. *Psychological Medicine, 3*, 188-189.
- Stice, E. (1998). Modeling of eating pathology and social reinforcement of the thin-ideal predict onset of bulimic symptoms. *Behaviour Research and Therapy, 36*, 931-944.
- Stice, E., Spangler, D., & Agras, W.S. (2001). Exposure to media portrayed thin ideal images adversely affects vulnerable girls: A longitudinal experiment. *Journal of Social and Clinical Psychology, 20*(3), 270-288.

Stice, E., & Bearman, S. K. (2001). Body image and eating disturbances prospectively predict growth in depressive symptoms in adolescent girls: A growth curve analysis.

Developmental Psychology, 37, 597-607.

Striegel-Moore, R.H., Silberstein, L.R., & Rodin, J. (1993). The social self in bulimia nervosa:

Public self-consciousness, social anxiety, and perceived fraudulence. *Journal of*

Abnormal Psychology, 102, 297-303.

Tajfel, H. (1972). Some developments in European social psychology. *European Journal of*

Social Psychology, 2, 307-322.

Tajfel, H. (1978). Social categorisation, social identity and social comparison. In H. Tajfel

(Ed.), *Differentiation between Social Groups* (pp. 61-76), London: Academic Press.

Tajfel, H., & Turner, J.C. (1978). An integrative theory of intergroup conflict. In W.G. Austin

& S. Worchel (Eds.), *The Social Psychology of intergroup relations* (pp.33-47).

Monterey, CA: Brooks/Cole.

Tester, M. L., & Gleaves, D. H. (2005). Self-deceptive enhancement and family environment:

Possible protective factors against internalisation of the thin ideal. *Eating Disorders*,

13, 187-199.

The National Health and Medical Research Council. (2006). *Acting on Australia's Weight*.

Commonwealth Department of Health and Public Services.

Thompson, J. K. (1990). *Body image disturbance: Assessment and treatment*. Elmsford, NY: Pergamon.

Thompson, Coover and Stormer (1999). Body image, social comparison and eating disturbance: A covariance structure modeling investigation. *International Journal of Eating Disorders*, 26, 43-51.

Thompson, J. K., & Altabe, M. N. (1991). Psychometric qualities of the figure rating scale. *International Journal of Eating Disorders*, 10, 615-619.

Thompson, J.K., Heinberg, L.J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment and treatment of body image disturbance*. Washington DC: American Psychological Association.

Thompson, J.K., Heinberg, L.J., & Tantleff, S. (1991). The Physical Appearance Comparison Scale. *The Behaviour Therapist*, 14, 174.

Thomsen, S.R., McCoy, J.K., Gustafson, R.L., & Williams, M. (2002). Motivations for reading beauty and fashion magazines and anorexic risk in college women. *Media Psychology*, 4, 113-135.

Thomson, R., McGrillis, S., Holland, J., Henderson, S., & Sharpe, S (2001). From 'Peter Andre's six pack' to 'I do knees' – the body in young people's moral discourse. In Backett-Milburn, K & McKie, L (Eds). *Constructing Gendered Bodies: Exploration in Sociology*. Basingtoke, England: Patgrave.

- Thomsen, S. R., Webber, M. M., & Brown, L. B. (2002). The relationship between reading beauty and fashion magazines and the use of pathogenic dieting methods among adolescent females. *Adolescence*, 37 (12), 145.
- Tiggemann, M., Gardiner, M & Slater, A. (2000). "I would rather be a size 10 than have straight A's": A focus group study of adolescent girls' wish to be thinner. *Journal of Adolescence*, 23(6), 645-659.
- Tiggemann, M. & McGill, B. (2004). The role of social comparison in the effect of magazine advertisements on women's mood and body dissatisfaction. *Journal of Social and Clinical Psychology*, 23(1), 23-44.
- Tiggemann, M & Pennington, (1990). The development of gender differences in body-size dissatisfaction. *Australian Psychologist*, 25(3), 306-319.
- Tiggemann, M., & Polivy, J. (2010). Upward and downward: Social comparison processing of thin idealized media images. *Psychology of Women Quarterly*, 34(3), 356-364.
- Tiggemann, M., Polivy, J., & Hargreaves, D. (2009). The processing of thin ideals in fashion magazines: A source of social comparison or fantasy? *Journal of Social and Clinical Psychology*, 28(1), 73-93.
- Tiggemann, M. & Wilson-Barrett, E. (1998). Children's figure ratings: relationship to self-esteem and negative stereotyping. *The International Journal of Eating Disorders*, 23(1), 83-8.

- Trampe, D., Stapel, D. A., & Siero, F. W. (2007). On models and vases: Body dissatisfaction and proneness to social comparison effects. *Journal of Personality and Social Psychology*, 92(1), 106-118.
- Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology*, 5, 5-34.
- Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social Identity and Intergroup Relations* (pp. 15-40) Cambridge, England: Cambridge University Press.
- Turner, J. C., & Oakes. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. *British Journal of Social Psychology*, 25, 237-252.
- Turner, J. C., & Onarato, R. S. (1999). Social identity, personality, and the self-concept: A self-categorization perspective. In T. R. Tyler., R. M. Kramer., & O. P. John (Eds.), *The Psychology of the Social Self* (pp 11-252). London: Lawrence Erlbaum.
- Vartanian, L.R., Giant, C.L., & Passino, R.M. (2001). "Ally Mcbeal vs. Arnold Schwarzenegger": Comparing mass media, interpersonal feedback and gender as predictors of satisfaction with body thinness and muscularity. *Social Behaviour and Personality*, 29(7), 711-724.

- Vogt, Y. A. (2010). Body perceptions, weight control behavior, and changes in adolescents' psychological well-being over time: A longitudinal examination of gender. *Journal of Youth and Adolescence*. Vol 39(8), 927-939.
- Waller, G., Hamilton, & K., Shaw, J. (1992), "Media influences on body size estimation in eating disordered and comparison subjects", *British Review of Bulimia and Anorexia Nervosa*, 6, 81-7.
- Wewers, M. E., & Lowe, N. K. (1990). A critical review of the visual analogue scales in the measurement of clinical phenomena. *Research in Nursing and Health*, 13, 227-236.
- Wilcox & Laird (2000). The impact of media images of super-slender women on women's self-esteem: Identification, social comparison, and self-perception. *Journal of Research in Personality*. Vol 34(2), 278-286.
- Wiseman CV, Gray JJ, Mosimann JE, Ahrens AH. (1992). Cultural expectations of thinness in women: An update. *International Journal of Eating Disorders*. 11, 85–89.
- Wojslawowicz, J. C. (2005). Public and private self-consciousness during early adolescence. *Human Development and Institute for Child Studies Theses and Dissertations*.
- Wood, J.V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychological Bulletin*, 106(2), 231-248.

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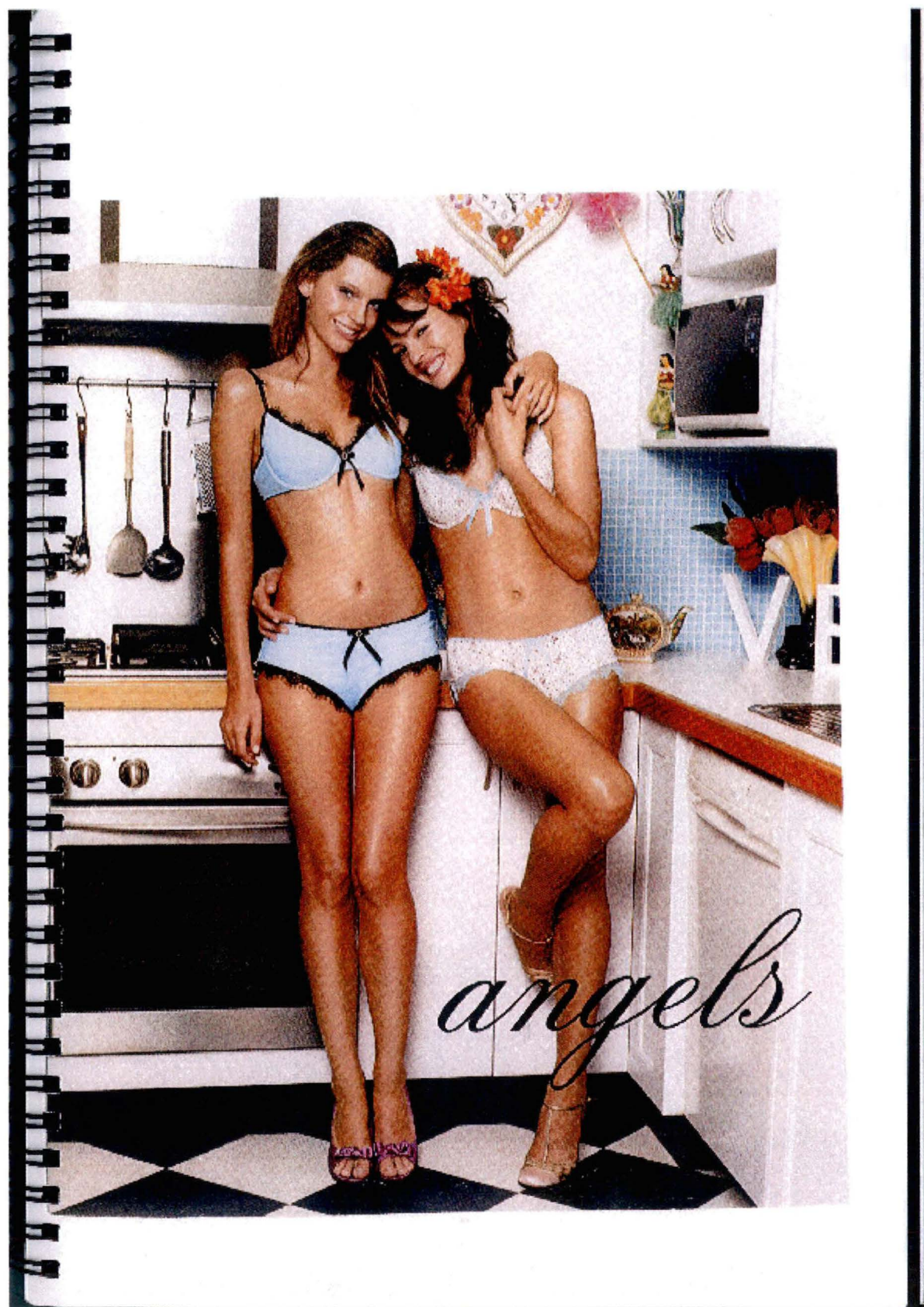
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Appendix A



LUCKY 13 F-SHIRT, \$50.95. BILLABONG SHORTS, \$39.95.
HANSFIELD SCARF, \$24. PETER LANG EARRINGS, \$30.





Appendix B1: PBSC Scale

The Fenigstein-Scheier-Buss Self-Consciousness Scale

Private self-consciousness:

I'm always trying to figure myself out.

Generally, I'm not very aware of myself.

I reflect about myself a lot.

I'm often the subject of my own fantasies.

I never scrutinize myself.

I'm generally attentive to my inner feelings.

I'm constantly examining my own motives.

I sometimes have the feeling that I'm off somewhere watching myself.

I'm alert to changes in my mood.

I'm aware of the way my mind works when I work through a problem.

Public self-consciousness:

I'm concerned about my style of doing things.

I'm concerned about the way I present myself.

I'm self-conscious about the way I look.

I usually worry about making a good impression.

One of the last things I do before I leave my house is look in the mirror.

I'm usually aware of my appearance.

Social anxiety:

It takes me time to overcome my shyness in new situations.

I have trouble working when someone is watching me.

I get embarrassed very easily.

I don't find it hard to talk to strangers.

I feel anxious when I speak in front of a group.

Appendix B2: BIQ

On part A of each item, rate *how much* you resemble your personal physical ideal by circling a number on the 0-3 scale.

On part B of each item, rate *how important* your ideal is to you by circling a number on the 0-3 scale.

1. A. My ideal height is:

0

1

2

3

Exactly as I am

Almost as I am

Fairly unlike me

Very unlike me

B. How important to you is your ideal height?

0

1

2

3

Not important

Somewhat important

Moderately important

Very important

2. A. My ideal skin complexion is:

0

1

2

3

Exactly as I am

Almost as I am

Fairly unlike me

Very unlike me

B. How important to you is your ideal skin complexion?

0

1

2

3

Not important

Somewhat important

Moderately important

Very important

3. A. My ideal hair texture and thickness are:

0

1

2

3

Exactly as I am

Almost as I am

Fairly unlike me

Very unlike me

B. How important to you is your ideal hair texture and thickness?

0

1

2

3

Not important

Somewhat important

Moderately important

Very important

4. A. My ideal facial features (eyes, nose, ears, facial shape) are:

0

1

2

3

Exactly as I am Almost as I am Fairly unlike me Very unlike me

B. How important to you are your ideal facial features?

0	1	2	3

Not important	Somewhat important	Moderately important	Very important

5. A. My ideal muscle tone and definition is:

0	1	2	3

Exactly as I am	Almost as I am	Fairly unlike me	Very unlike me

B. How important to you is your ideal muscle tone and definition?

0	1	2	3

Not important	Somewhat important	Moderately important	Very important

6. A. My ideal body proportions are:

0	1	2	3

Exactly as I am	Almost as I am	Fairly unlike me	Very unlike me

B. How important to you are your ideal body proportions?

0	1	2	3

Not important	Somewhat important	Moderately important	Very important

7. A. My ideal weight is:

0	1	2	3

Exactly as I am	Almost as I am	Fairly unlike me	Very unlike me

B. How important to you is your ideal weight?

0	1	2	3

Not important	Somewhat important	Moderately important	Very important

8. A. My ideal chest size is:

0	1	2	3

Exactly as I am	Almost as I am	Fairly unlike me	Very unlike me

B. How important to you is your ideal chest size?

0	1	2	3
Not important	Somewhat important	Moderately important	Very important

9. A. My ideal physical strength is:

0	1	2	3
Exactly as I am	Almost as I am	Fairly unlike me	Very unlike me

B. How important to you is your ideal physical strength?

0	1	2	3
Not important	Somewhat important	Moderately important	Very important

10. A. My ideal physical coordination is:

0	1	2	3
Exactly as I am	Almost as I am	Fairly unlike me	Very unlike me

B. How important to you is your ideal physical coordination?

0	1	2	3
Not important	Somewhat important	Moderately important	Very important

11. A. My ideal overall physical appearance is:

0	1	2	3
Exactly as I am	Almost as I am	Fairly unlike me	Very unlike me

B. How important is your ideal overall physical appearance?

0	1	2	3
Not important	Somewhat important	Moderately important	Very important

Appendix B3: VAS

Visual Analogue Scales

How are you feeling?

1.

Not at all Depressed	Very Depressed
-------------------------	-------------------

2.

Not at all Worthless	Very Worthless
-------------------------	-------------------

3.

Not at all Anxious	Very Anxious
-----------------------	-----------------

4.

Not at all Hopeless	Very Hopeless
------------------------	------------------

5.

Not at all Unhappy	Very Unhappy
-----------------------	-----------------

Appendix B4: Study 1 Manipulation Check Items

Group: Self-Evaluation Condition

1. Can you tell me what instructions you were given (just in your own words)?
2. Were you able to follow the instructions?

Yes ☐
No ☐
3. In general do you find that you tend to look at magazines more with your friends or more on your own (tick one only)?
Always on my own ☐
More on my own than with friends ☐
As much with friends as on my own ☐
More with friends than on my own ☐
Always with friends ☐
4. In the group today was your reaction the same as when you normally react to media images in a group?

Yes ☐
No ☐
5. Can you explain how your reaction in the group today compared with when you look at magazine images on your own?

Same ☐
Different ☐
6. When you were looking at the media images did you make any other kinds of comparisons?

Yes ☐
No ☐

If yes, did you think about how the models are disadvantaged in comparison to yourself?

- Most of the time ☐
Half the time ☐
Part of the time ☐

Individual: Self-Evaluation Condition

1. Can you tell me what instructions you were given (just in your own words)?

2. Were you able to follow the instructions?

Yes ☐

No ☐

3. In general do you find that you tend to look at magazines more with your friends or more on your own (tick one only)?

Always on my own ☐

More on my own than with friends ☐

As much with friends as on my own ☐

More with friends than on my own ☐

Always with friends ☐

4. As you were looking at the magazine images by yourself today was your reaction the same as when you normally look at magazine images on your own?

Yes ☐

No ☐

5. Can you explain how your reaction when you were looking at the magazine images alone compared with when you look at them with a group of friends?

Same? ☐

Different ☐

6. When you were looking at the media images did you make any other kinds of comparisons?

Yes ☐

No ☐

If yes, did you think about how the models in the pictures are disadvantaged in comparison to yourself?

Most of the time ☐

Half the time ☐

Part of the time ☐

Group: Self-Enhancement Condition

1. Can you tell me what instructions you were given (just in your own words)?

2. Were you able follow the instructions?

Yes ☐

No ☐

3. In general do you find that you tend to look at magazines more with your friends or more on your own (tick one only)?

Always on my own ☐

More on my own than with friends ☐

As much with friends as on my own ☐

More with friends than on my own ☐

Always with friends ☐

4. In the group today was your reaction the same as when you normally react to media images in a group?

Yes ☐

No ☐

5. Can you explain how your reaction in the group today compared with when you look at magazine images on your own?

Same ☐

Different ☐

6. When you were looking at the media images did you make any other kinds of comparisons?

Yes ☐

No ☐

If yes, did you find that you were critically comparing yourself to the models in the pictures?

Most of the time ☐

Half the time ☐

Part of the time ☐

Individual: Self-Enhancement Condition

1. Can you tell me what instructions you were given (just in your own words)?

2. Were you able follow the instructions?

Yes ☐

No ☐

3. In general do you find that you tend to look at magazines more with your friends or more on your own (tick one only)?

Always on my own ☐

More on my own than with friends ☐

As much with friends as on my own ☐

More with friends than on my own ☐

Always with friends ☐

4. As you were looking at the magazine images by yourself today was your reaction the same as when you normally look at magazine images on your own?

Yes ☐

No ☐

5. Can you explain how your reaction when you were looking at the magazine images alone compared with when you look at them with a group of friends?

Same ☐

Different ☐

6. When you were looking at the media images did you make any other kinds of comparisons?

Yes ☐

No ☐

If yes, did you find that you were critically comparing yourself to the models in the pictures?

Most of the time ☐

Half the time ☐

Part of the time ☐

Appendix B5: SIAQ-A

Sociocultural Attitudes Toward Appearance Internalisation subscale
Heinberg, Thompson & Stormer, 1995

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

1. Women who appear in TV shows and movies project the type of appearance that I see as my goal.

1

strongly disagree

2

moderately disagree

3

neither disagree nor agree

4

moderately agree

5

strongly agree
2. I believe that clothes look better on thin models.

1

strongly disagree

2

moderately disagree

3

neither disagree nor agree

4

moderately agree

5

strongly agree
3. Music videos that show thin women make me wish that I were thin.

1

strongly disagree

2

moderately disagree

3

neither disagree nor agree

4

moderately agree

5

strongly agree
4. I do not wish to look like the models in the magazines.

1

strongly disagree

2

moderately disagree

3

neither disagree nor agree

4

moderately agree

5

strongly agree
5. I tend to compare my body to people in magazines and TV.

1

strongly disagree

2

moderately disagree

3

neither disagree nor agree

4

moderately agree

5

strongly agree
6. In our society, fat people are not regarded as unattractive.

1

strongly disagree

2

moderately disagree

3

neither disagree nor agree

4

moderately agree

5

strongly agree
7. Photographs of thin women make me wish that I were thin.

1

2

3

4

5

strongly disagree	moderately disagree	neither disagree nor agree	moderately agree	strongly agree
----------------------	------------------------	-------------------------------	---------------------	-------------------

8. Attractiveness is very important if you want to get ahead in our culture.

1	2	3	4	5
strongly disagree	moderately disagree	neither disagree nor agree	moderately agree	strongly agree

9. It's important for people to work hard on their figures/physiques if they want to succeed in today's culture.

1	2	3	4	5
strongly disagree	moderately disagree	neither disagree nor agree	moderately agree	strongly agree

10. Most people do not believe that the thinner you are, the better you look in clothes.

1	2	3	4	5
strongly disagree	moderately disagree	neither disagree nor agree	moderately agree	strongly agree

11. People think that the thinner you are, the better you look in clothes.

1	2	3	4	5
strongly disagree	moderately disagree	neither disagree nor agree	moderately agree	strongly agree

12. In today's society, it's not important to always look attractive.

1	2	3	4	5
strongly disagree	moderately disagree	neither disagree nor agree	moderately agree	strongly agree

13. I wish I looked like a swimsuit model.

1	2	3	4	5
strongly disagree	moderately disagree	neither disagree nor agree	moderately agree	strongly agree

14. I often read magazines like *Cosmopolitan*, *Vogue*, and *Glamour* and compare my appearance to the models.

1	2	3	4	5
strongly disagree	moderately disagree	neither disagree nor agree	moderately agree	strongly agree

Appendix B6: PACS

Physical Appearance Comparison Scale

Thompson, Heinberg & Tantleff, 1991

Using the following scale, rate the statements below.

Never	Seldom	Sometimes	Often	Always
1	2	3	4	5

- | | | | | | |
|--|---|---|---|---|---|
| 1. At parties or other social events, I compare my physical appearance to the physical appearance of others. | 1 | 2 | 3 | 4 | 5 |
| 2. The best way for people to know if they are overweight or underweight is to compare their figure to the figure of Others. | 1 | 2 | 3 | 4 | 5 |
| 3. At parties or other social events, I compare how I am dressed to how other people are dressed. | 1 | 2 | 3 | 4 | 5 |
| 4. Comparing your “looks” to the “looks” of others is a bad way to determine if you are attractive or unattractive. | 1 | 2 | 3 | 4 | 5 |
| 5. In social situations, I sometimes compare my figure to the figures of other people. | 1 | 2 | 3 | 4 | 5 |

Appendix C1: Principal and Staff Information Sheet

Information Sheet for Principal and Staff

Dr Elaine Hart
Clinic Director/Lecturer

Mr Peter Ball
Senior Lecturer

Miss Sonia Sultan
Postgraduate Psychology Student

This information sheet is to tell you about some research that we would like to do at your school. The general aim of the study is concerned with the development of eating disorders in adolescent females. More specifically our aim is to determine factors which lead to body image dissatisfaction, as this has found to be a central aspect of eating disorders. We are interested in the role of the mass media in the development of body image dissatisfaction as they have been criticised for promoting an ideal body shape that is unattainable by most young women. As I am sure you are aware this topic is important because many females are dissatisfied with their body image. We feel it is important to look at short term changes in body image because, short-term changes in mood and body image satisfaction may be the precipitants for all kinds of unhealthy behaviour such as dieting and binge eating which in turn have a negative effect on both health and well-being. This topic is also increasingly becoming a serious issue in young females and this is why we would like to investigate body image in females in younger age groups. To do this we need your help.

This study will involve girls aged between 12 and 14 years. They will be asked to examine media images of women taken from fashion magazines. This will take place over two sessions, approximately half an hour each session during class time and there will be no teachers present. Girls will view the images either individually or in small groups of four or five. Participants will then be asked to complete short questionnaires, on their own relating to the pictures they have just seen. At the conclusion of the study the girls will be debriefed and the purpose of the investigation will be fully explained and they will be given an opportunity to comment or ask questions. When the group results are available Miss Sultan will present the results as well as information about body image to the class.

Body image and dieting can be a sensitive issue for some people. It is not expected that participating in this study will cause any distress or discomfort to participants unless an individual has a pre-existing sensitivity around this issue. However as participation in this study is entirely voluntary no such individual is under any obligation to volunteer. If any participants feel upset or wish to withdraw, they may stop at any time, and can do so without prejudice. All instructions will be carefully explained to the girls and there will be opportunity for each participant to ask questions.

The results of this study will improve our understanding of how group processes contribute to the development of healthy or disordered eating. We need as many girls as possible to participate in our study for it to be successful. However we need your school's permission and support. If you have any questions about this project please contact Dr Elaine Hart on 62 262936, Mr Peter Ball on 62 267462 or Miss Sonia Sultan on 62 250380. Additionally, you may contact A/Professor Gino DalPont (chair of the University Ethics Committee) on 62 26 2078 if you have any concerns of an ethical nature. The project has the approval of the Southern Tasmania Social Sciences Human Research Ethics Committee and the School of Psychology.

Thank you for your support of our project.

Appendix C2: Parents and Guardians Information Sheet

Information Sheet for Parents/Guardians of Minors

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Dr Elaine Hart
Clinic Director/Lecturer

Mr Peter Ball
Senior Lecturer

Miss Sonia Sultan
Postgraduate Psychology Student

Dear Parent/Guardian,

We are researchers from the school of psychology at the University of Tasmania and are conducting a study on body image dissatisfaction in adolescent females. We are interested in factors which lead to body image dissatisfaction. This research is important because many females are dissatisfied with their body image and this is often related to unnecessary dieting and eating disorders, which have a negative effect on health and well-being. We will be looking at which factors lead to body image dissatisfaction, as this is a central aspect of eating disorders. More specifically we will be examining the role of the mass media in the development of body image dissatisfaction as the media has been criticised for promoting an ideal body shape that is unattainable by most young women. Body image is now becoming a serious issue in young children and it is therefore important to investigate younger age groups. The results of this study will improve our understanding of how group processes contribute to the development of healthy or disordered eating. Furthermore, research of this nature contributes to the prevention and treatment of eating disorders. We would like to invite your daughter's participation. The study is being undertaken as part of the requirements for Sonia Sultan's Masters degree in Clinical Psychology and participation is completely voluntary.

In the initial stage of the study your daughter will have to provide her name on the questionnaire in order to match her responses in the two parts of the study. At the completion of the study a code number will be used to store information. All personal information will remain confidential and will only be available to the investigators. Questionnaires will be kept in a locked cabinet in the School of Psychology and will be destroyed five years after the conclusion of the study.

Your daughter will be asked to examine media images of women taken from fashion magazines and then will be required to complete short questionnaires. This will take place over two sessions during class time. The first session will last approximately 5 minutes and the second session will be half an hour. There will be no teachers present. She will view the images either individually or in a small discussion group and then complete the questionnaires on her own relating to the pictures she has just seen. The questionnaires relate to body image satisfaction. At the conclusion of the study your daughter will be debriefed and the purpose of the study will be fully explained and she will be given an opportunity to comment or ask questions. When the group results are available Miss Sultan will present the results as well as information about body image to the class.

For most participants body image and dieting is not an issue but for some it can be and answering questions of this sort may cause some distress or discomfort to young people. Miss Sultan will be present and will be monitoring your daughter's reactions to the pictures regardless of whether she views the pictures as part of a group or on her own. However, if your daughter feels upset or does not wish to answer the questions, she may stop at any time, and can do so without being required to give a reason and without any effect to her school records. Her participation on this study is entirely voluntary and if she feels upset after answering these questions please contact one of the researchers and we will provide you with information about counselling services available such as a school guidance officer.

Please keep a copy of this information sheet. You will need to read and sign the statement of informed consent before your child takes part in this study. This information sheet has been forwarded to you through your daughter's school and at present we have no information on your daughter until we make contact with her. For further information you can contact Dr Elaine Hart – 62 262936, Mr Peter Ball – 62 267462 or Miss Sonia Sultan – 62 250380

If you have any concerns of an ethical nature or any complaints about the way in which the project is run, you may contact the chair or Executive Officer of the Human Research Ethics Committee. The chair is A/Professor Gino DalPont on 62 26 2078 and the executive officer is Ms Amanda McAully – 62 262 763. The project has the approval of the Southern Tasmania Social Sciences Human Research Ethics Committee and the School of Psychology. If you would like information about the overall results of the study you can call Sonia Sultan.

Thankyou for allowing your child to participate in this study.

Appendix C3: Parents/Guardians Consent Form

Statement of Informed Consent for Parents/Guardians of Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Parent Guardian:

- 1. I have read and understood the "information sheet" for this study.
- 2. The nature and possible effects of the study have been explained to me.
- 3. I understand that the study involves examining media images either individually or in a small group and then completing short questionnaires relating to body image and mood.
- 4. I understand that the questions relating to body image satisfaction in rare instances may cause distress or discomfort in some individuals.
- 5. I understand that my daughter's answers will be treated with strict confidentiality.
- 6. Any questions that I have asked have been answered to my satisfaction.
- 7. I agree that research data gathered for the study may be published provided that my child cannot be identified as a participant.
- 8. I agree to allow my daughter to participate in this investigation and understand that she may withdraw or I may withdraw her without being required to give a reason and without any effect to her school records.

Name of participant.....

Name of parent or guardian.....

Signature of parent or guardian.....Date...../...../.....

Investigator:

I have explained the purpose and procedure of this study and the implications of participation in it to this volunteer's parent/guardian and I believe that the consent is informed and that he/she understands the implications of their child's participation.

Name of investigator.....

Signature of investigator.....Date...../...../.....

Appendix C4: Participants Information Sheet

Information Sheet for Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Dr Elaine Hart
Clinic Director/Lecturer

Mr Peter Ball
Senior Lecturer

Miss Sonia Sultan
Postgraduate Psychology Student

Dear Participant,

We are researchers from the school of psychology at the University of Tasmania and are conducting a study on body image dissatisfaction in adolescent girls. We are interested in factors which lead to body image dissatisfaction. This research is important because many young women are dissatisfied with their body image and this is often related to unnecessary dieting and eating disorders, which have a negative effect on health and well-being. We will be looking at which factors lead to body image dissatisfaction, as this is a central aspect of eating disorders. More specifically we will be examining the role of the mass media in the development of body image dissatisfaction as the media has been criticised for promoting an ideal body shape that is unattainable by most young women. Body image is now becoming a serious issue in adolescents and it is therefore important to investigate younger age groups. The results of this study will improve our understanding of how group processes contribute to the development of healthy or disordered eating. Furthermore, research of this nature contributes to the prevention and treatment of eating disorders. We would like to invite you to participate in our study. This study is being undertaken as part of the requirements for Sonia Sultan's Masters degree in Clinical Psychology and participation is completely voluntary.

You will be asked to view pictures of women taken from fashion magazines and then fill in short questionnaires. This will take place over two sessions during class time, each session will last approximately half an hour and there will be no teachers present. You will be asked to view the pictures either on your own or in a small discussion group. You will then be required to complete short questionnaires on your own relating to the pictures you have just seen. The questionnaires relate to body image satisfaction. At the conclusion of the study you will be debriefed and the purpose of the investigation will be fully explained and you will also be given an opportunity to comment or ask questions. When the group results are available Miss Sultan will present the results as well as information about body image to the class.

In the initial stage of the study you will have to provide your name on the questionnaire so as to match your responses in the two parts of the study. At the completion of the study a code number will be used to store information. All personal information will remain confidential and will only be available to the investigators. Questionnaires will be kept in a locked cabinet in the School of Psychology and will be destroyed five years after the conclusion of the study.

Body image and dieting can be an issue to some people, and answering questions of this sort can sometimes cause some distress or discomfort. Miss Sultan will be present and will be monitoring your reactions to the pictures whether you view the pictures as part of a group or on your own. However, if you feel upset or do not wish to answer the questions, you may stop at any time, and can do so without being required to give a reason and without any effect to your school records. Your participation on this study is entirely voluntary and if you feel upset after answering these questions please contact one of the researchers and we will provide you with information about counselling services available.

Please keep a copy of this information sheet. You will need to read and sign the statement of informed consent before taking part in this study. This information sheet has been forwarded to you through your school, so at

present we have no information on you until we make contact with you. For further information you can contact Dr Elaine Hart – 62 262936, Mr Peter Ball – 62 267462 or Miss Sonia Sultan – 62 250380.

If you have any concerns of an ethical nature or any complaints about the way in which the project is run, you may contact the chair or Executive Officer of the Human Research Ethics Committee. The chair is A/Professor Gino DalPont – 62 262078 and the Executive Officer is Ms Amanda McAully – 62 262763. The project has the approval of the Southern Social Sciences Human Research Ethics Committee and the School of Psychology. If you would like information about the overall results of the study or your individual results you can call Sonia Sultan.

Thankyou for your participation

Appendix C5: Participants Consent Form

Statement of Informed Consent for Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Participant:

1. I have read and understood the "information sheet" for this study.
2. The nature and possible effects of the study have been explained to me.
3. I understand that the study involves looking at pictures of women either on my own or in a small group and then completing short questionnaires relating to body image and mood.
4. I understand that the questions relating to body image satisfaction in rare instances may cause distress or discomfort in some individuals.
5. I understand that my answers will be treated with strict confidentiality.
6. Any questions that I have asked have been answered to my satisfaction.
7. I agree that research data gathered for the study may be published provided that I cannot be identified as a participant.
8. I agree to participate in this investigation and understand that I may withdraw at any time without being required to give a reason and without any effect to my school records.

Name of participant.....

Signature of participant.....Date...../...../.....

Investigator:

I have explained the purpose and procedure of this study and the implications of participation in it to this volunteer and I believe that the consent is informed and that she understands the implications of participation.

Name of investigator.....

Signature of investigator.....Date...../...../.....

Appendix D: Intercorrelations for Study 1

Table1. Intercorrelations of Pre-Experimental Measures of Mood

	Depressed1	Worthless1	Anxious1	Hopeless1	Unhappy1
Depressed1	r 1				
	Sig.				
	N 88				
Worthless1	r .355**	1			
	Sig .001				
	N 88	89			
Anxious1	r .355**	.375**	1		
	Sig .001	.000			
	N 88	89	89		
Hopeless1	r .529**	.489**	.533**	1	
	Sig .000	.000	.000		
	N 88	89	89	89	
Unhappy1	r .620**	.296**	.214*	.500**	1
	Sig .000	.005	.044	.000	
	N 88	89	89	89	89

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)

Table2. Interrelations of Post-Experimental Measures of Mood

		Depressed2	Worthless2	Anxious2	Hopeless2	Unhappy2
Depressed2	r	1				
	Sig.					
	N	88				
Worthless2	r	.554**	1			
	Sig	.000				
	N	88	89			
Anxious2	r	.581**	.670**	1		
	Sig	.000	.000			
	N	88	89	89		
Hopeless2	r	.672**	.791**	.752**	1	
	Sig	.000	.000	.000		
	N	88	89	89	89	
Unhappy2	r	.607**	.616**	.406*	.620**	1
	Sig	.000	.000	.000	.000	
	N	88	89	89	89	89

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)

Appendix E: Interview Transcript for Study 2

1. Were you surprised by the results we have presented or was it pretty much as you expected?
 2. What do you think might account for the differences in the group and the individual conditions?
 3. What does that suggest to you about the way we respond to magazines?
 4. What do these findings (our findings) mean to you? What is their significance?
 5. What did those of you in the group situation find pleasant? (or helpful, interesting, threatening, uncomfortable etc). (Try to elicit the key words from them) We know we measured mood etc, but can they broaden the concept for us by throwing in other words?
 6. How did that seem different from other group situations (e.g., lunchtime talk about magazines)?
 7. How did that seem different from your experience of looking at such magazines on your own e.g., at home?
- Similar questions would invite those who experienced the individual exposure to contribute?
8. Did we fail to ask you about important responses to the magazines? We asked about mood, BI satisfaction, engagement in social comparison, media influence. What did we miss?
 9. When we asked you to look at these pictures why did you think the girls felt happier about their physical appearance when they were looking at them with their friends than when they were on their own?

10. Why is it that you don't compare yourselves (as much) to the models in the magazines when you are with your friends?
11. Can you tell me how it is different when you look at this kind of magazine image on your own?
12. Did we ask you about important aspects of your response to the magazines but did we ask in the wrong sort of way? In a way that made it difficult for you to appreciate what we were getting at? Or that didn't allow you to fully explain what you experienced?
13. Is there anything else you would like to say about the original study in which you participated?

Appendix F1: Parents/Guardians Information Sheet

Information Sheet for Parents/Guardians of Minors

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Dr Elaine Hart
Clinic Director/Lecturer

Mr Peter Ball
Senior Lecturer

Miss Sonia Sultan & Miss Joanne Burbury
Postgraduate Psychology Students

Dear Parent/Guardian,

We would like to invite your daughter's participation in an extension of our first study which she participated in. The results of the first study suggested that the experience was more positive for those girls who viewed the magazine images as part of a group as opposed to on their own, therefore an extension to this study will enable us to explore the group experience further.

Your daughter will be asked to participate in a small discussion group (8-10 girls) relating to the task she completed in our previous study. This will take place over one session during class time and will last approximately one hour and there will be no teachers present. Miss Joanne Burbury who is also a Postgraduate Psychology student undertaking research in the area of body image will assist Miss Sultan in facilitating the groups. Prior to the discussion group confidentiality will be discussed with all participants and they will be informed that whatever is discussed during the session is to remain private.

The discussion will be audio recorded so the researchers can refer back to the discussion for analysis, however your daughter will not have to provide her name in this study. All information will remain confidential and will only be available to the investigators. The tapes will be kept in a locked cabinet in the School of Psychology and will be destroyed five years after the conclusion of the study.

For most participants body image and dieting is not an issue but for some it can be and answering questions of this sort may cause some distress or discomfort to young people. Miss Sultan and Miss Burbury will be present and will be monitoring your daughter's participation in the group. However, if your daughter feels upset or does not wish to participate in the group, she may stop at any time, and can do so without being required to give a reason and without any effect to her school records. Her participation on this study is entirely voluntary and if she feels upset after participating in the group please contact one of the researchers and we will provide you with information about counselling services available such as a school guidance officer.

Please keep a copy of this information sheet. You will need to read and sign the statement of informed consent before your child takes part in this study. This information sheet has been forwarded to you through your daughter's school and at present we have no information on your daughter until we make contact with her. For further information you can contact Dr Elaine Hart – 62 262936, Mr Peter Ball – 62 267462 or Miss Sonia Sultan – 62 250380

The project has the approval of the Southern Tasmania Social Sciences Human Research Ethics Committee and the School of Psychology. If you have any concerns of an ethical nature or any complaints about the way in which the project is run, you may contact the Chair or Executive Officer of the Human Research Ethics Committee. The chair is A/Professor Gino DalPont on 62 26 2078 and the executive officer is Ms Amanda McAully – 62 262 763. If you would like information about the overall results of the study you can call Sonia Sultan.

Thankyou for allowing your child to participate in this study.

Appendix F2: Parents/Guardians Consent Form

Statement of Informed Consent for Parents/Guardians of Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Parent Guardian:

- 1. I have read and understood the "information sheet" for this study.
- 2. The nature and possible effects of the study have been explained to me.
- 3. I understand that the study involves my daughter participating in a one-hour class time group discussion relating to the task my daughter completed in the previous study.
- 4. I understand that the questions relating to body image satisfaction in rare instances may cause distress or discomfort in some individuals.
- 5. I understand that my daughter's answers will be treated with strict confidentiality.
- 6. Any questions that I have asked have been answered to my satisfaction.
- 7. I agree that research data gathered for the study may be published provided that my child cannot be identified as a participant.
- 8. I agree to allow my daughter to participate in this investigation and understand that she may withdraw or I may withdraw her without being required to give a reason and without any effect to her school records.

Name of participant.....

Name of parent or guardian.....

Signature of parent or guardian.....Date...../...../.....

Investigator:

I have explained the purpose and procedure of this study and the implications of participation in it to this volunteer's parent/guardian and I believe that the consent is informed and that he/she understands the implications of their child's participation.

Name of investigator.....

Signature of investigator.....Date...../...../...

Appendix F3: Participants Information Sheet

Information Sheet for Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Dr Elaine Hart	Mr Peter Ball	Miss Sonia Sultan & Miss Joanne Burbury
Clinic Director/Lecturer	Senior Lecturer	Postgraduate Psychology Students

Dear Participant,

We would like to invite your participation in an extension of our first study which you participated in. The results of the first study suggested that the experience was more positive for those girls who viewed the magazine images as part of a group as opposed to on their own, therefore an extension to this study will enable us to explore the group experience further.

You will be asked to participate in a small discussion group (8-10 girls) relating to the task you completed in our previous study. This will take place over one session during class time and will last approximately one hour and there will be no teachers present. Miss Joanne Burbury who is also a Postgraduate Psychology student undertaking research in the area of body image will assist Miss Sultan in facilitating the groups. Prior to the discussion group confidentiality will be discussed with all participants and you will be informed that whatever is discussed during the session is to remain private.

The discussion will be audio recorded so the researchers can refer back to the discussion for analysis, however you will not have to provide your name in this study. All information will remain confidential and will only be available to the investigators. The tapes will be kept in a locked cabinet in the School of Psychology and will be destroyed five years after the conclusion of the study.

Body image and dieting can be an issue to some people, and answering questions of this sort can sometimes cause some distress or discomfort. Miss Sultan and Miss Burbury will be the group facilitators therefore will be monitoring your participation in the group. However, if you feel upset or do not wish to participate in the group, you may stop at any time, and can do so without being required to give a reason and without any effect to your school records. Your participation in this study is entirely voluntary and if you feel upset after participating in this group please contact one of the researchers and we will provide you with information about counselling services available.

Please keep a copy of this information sheet. You will need to read and sign the statement of informed consent before taking part in this study. This information sheet has been forwarded to you through your school, so at present we have no information on you until we make contact

with you. For further information you can contact Dr Elaine Hart – 62 262936, Mr Peter Ball – 62 267462 or Miss Sonia Sultan – 62 250380.

The project has the approval of the Southern Social Sciences Human Research Ethics Committee and the School of Psychology. If you have any concerns of an ethical nature or any complaints about the way in which the project is run, you may contact the Chair or Executive Officer of the Human Research Ethics Committee. The chair is A/Professor Gino DalPont – 62 262078 and the Executive Officer is Ms Amanda McAully – 62 262763. If you would like information about the overall results of the study or your individual results you can call Sonia Sultan.

Thankyou for your participation

Appendix F4: Parents/Guardians Consent Form

Statement of Informed Consent for Parents/Guardians of Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Parent Guardian:

- 9. I have read and understood the "information sheet" for this study.
- 10. The nature and possible effects of the study have been explained to me.
- 11. I understand that the study involves my daughter participating in a one-hour class time group discussion relating to the task my daughter completed in the previous study.
- 12. I understand that the questions relating to body image satisfaction in rare instances may cause distress or discomfort in some individuals.
- 13. I understand that my daughter's answers will be treated with strict confidentiality.
- 14. Any questions that I have asked have been answered to my satisfaction.
- 15. I agree that research data gathered for the study may be published provided that my child cannot be identified as a participant.
- 16. I agree to allow my daughter to participate in this investigation and understand that she may withdraw or I may withdraw her without being required to give a reason and without any effect to her school records.

Name of participant.....

Name of parent or guardian.....

Signature of parent or guardian.....Date...../...../.....

Investigator:

I have explained the purpose and procedure of this study and the implications of participation in it to this volunteer's parent/guardian and I believe that the consent is informed and that he/she understands the implications of their child's participation.

Name of investigator.....

Signature of investigator.....Date...../...../...

Appendix F5: Participants Consent Form

Statement of Informed Consent for Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Participant:

- 1. I have read and understood the “information sheet” for this study.
- 2. The nature and possible effects of the study have been explained to me.
- 3. I understand that the study involves participating in a one-hour class time group discussion relating to the task I completed in the previous study.
- 4. I understand that the questions relating to body image satisfaction in rare instances may cause distress or discomfort in some individuals.
- 5. I understand that my answers will be treated with strict confidentiality.
- 6. Any questions that I have asked have been answered to my satisfaction.
- 7. I agree that research data gathered for the study may be published provided that I cannot be identified as a participant.
- 8. I agree to participate in this investigation and understand that I may withdraw at any time without being required to give a reason and without any effect to my school records.
- 9. I understand that everything that is said in the group will remain confidential and is not to be discussed outside the session.

Name of participant.....

Signature of participant.....Date...../...../.....

Investigator:

I have explained the purpose and procedure of this study and the implications of participation in it to this volunteer and I believe that the consent is informed and that she understands the implications of participation.

Name of investigator.....

Signature of investigator.....Date...../...../.....

Appendix G1: Friendship Group Formation Questionnaire

Friendship Network Identification Questionnaire

(1) Write down the names of your best friends, that is the girls that you “hang around” most and are closest to.

(2) Is there one particular “group” of girls you normally hang around with? (Please Circle)

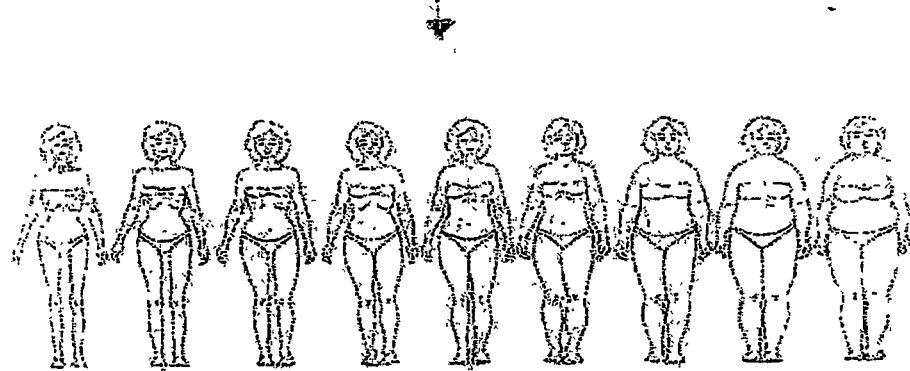
- (a) Yes
- (b) No, I hang around with a number of different “groups” or with people from a number of different “groups”
- (c) No I spend most of my time alone
- (d) No, I spend most of my time with one other friend

(3) If you answered (a) “yes” to the previous question, write down the names of the girls in the “group” that you hang around with.

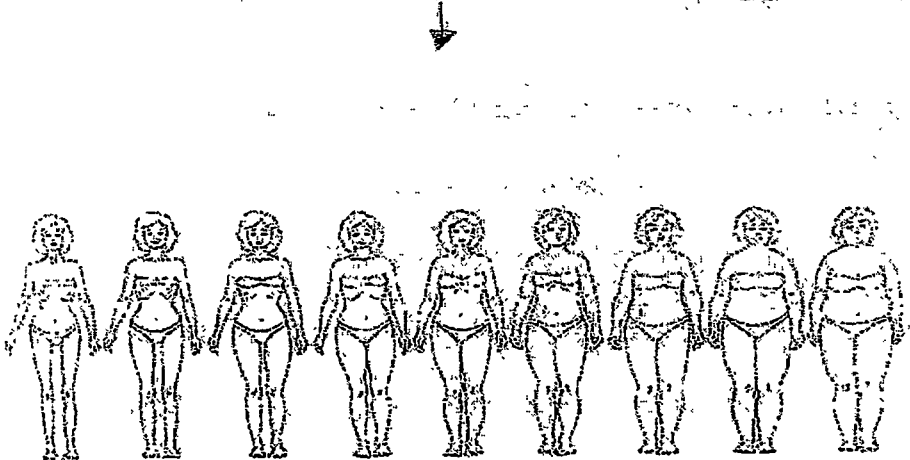
(4) If you answered (b) to question 2, write down the names of the different groups you hang around with.

Appendix G2: Figure Rating Scale

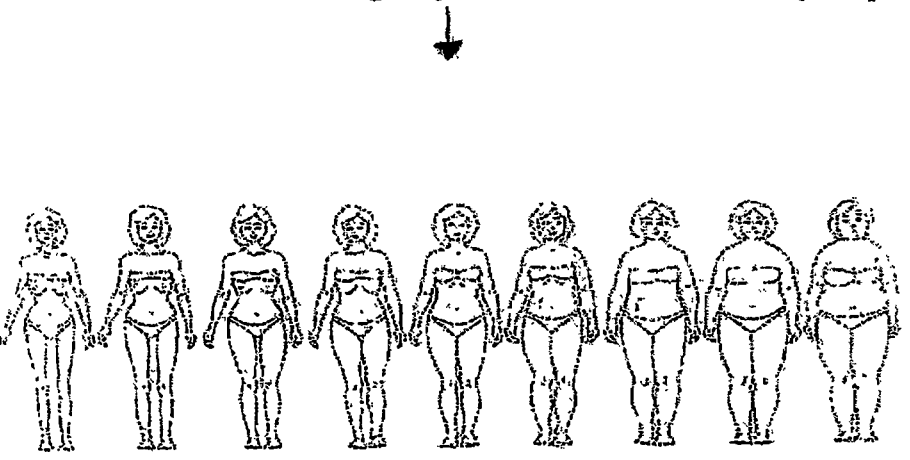
Place a tick below the figure that is most similar to your own body shape



Place a tick below the figure that is most similar to your eating partner's body shape



Place a tick below the figure you feel to be the ideal body shape



Appendix G3: Social Comparison Rating Task

Social Comparison Rating Scale

Self-Evaluation Condition:

(1) I would like my body to look like these girls' bodies

1	2	3	4	5
strongly	disagree	neutral	agree	strongly
disagree				agree

(2) These girls' are thinner than me

1	2	3	4	5
strongly	disagree	neutral	agree	strongly
disagree				agree

(3) In a busy clothes shop I wouldn't like to try on bathers in the same change room as these girls'.

1	2	3	4	5
strongly	disagree	neutral	agree	strongly
disagree				agree

Self-Improvement Condition:

(1) I know how to improve my body so that it looks like these women’s bodies

1	2	3	4	5
strongly	disagree	neutral	agree	strongly
disagree				agree

(2) I can see a number of ways to improve so that I look as thin as these girls

1	2	3	4	5
strongly	disagree	neutral	agree	strongly
disagree				agree

(3) In a busy clothes shop I wouldn’t like to try on bathers in the same change room as these people without improving my body shape

1	2	3	4	5
strongly	disagree	neutral	agree	strongly
disagree				agree

Self-Enhancement Condition:

(1) I don't need my body to look like these girls bodies because nobody really looks like that.

- | | | | | |
|----------|----------|---------|-------|----------|
| 1 | 2 | 3 | 4 | 5 |
| strongly | disagree | neutral | agree | strongly |
| disagree | | | | agree |

(2) These girls are thinner than me but they look unnatural.

- | | | | | |
|----------|----------|---------|-------|----------|
| 1 | 2 | 3 | 4 | 5 |
| strongly | disagree | neutral | agree | strongly |
| disagree | | | | agree |

(3) In a busy clothes shop I would be quite comfortable trying on bathers in the same change room as these girls because I'm real.

- | | | | | |
|----------|----------|---------|-------|----------|
| 1 | 2 | 3 | 4 | 5 |
| strongly | disagree | neutral | agree | strongly |
| disagree | | | | agree |

Appendix G4: Study 3 Manipulation Check Items

Self-Evaluation Condition

1. Can you tell me what instructions you were given (just in your own words)?

2. Were you able follow the instructions?

All of the time ☐

Most of the time ☐

A little of the time ☐

3. As a group how will do you think you were able to follow the instructions?

All of the time ☐

Most of the time ☐

A little of the time ☐

4. In general do you find that you tend to look at magazines more with your friends or more on your own (tick one only)?

Always on my own ☐

More on my own than with friends ☐

As much with friends as on my own ☐

More with friends than on my own ☐

Always with friends ☐

5. In the group today was your personal reaction the same as when you normally react to media images in a group?

Yes ☐

No ☐

6. How real did the group experience feel?

7. When you were looking at the media images did you make any other kinds of comparisons?

Yes ☐

No ☐

If no then please explain how it was different?

8. Did you find that you were comparing yourself to the models in the pictures and thinking about how disadvantaged they are in comparison to you?

Disadvantaged:

Most of the time ☐

Half the time ☐

Part of the time ☐

Or

9. Did you find that you were looking at how you could improve yourself?

Improvement:

Half the time ☐

Part of the time ☐

Part of the time ☐

10. Can you estimate the percentage of the time you spent focusing on yourself, comparing yourself to the models and to your friends?

• Self ☐

• Friends ☐

☐

• Models

Self-Enhancement Condition

1. Can you tell me what instructions you were given (just in your own words)?

2. Were you able follow the instructions?

All of the time ☐

Most of the time ☐

A little of the time ☐

3. As a group how will do you think you were able to follow the instructions?

All of the time ☐

Most of the time ☐

A little of the time ☐

4. In general do you find that you tend to look at magazines more with your friends or more on your own (tick one only)?

Always on my own ☐

More on my own than with friends ☐

As much with friends as on my own ☐

More with friends than on my own ☐

Always with friends ☐

5. In the group today was your personal reaction the same as when you normally react to media images in a group?

Yes ☐

No ☐

6. How real did the group experience feel?

7. When you were looking at the media images did you make any other kinds of comparisons?

Yes ☐

No ☐

If no then please explain how it was different?

8. Did you find that you were critically comparing yourself to the models in the pictures *or* were you looking at how you could improve yourself?

Critical:

Most of the time ☐

Half the time ☐

Part of the time ☐

Or

9. Did you find that you were looking at how you could improve yourself?

Improvement:

Half the time ☐

Part of the time ☐

Part of the time ☐

10. Can you estimate the percentage of the time you spent focusing on yourself, comparing yourself to the models and to your friends?

• Self ☐

• Friends ☐

☐

• Models

Self-Improvement Condition

1. Can you tell me what instructions you were given (just in your own words)?

2. Were you able follow the instructions?

All of the time ☐

Most of the time ☐

A little of the time ☐

3. As a group how will do you think you were able to follow the instructions?

All of the time ☐

Most of the time ☐

A little of the time ☐

4. In general do you find that you tend to look at magazines more with your friends or more on your own (tick one only)?

Always on my own ☐

More on my own than with friends ☐

As much with friends as on my own ☐

More with friends than on my own ☐

Always with friends ☐

5. In the group today was your personal reaction the same as when you normally react to media images in a group?

Yes ☐

No ☐

6. How real did the group experience feel?

7. When you were looking at the media images did you make any other kinds of comparisons?

Yes ☐

No ☐

If no then please explain how it was different?

8. Did you find that you were critically comparing yourself to the models in the pictures *or* were you looking at how the models were disadvantaged in comparison to yourself?

Critical:

Most of the time ☐

Half the time ☐

Part of the time ☐

Or

9. Did you find that you were comparing yourself to the models in the pictures and thinking about how disadvantaged they are in comparison to you?

Disadvantaged:

Half the time ☐

Part of the time ☐

Part of the time ☐

10. Can you estimate the percentage of the time you spent focusing on yourself, comparing yourself to the models and to your friends?

• Self ☐

• Friends ☐

• Models ☐

Appendix H1: Principal and Staff Information Sheet

Information Sheet for Principal and Staff

Dr Elaine Hart
Clinic Director/Lecturer

Mr Peter Ball
Senior Lecturer

Miss Sonia Sultan
Postgraduate Psychology Student

This information sheet is to tell you about some research that we would like to do at your school. This study is an extension of our previous studies that we conducted in local high schools in 2003 and 2004. The study is being undertaken as part of the requirements for Sonia Sultan's Doctorate in Clinical Psychology. Miss Sultan is a registered Psychologist and has worked as a Guidance Officer in schools in Southern Tasmania. She also has experience working as a group facilitator.

The general aim of the study is concerned with the development of eating disorders in adolescent females. More specifically our aim is to determine factors which lead to body image dissatisfaction, as this has found to be a central aspect of eating disorders. We are interested in the role of the mass media in the development of body image dissatisfaction as they have been criticised for promoting an ideal body shape that is unattainable by most young women. As I am sure you are aware this topic is important because many females are dissatisfied with their body image. We feel it is important to look at short term changes in body image because, short-term changes in mood and body image satisfaction may be the precipitants for all kinds of unhealthy behaviour such as dieting and binge eating which in turn have a negative effect on both health and well-being. This topic is also increasingly becoming a serious issue in young females and this is why we would like to investigate body image in females in younger age groups.

Participation in the study is completely voluntary and no girl will be able to participate unless parental consent is obtained. Adolescent girls aged between 12 and 14 years will be asked to examine media images of women taken from fashion magazines. This will take place over two sessions, approximately half an hour each session during class time and there will be no teachers present. Girls will view the images in small friendship groups ranging from three to five girls per group. Participants will then be asked to complete six short questionnaires, on their own relating to the pictures they have just seen. The questionnaires deal with friendship, mood, body image dissatisfaction and media influence. Prior to the discussion group confidentiality will be discussed with all participants and they will be informed that whatever is discussed during the session is to remain private. The group discussion will be audio recorded so the researchers can refer back to the discussion for analysis. All information will remain confidential and will only be available to the researchers. The tapes will be kept in a locked cabinet in the School of Psychology for five years and then destroyed.

At the conclusion of the study the girls will be debriefed and the purpose of the investigation will be fully explained and they will be given an opportunity to comment or ask questions. When the group results are available Miss Sultan will present the results as well as information about body image to the class. No individual results will be available.

Body image and dieting can be a sensitive issue for some people. It is not expected that participating in this study will cause any distress or discomfort to participants unless an individual has a pre-existing sensitivity around this issue. However as participation in this study is entirely voluntary no such individual is under any obligation to volunteer. If any participants feel upset or wish to withdraw, they may stop at any time, and can do so without prejudice. All instructions will be carefully explained to the girls and there will be opportunity for each participant to ask questions.

The results of this study will improve our understanding of how group processes contribute to the development of healthy or disordered eating. We need as many girls as possible to participate in our study for it to be successful. However we need your school's permission and support. The project has the approval of the Human Research Ethics Committee (Tasmania) Network and the School of Psychology. If you have any questions about this project please contact Dr Elaine Hart on 6226 2936, Mr Peter Ball on 6226 7462 or Miss Sonia Sultan on 6226 2260. Additionally, you may contact Ms Amanda McAully (Executive Officer of the Human Research Ethics Committee (Tasmania) Network) on 6226 2763 if you have any concerns of an ethical nature. If your school is interested in participating in this study please contact the researchers and distribute the information sheets and consent forms to parents. Furthermore, your school will not be identifiable in this study.

Thank you for your support of our project.

Appendix H2: Parents/Guardians Information Sheet

Information Sheet for Parents/Guardians of Minors

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Dr Elaine Hart
Clinic Director/Lecturer

Mr Peter Ball
Senior Lecturer

Miss Sonia Sultan
Postgraduate Psychology Student

Dear Parent/Guardian,

We are researchers from the school of psychology at the University of Tasmania and are conducting a study on body image dissatisfaction in adolescent females. We are interested in factors which lead to body image dissatisfaction and this study is an extension of our previous studies that we conducted in local high schools in 2003 and 2004. The study is being undertaken as part of the requirements for Sonia Sultan's Doctorate in Clinical Psychology and participation is completely voluntary. Miss Sultan is a registered Psychologist and has worked as a Guidance Officer in schools in Southern Tasmania. She also has experience working as a group facilitator. This information sheet has been forwarded to you through your daughter's school and we have the school's permission to conduct the study. At present we have no information on your daughter until we make contact with her.

This research is important because many females are dissatisfied with their body image and this is often related to unnecessary dieting and eating disorders, which have a negative effect on health and well-being. We will be looking at which factors lead to body image dissatisfaction, as this is a central aspect of eating disorders. More specifically we will be examining the role of the mass media in the development of body image dissatisfaction as the media has been criticised for promoting an ideal body shape that is unattainable by most young women. Body image is now becoming a serious issue in young children and it is therefore important to investigate younger age groups. The results of this study will improve our understanding of how group processes contribute to the development of healthy or disordered eating. Furthermore, research of this nature contributes to the prevention and treatment of eating disorders. We would like to invite your daughter's participation.

In the initial stage of the study your daughter will be asked to provide her name on the questionnaire in order to match her responses in the two parts of the study. At the completion of the study a code number will be used to store information. Your daughter will be asked to examine media images of women taken from fashion magazines and then will be asked to complete six short questionnaires. The questionnaires relate to mood, body image dissatisfaction and the media. This will take place over two sessions during class time, each session will last approximately half an hour and there will be no teachers present. She will view the images in a small discussion group with her friends and then complete the questionnaires on her own relating to the pictures she has just seen. The questionnaires deal with friendship, mood, body image satisfaction and the media. Prior to the discussion group confidentiality will be discussed with all the girls participating and they will be informed that whatever is discussed during the session is to remain private. The group discussion will be audio recorded so the researchers can refer back to the discussion for analysis. All information will remain confidential and will only be available to the researchers. The questionnaires the tapes will be kept in a locked cabinet in the School of Psychology and destroyed five years after the conclusion of the study.

At the conclusion of the study your daughter will be debriefed and the purpose of the study will be fully explained and she will be given an opportunity to comment or ask questions. When the group results are available Miss Sultan will present the results as well as information about body image to the class.

For most participants body image and dieting is not an issue but for some it can be and answering questions of this sort may cause some distress or discomfort to young people. Miss Sultan will be present and will be monitoring your daughter's reactions to the pictures while she is completing the group task. However, if your daughter feels upset or does not wish to answer the questions, she may stop at any time, and can do so without being required to give a reason and without any effect to her school records. Her participation on this study is entirely voluntary and if she feels upset after answering these questions please contact one of the researchers and we will provide you with information about counselling services available such as a school guidance officer.

Please keep a copy of this information sheet. You will be asked to read and sign the statement of informed consent before your child takes part in this study. Your child and the school will not be identifiable in this study. For further information you can contact Dr Elaine Hart – 62 262936, Mr Peter Ball – 62 267462 or Miss Sonia Sultan – 62 250380. The project has the approval of the Human Research Ethics Committee (Tasmania) Network and the School of Psychology. If you have any concerns of an ethical nature or any complaints about the way in which the project is run, you may contact Ms Amanda McAully – 62 262 763 (Executive Officer of the Human Research Ethics Committee (Tasmania) Network). If you would like information about the group results of the study you can call Sonia Sultan. No individual results will be available.

Thankyou for allowing your child to participate in this study

Appendix H3: Parents Consent Form

Statement of Informed Consent for Parents/Guardians of Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Parent Guardian:

- 1. I have read and understood the "information sheet" for this study.
- 2. The nature and possible effects of the study have been explained to me.
- 3. I understand that my daughter's participation in the study involves her examining media images in small friendship groups which will be audio-recorded and then completing six short questionnaires relating to friendship, body image and mood.
- 4. I understand that the questions relating to body image satisfaction in rare instances may cause distress or discomfort in some individuals.
- 5. I understand that my daughter's answers will be treated with strict confidentiality.
- 6. Any questions that I have asked have been answered to my satisfaction.
- 7. I agree that research data gathered for the study may be published provided that the school and my child cannot be identified as a participant.
- 8. I agree to allow my daughter to participate in this investigation and understand that she may withdraw or I may withdraw her without being required to give a reason and without any effect to her school records.

Name of participant.....

Name of parent or guardian.....

Signature of parent or guardian.....Date...../...../.....

Investigator:

I have explained the purpose and procedure of this study and the implications of participation in it to this volunteer's parent/guardian and I believe that the consent is informed and that he/she understands the implications of their child's participation.

Name of investigator.....

Signature of investigator.....Date...../...../.....

Appendix H4: Participants Information Sheet

Information Sheet for Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Dr Elaine Hart Clinic Director/Lecturer	Mr Peter Ball Senior Lecturer	Miss Sonia Sultan Postgraduate Psychology Student
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Dear Participant,

We are researchers from the school of psychology at the University of Tasmania and are conducting a study on body image dissatisfaction in adolescent girls. We are interested in factors which lead to body image dissatisfaction and this study is an extension of our previous studies that we conducted in local high schools in 2003 and 2004. This study is being undertaken as part of the requirements for Sonia Sultan's Doctorate in Clinical Psychology and participation is completely voluntary. Miss Sultan is a registered Psychologist and has worked as a Guidance Officer in schools in Southern Tasmania. She also has experience working as a group facilitator.

This research is important because many young women are dissatisfied with their body image and this is often related to unnecessary dieting and eating disorders, which have a negative effect on health and well-being. We will be looking at which factors lead to body image dissatisfaction, as this is a central aspect of eating disorders. More specifically we will be examining the role of the mass media in the development of body image dissatisfaction as the media has been criticised for promoting an ideal body shape that is unattainable by most young women. Body image is now becoming a serious issue in adolescents and it is therefore important to investigate younger age groups. The results of this study will improve our understanding of how group processes contribute to the development of healthy or disordered eating. Furthermore, research of this nature contributes to the prevention and treatment of eating disorders. We would like to invite you to participate in our study. We already have your parent's consent but we also need your consent to participate in this study.

You will be asked to view pictures of women taken from fashion magazines and then fill in short questionnaires. This will take place over two sessions during class time, each session will last approximately half an hour and there will be no teachers present. In part one of the study you will be asked to complete a questionnaire asking you to indicate the names of your friends so that we can create friendship groups for part two of the study. In part two of the study you will be asked to view the pictures in a small discussion group with your friends. You will then be asked to complete short questionnaires on your own relating to the pictures you have just seen, which also relate to body image satisfaction, mood and the media. Before the group discussion begins confidentiality will be discussed with all the girls in your group and you will be informed that whatever is discussed during the session is to remain private. Miss Sultan will be present at all times. The group discussion will be audio recorded so the researchers can refer back to the discussion for analysis. All information will remain confidential and will only be available to the investigators. As with the questionnaires the tapes will be kept in a locked cabinet in the School of Psychology and destroyed five years after the conclusion of the study.

At the conclusion of the study you will be debriefed and the purpose of the investigation will be fully explained and you will also be given an opportunity to comment or ask questions. When the group results are available Miss Sultan will present the results as well as information about body image to the class. In the initial stage of the study you will have to provide your name on the questionnaire so as to match your responses in the two parts of the study. At the completion of the study a code number will be used to store information. All personal information will remain confidential and will only be available to the researchers. No individual results will be available.

Body image and dieting can be an issue to some people, and answering questions of this sort can sometimes cause some distress or discomfort. Miss Sultan will be present and will be monitoring your reactions to the pictures while you are completing the group task. However, if you feel upset or do not wish to answer the questions, you may stop at any time, and can do so without being required to give a reason and without any effect to your school records. Your participation on this study is entirely voluntary and if you feel upset after answering these questions please contact one of the researchers and we will provide you with information about counselling services available such as your school Guidance officer.

Please keep a copy of this information sheet. You will be asked to read and sign the statement of informed consent before taking part in this study. You will not be identifiable in this study nor will your school. This information sheet has been forwarded to you through your school, so at present we have no information on you until we make contact with you. For further information you can contact Dr Elaine Hart – 62 262936, Mr Peter Ball – 62 267462 or Miss Sonia Sultan – 62 250380.

The project has the approval of the Human Research Ethics Committee (Tasmania) Network and the School of Psychology. If you have any concerns of an ethical nature or any complaints about the way in which the project is run, you may contact Ms Amanda McAully – 62 262 763 (Executive Officer of the Human Research Ethics Committee (Tasmania) Network).

Thank You for being a part of this study

Appendix H5: Participants Consent Forms

Statement of Informed Consent for Participants

An investigation of social comparison on Body Image Dissatisfaction in Adolescent Girls

Participant:

- 1. I have read and understood the "information sheet" for this study.
- 2. The nature and possible effects of the study have been explained to me.
- 3. I understand that the study involves looking at pictures of women in small friendship groups which will be audio-recorded and then completing six short questionnaires relating to friendship, body image and mood.
- 4. I understand that the questions relating to body image satisfaction in rare instances may cause distress or discomfort in some individuals.
- 5. I understand that my answers will be treated with strict confidentiality.
- 6. Any questions that I have asked have been answered to my satisfaction.
- 7. I agree that research data gathered for the study may be published provided that neither I nor my school can be identified as a participant.
- 8. I agree to participate in this investigation and understand that I may withdraw at any time without being required to give a reason and without any effect to my school records.
- 9. I understand that everything that is said in the group will remain confidential and is not to be discussed outside the session.

Name of participant.....

Signature of participant.....Date...../...../.....

Investigator:

I have explained the purpose and procedure of this study and the implications of participation in it to this volunteer and I believe that the consent is informed and that she understands the implications of participation.

Name of investigator.....

Signature of investigator.....Date...../...../.....

Appendix I: Intercorrelations for Study 3

Table3. Interrelations of Pre-Experimental Measures of Mood

		Depressed1	Worthless1	Anxious1	Hopeless1	Unhappy1
Depressed1	r	1				
	Sig.					
	N	76				
Worthless1	r	.560**	1			
	Sig	.000				
	N	76	76			
Anxious1	r	.633**	.702**	1		
	Sig	.000	.000			
	N	76	76	76		
Hopeless1	r	.510**	.565**	.520**	1	
	Sig	.000	.000	.000		
	N	76	76	76	76	
Unhappy1	r	.687**	.655**	.704**	.497**	1
	Sig	.000	.000	.000	.000	
	N	76	76	76	76	76

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)

Table 4. Interrelations of Post-Experimental Measures of Mood

		Depressed2	Worthless2	Anxious2	Hopeless2	Unhappy2
Depressed2	r	1				
	Sig.					
	N	76				
Worthless2	r	.631**	1			
	Sig	.000				
	N	76	76			
Anxious2	r	.460**	.859**	1		
	Sig	.000	.000			
	N	76	76	76		
Hopeless2	r	.732**	.718**	.575**	1	
	Sig	.000	.000	.000		
	N	76	76	76	76	
Unhappy2	r	.699**	.745**	.671**	.691**	1
	Sig	.000	.000	.000	.000	
	N	76	76	76	76	76

** Correlation is significant at the .01 level (2-tailed)

* Correlation is significant at the .05 level (2-tailed)