

**OVERWEIGHT-RELATED VICTIMISATION IN
PRE-ADOLESCENT BOYS AND GIRLS**

Clea Lynne Waterston

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The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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ABSTRACT

Research findings from adult studies suggest that being teased about weight or size when growing up may be a risk factor in the development of later eating and body image problems. However, little research has focused directly on teasing experiences in childhood. The current study aimed to extend previous work and investigate the frequency of overweight-related victimisation and its psychological correlates in preadolescent boys and girls. It was hypothesised that victimised children would have lower self-esteem, more body dissatisfaction, and be more likely to report dieting to lose weight. From the sample of three hundred and eighty-three children (200 boys and 183 girls), aged nine years, it was found that 41% of girls and 36% of boys reported general victimisation. Furthermore, 21% of girls and 16% of boys reported overweight-related victimisation, which included being teased, bullied, and called names about being fat. Overweight-related victimisation was associated with reduced self-esteem and greater levels of body dissatisfaction, even when controlling for BMI. These children were also more likely to report dieting and restrained eating behaviours than non-overweight victimised participants. Moreover, the overweight-related victimised participants received less attractiveness nominations from their peers than non-overweight victimised participants. Not surprisingly these participants rated fat teasing worse than other forms of teasing and it was more upsetting for them. This study also investigated characteristics associated with overweight-related victimisers and found they had lower behavioural conduct esteem and lower global self-worth. In addition, they considered physical appearance more important for self-worth than those who did not victimise others for overweight. To date, this is the first study to describe levels of overweight-related victimisation in a community sample of preadolescent boys and girls. Overall, this study highlights the presence of obesity stigmatisation, through teasing, in children and the potential negative consequences of overweight-related victimisation. Further research is required to examine the role of peer victimisation as a risk factor in the emergence of eating and weight concerns.

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INTRODUCTION

Although there has been controversy for some time concerning whether eating disorders represent a discrete category different from dieting and bingeing, recent research has indicated there is a continuum of disordered eating ranging from normal eating to more severe syndrome eating disorders. Disordered eating is a term used to refer to any unhealthy eating or weight control practices, such as, consuming food to relieve negative mood states or dieting when weight is normal. Furthermore, research has documented high levels of eating problems and body image dissatisfaction in children and adolescents. Therefore, investigating the origins of eating disturbance might provide valuable information to guide preventative health care interventions in this area. Increasingly eating disturbance is being understood from a sociocultural perspective, which highlights the presence of a dominant cultural image of thin as successful and desirable. The sociocultural model identifies the role of the media, the family, and the peer group, as powerful transmitters of pressure to achieve the perfect body shape. As a result research has begun to focus on issues such as obesity stigmatisation and its consequences. Research findings from adult studies suggest that being teased about weight or size when growing up may be a risk factor in the development of later eating and body image problems. However, little research has focused directly on teasing experiences in childhood. The aim of the current research is to investigate a specific form of teasing, overweight-related teasing, and the association with body image and eating disturbance in preadolescent girls and boys.

1.1 EATING DISORDERS

The definitions of eating disorder will influence estimations concerning the extent of the problem. While fewer individuals show the full diagnostic criteria for eating disorders (classified using the Diagnostic and Statistical Manual produced by the American Psychiatric Association, DSM-IV, 1994), many more engage in other unhealthy weight control practices. Well-known full syndrome disorders, such as bulimia nervosa and anorexia nervosa, have been estimated to effect between 1-3% and 0.5% of the population respectively (Shisslak, Crago & Estes 1995). These figures are estimated to be twice as high for partial syndrome eating disorders, also referred to as eating disorders not otherwise specified. An even

higher prevalence (13-67%) of eating distress using broader definitions such as self-reported binge eating has been found in non-clinical samples (Blundell & Bauer 1994).

Several studies have looked at the presence of disordered eating and weight-control practices in young people. Characteristics of disordered eating in girls, aged 10, have been shown to include restrained eating, binge eating, fear of fatness, purging, and distortion of body image (Mellin, Irwin & Scully 1992). These authors reported dieting, fear of fatness, and binge eating in 31- 46 % of nine year-old girls and 46-81% of ten year-old girls. Studies have also found that adolescent girls sometimes diet to lose weight even when their weight is normal or they are underweight (Maloney, McGuire, Daniels & Specker 1989). In addition, between 5-15% of adolescent girls have reported using weight control practices such as self-induced vomiting, laxatives, and diuretics (Greenfield, Quinlan, Harding, Glass & Bliss 1987; Phelps, Andrea, Rizzo, Johnston & Main 1993).

In children and adolescents several studies have indicated that body image and eating concerns begin in girls between the age of nine and eleven (Koff & Rierdan 1991; Mellin, Irwin & Scully 1992; Thelen, Powell, Lawrence & Kuhnert 1992; Wardle & Marsland 1990). Further, studies have shown that body image and eating concerns increase during adolescence (Richards, Casper & Larson 1990). Shisslak et al (1995) found clear evidence from longitudinal studies of the progression in some individuals from less to more severe disturbances in eating behaviour. Longitudinal research with children has found that eating problems in early childhood are predictive of symptoms of eating disorders in adolescence (Marchi & Cohen 1990). Together these findings provide support for the continuum theory of eating disorders and highlight the importance of exploring the origins of eating distress in children. There is a need for careful scientific evaluation of risk factors in the development of eating disturbances before they develop into severe problems that are more difficult to treat.

This brief overview suggests a wide range of eating problems and weight control practices in the population. While the etiology of these problems is not well understood, individual and sociocultural factors may contribute to an environment

conducive to the development of eating disturbance (Paxton 1996). The next section of this review will examine sociocultural factors in relation to eating attitudes and behaviours.

1.2 THE SOCIOCULTURAL MODEL

‘The present era can be regarded as a time in which excessive attention is being directed toward avoidance of obesity and attainment of culturally defined idealized body shapes’ (Blundell & Bauer, 1994).

The sociocultural perspective highlights the presence of a dominant cultural image, in western society, of thin as successful and desirable, and achievable through dieting, exercise, and weight control. The theory is that cultural messages become internalised which is evidenced in the normative nature of body dissatisfaction in young women (Stice, Schupak-Neuberg, Shaw & Stein 1994). The sociocultural model proposes that exposure to and internalisation of idealised images of body size contributes to body dissatisfaction and eating disturbance (Levine, Smolak & Hayden 1994) and suggests the media, the family, and the peer group are transmitters of information and pressure to achieve the ideal body shape.

Research findings suggest the media plays a significant role in promoting the thin body ideal. Irving (1990) exposed women to slides of thin, average and heavy models and found that exposure to thin models resulted in lower self-esteem and decreased weight satisfaction. Stice, Schupak-Neuberg, Shaw & Stein (1994) in a study of 238 female students found a direct effect of media exposure on eating disorder symptoms. Media exposure was measured by using the number of magazines read and TV programmes watched in the last month. These findings support the theory that repeated exposure to the thin ideal portrayed in the media leads women to internalise the thin ideal, which in turn is thought to produce greater body dissatisfaction and eating pathology.

The family has also been considered an important sociocultural factor through which pressure to achieve a thin body ideal may be perceived. In one study, female women with bulimia reported first binge-eating during a period of dieting

when they perceived pressure from family members to lose weight during the dieting episode (Mitchell, Hatsukami, Pyle & Eckert 1986). Similarly, pressure to diet from friends and family has been found to be associated with higher rates of bulimic symptomatology in young women (Pauls & Daniels 2000). Pressure can be transmitted through teasing and a recent retrospective study found that fathers' and mothers' teasing about weight while growing up significantly predicted young women's body image satisfaction (Schwartz, Phares, Tantleff-Dunn & Thompson 1999). In summary, the family has been identified as a route through which parental concerns with weight and dieting are passed on to daughters (Striegel-Moore, Silberstein & Rodin 1986).

Particular vulnerability to eating disturbance may be present among individuals who inhabit multiple sociocultural environments that endorse thinness as an ideal. Consistent with this hypothesis, Levine, Smolak & Hayden (1994) found that reading magazines containing images of attractive body shapes and information about weight management, in addition to weight or shape-related teasing and criticism from family, were strong correlates of drive for thinness and disturbed patterns of eating. In an earlier study, Levine & Smolak (1992) found pressure from family, peers and the media to obtain a thin body ideal distinguished dieters and non-dieters and girls at risk for partial or full syndrome eating disorders. Similar conclusions were reached by Dunkley, Wertheim & Paxton (1996) who found the combined pressure to be thin from the media, peers and parents was a stronger predictor of individual body dissatisfaction and dietary restraint, in adolescent girls, than any one of these single factors alone.

The influence of peers on body image and eating patterns has received the least attention and is worthy of further investigation. Peer influence has recently been thought to occupy a central role in promoting the thin body ideal and communicating different weight control strategies (Crandall 1996). One study found that the initial idea of unhealthy dieting behaviours, such as vomiting or laxative abuse, was passed on through conversations with friends (Nasser 1986), and another study found among student women who purge that their closest friend also engaged in self-induced vomiting (Schwartz, Thompson & Johnson 1982). Research has found that adolescent girls frequently discuss weight and weight loss strategies (Levine et al 1994) which may

explain the research that found a commonality among friendship groups in dietary restraint behaviours, body dissatisfaction, and weight loss strategies (Paxton, Schutz, Wertheim & Muir 1996). The peer friendship environment appears to provide a subculture in which pressure to achieve the ideal body shape can be passed on through discussion and sharing of information.

Furthermore, peer influences have been associated with the decision to begin dieting in adolescence, which is a concern because dieting has been found to have certain health risks including being a risk factor for eating disorders. The risk of developing an eating disorder has been shown to be eight times higher in dieting as compared to non-dieting 15-year-olds (Patton, Johnson-Sabine, Wood, Mann & Wakeling 1990). Two studies have investigated the triggers of first episode dieting in adolescents and found peer influences were often given as reasons for engaging in weight loss behaviours. Wertheim, Paxton, Schutz & Muir (1997) found that adolescent girls reported subjective feelings of becoming fat as triggers for weight loss attempts, while others reported specific environmental events such as a negative comment from a friend, teasing, or another friend going on a diet. In a later study, Muir, Wertheim & Paxton (1999) found adolescent girls dieting behaviour was predicted by body dissatisfaction and 'feeling fat', social comparison with others (peers, models, family), being teased by others, and being invited to go on a diet with someone else. The reasons most frequently given for why potential dieters chose not to diet involved conscious resistance to direct or perceived pressure to diet.

Research has increasingly looked at the role of teasing as a factor in the development of eating and weight concern. One study found the relationship between peer teasing experiences and body dissatisfaction among middle-school girls was more influential than weight/shape related teasing from family which contributed only modestly to increased body dissatisfaction, investment in thinness, weight-management behaviour and eating behaviour (Levine, Smolak & Hayden 1994). Teasing can be viewed as another way in which peers reinforce the thin body ideal.

Within the adult literature research has identified an association between a history of being teased about appearance and the occurrence of body image dissatisfaction. Grilo, Wilfley, Brownell & Rodin (1994) found in a clinical sample of adult obese women that a history of being teased about weight and size while growing up was associated with a negative evaluation of appearance and body dissatisfaction during adulthood. The generalisability of these findings was limited because the study focused on a clinical sample of obese females who were presenting for weight-loss treatment. However, the results are similar to findings from a large scale survey which found that women who had been teased about their appearance as children were more likely to be dissatisfied with their appearance during adulthood (Cash, Winstead & Janda 1986).

Adult studies have also identified an association between a history of appearance related teasing and eating disturbance. Thompson (1991) found college women with high levels of eating disturbance reported a greater history of being teased about their appearance than women with low levels of eating disturbance. In another study of college women, Thompson & Psaltis (1988) found depression, body dissatisfaction, and eating disturbance were positively associated with the reported frequency of weight-related teasing while growing up and with how much it upset the individual at the time. It is possible that being teased about weight or size when growing up is a risk factor in the development of a negative body image.

Several studies have explored the association between a teasing history and eating disturbance in adolescence. One study found that in adolescents who had an eating disorder a history of being teased about appearance was greater than in adolescents without eating problems (Brown, Cash & Lewis 1989). These findings are in line with research in 10-15 year old girls that found high connections between depression, self-esteem, body esteem, eating disturbance, and teasing history (Fabian & Thompson 1989). In a recent large-scale study of Swedish 10-16 year olds, dieters reported that they had been teased about their appearance more often than non-dieters (Edlund, Halvarsson, Gebre-Medhin & Sjoden 1999). However, the majority of studies have been restricted in their generality due to lack of sensitivity in the measurement of teasing, which has been limited to one or two general questions concerning frequency and severity of effect

(Edlund et al 1999; Fabian & Thompson 1989; Thompson 1991; Thompson & Psaltis 1988). Therefore there is a need for further research to determine the nature of early teasing about appearance.

Cattarin & Thompson (1994) in the first longitudinal investigation to include a measure of teasing history found a significant association with body dissatisfaction. Both variables, level of obesity and teasing history, predicted later body image problems, and body dissatisfaction predicted restrictive eating practices. Interestingly, teasing explained overall appearance dissatisfaction even after the influence of level of obesity and maturational status had been removed from the analysis. The findings were limited by a small sample size, and the authors acknowledged that they did not measure other factors that could have influenced the development of body image problems and eating disturbance. However, these authors identified the role of teasing about appearance as a developmental antecedent to body image problems.

Overall, the research findings support an emerging theoretical model of a ‘negative verbal commentary’ (Thompson 1992) as a risk factor for the development of body image dissatisfaction and eating disturbance. Peer influence, including teasing, as a mechanism through which sociocultural pressure is transmitted will be considered in more detail following a further discussion of the consequences of the sociocultural context on individual body-esteem, self-esteem and eating behaviour.

1.3 RISK FACTORS ASSOCIATED WITH EATING DISTURBANCE

Obesity

Eating disorders, in particular bulimia and binge eating, are phenomena most common in societies with high rates of obesity and in societies where obesity is negatively evaluated (Blundell & Bauer 1994). In Western society there is an increasing level of obesity in the population. Recent estimates in the UK suggest nearly two thirds of men and just over half of women are either overweight or obese, which is nearly three times greater than figures from 1980 (Bourn 2001). It has also been shown that the prevalence of overweight and obesity among children

is increasing. A large scale prevalence study, conducted from 1989 to 1998, found a highly significant increasing trend in the proportion of overweight and obese children under four years of age (Bundred, Kitchiner & Buchan 2001).

Confirming these findings, a recent Leeds based study found that one in five 9 year-olds and one in three 11 year-olds were overweight (Rudolf, Sahota, Barth & Walker 2001).

As a result of sociocultural pressures to achieve a thin ideal the physical state of overweight is negatively evaluated and stigmatised. Overweight and obese people report job discrimination, social exclusion, negative assumptions being made about them, being stared at, and receiving nasty comments from family and others (Myers & Rosen, 1999). These authors conclude that obesity stigmatisation is frequent and distressing, although observed their participants were mainly clinical subjects seeking help for weight management. However, studies have found the presence of negative attitudes towards overweight in young children and Staffieri (1967) showed that boys, age six years to ten years, assigned labels, such as, lazy, ugly, stupid and dirty, to silhouette drawings of overweight body shapes. Further confirming these findings, a more recent study showed overweight body shape silhouettes were judged by children to have fewer friends, to do less well as school and to be less content about appearance (Hill & Silver 1995). These authors conclude that young children have perceptions of thinness and overweight that mirror prejudices against overweight in society. Similar results were found in adults, in which, normal size body shape silhouettes were rated higher than the obese shape on several different personality dimensions, such as, happy/sad, popular/unpopular, smart/stupid, good/bad, by anorexic, normal weight and obese participants (Bell, Kirkpatrick & Rinn 1986). Furthermore, the obese body shape silhouettes received the overall lowest personality dimension ratings from obese and normal weight participants.

There is a belief system that can be identified that underpins obesity stigmatisation in Western society, which is based on several assumptions that serve to maintain negative attitudes towards overweight persons. There is a belief that if a person exerts enough self-discipline, the body can be shaped and moulded as desired, therefore excess weight reflects personal failing (Brownell 1991). In a culture

emphasising that individuals are personally responsible for their lives and health there is the tendency to blame the person for physical problems: an imperfect body reflects an imperfect personality (Brownell & Rodin 1994). Furthermore, these authors highlight there is a lot at stake, including a multi-billion dollar industry supplying diet books, programs, videos, foods, pills and even cosmetic surgery; services that are based on the drive for the perfect body. These pressures and the systems that maintain these beliefs are likely to impact on a person's body esteem and self-esteem which may then impact on subsequent eating behaviours.

Body Image Satisfaction

In recent years research has considered the association between body-image dissatisfaction and overweight. It is possible that overweight persons are more likely to have body image problems as a result of sociocultural pressures. This prediction is important to investigate because body dissatisfaction has been shown to predict later eating problems (Cattarin & Thompson 1994; Attie & Brooks-Gunn 1989). Unfortunately, it has been shown that overweight and obese persons have greater levels of body image dissatisfaction than average weight persons (Brownell & Wadden 1992). High body mass index (BMI) is linked with poor body image (Thompson, Covert, Richards, Johnson & Cattarin 1995). Similarly, Cash & Hicks (1990) found that overweight participants felt less physically attractive, less satisfied with their body and less interested in physical activities compared to non-overweight controls. In addition to having greater body dissatisfaction, overweight individuals have been found to make inaccurate body size judgements. Obese, anorexic, and bulimic subjects have been shown to either overestimate or underestimate their body size by 15% in comparison with control subjects (Collins, Beumont, Touyz, Krass, Thompson & Phillips 1987). These findings are not surprising given the research that demonstrates presence of prejudice and discrimination against overweight and obesity in society.

However, body dissatisfaction is not just dependent on being overweight. Young adult women have been found to rate their ideal figures, what they would like to look like, as thinner than they rate their current figure (Raudenbush & Zellner 1997; Zellner, Harner & Adler 1989; Fallon & Rozin 1985). Raudenbush &

Zellner (1997) found that a significant number of women had a tendency to overestimate their weight and therefore had a greater desire to be thinner. In addition they found that even the female participants who thought they were the correct weight wanted to be thinner. These findings provide further evidence for the theory that overweight is stigmatised and young women aspire towards a thin body ideal.

Studies have begun to consider body dissatisfaction among men. Raudenbush & Zellner (1997) found many males are dissatisfied with their body image. They showed overweight men wanted to be thinner, while normal weight men wanted to be heavier and often rated themselves underweight. In contrast to women who have been shown to desire a thinner body shape, men are split between either wanting to be thinner or heavier. Sociocultural pressure may affect men differently. While overweight is also stigmatised, pressure to look good for men appears to be pushing their ideal figure in a direction opposite to that of women (Cash, Winstead & Janda 1986). Kearney-Cooke and Steichen-Asch (1990) found that men, from a non-clinical group, most often described the ideal male body-shape as muscular, strong and broad shouldered. There is a need for more research in eating attitudes and behaviours in males.

In summary, being overweight seems to increase the likelihood of body dissatisfaction, although lack of satisfaction with body image also appears to be common in normal weight men and women. It has been suggested that body image satisfaction could be an important aspect of self-esteem, particularly in cultures that place a strong emphasis on thinness (Grilo, Wilfley, Brownell & Rodin 1994). These authors found that body image and self-esteem co-varied and wondered if low self-esteem may be a risk factor in the development of negative body image.

Self Esteem

It is possible that low self-esteem is a consequence of overweight and obesity. If this is the case it is concerning because low self-esteem has been identified as a risk factor in the development of eating problems. One longitudinal study showed

that girls with low self-esteem at 11-12 years were at significantly greater risk of developing more signs of eating disorders, in addition to other psychological problems, by the age of 15-16 years (Button, Sonuga-Barke, Davies & Thompson 1996). However, in a recent review of nineteen studies no relationship was found between self-esteem and obesity in children age 7-12 years (French, Story & Perry 1995). In contrast, these authors found that 13 of 25 cross-sectional studies showed lower self-esteem in obese adolescents. These findings indicate that low self-esteem is not simply a consequence of obesity and suggests a rather more complicated picture.

One explanation for the lack of consistency in studies concerning self-esteem and obesity could be that the majority of studies have had weak research methodologies, such as, small and select samples and lack of appropriate comparison groups (French et al 1995). In addition, Phillips & Hill (1998) observe that research in this area has used measures of self-esteem that are too broad to uncover subtle differences between overweight and average weight children. Similarly, Harter (1982) argued against viewing self-perceived competence as a unitary concept and proposed that researchers should instead tap children's domain specific perceptions of self. Therefore, Harter (1985) developed the Self-Perception Profile for Children (SPPC) which taps five specific domains, scholastic competence, social acceptance, athletic competence, physical appearance and behavioural conduct, as well as global self-worth, that together are thought to represent an overall view of a child's self-concept. Phillips & Hill (1998) using the SPPC found that although overweight children had reduced physical appearance self-esteem and reduced athletic competence self-esteem, they did not have reduced global self-esteem. These results highlight the value of investigating components of self-esteem.

Others have suggested that low self-esteem could be an underlying psychological factor contributing to the development of weight problems (Mellin, Slinkard & Irwin 1987). To test the hypothesis that low self-esteem contributes to the development of obesity, one large-scale study measured diverse aspects of self-esteem, including the SPPC, in adolescents over a period of three years (French, Perry, Leon & Fulkerson 1996). This study demonstrated a modest association

between physical appearance self-esteem and Body Mass Index (BMI), but overall found low self-esteem did not appear to predict the development of obesity over time.

Another strand of research has considered the impact of perceived overweight and self-esteem. Cash & Hicks (1990) found that the perception of being overweight was closely linked with negative body image, weight concern, and dieting behaviour in normal weight participants in comparison with weight-matched controls. These authors found that although actually being overweight has not been consistently shown to adversely affect self-esteem, the belief that one is overweight is linked with poorer self-esteem in normal weight participants. Similarly, Erikson, Robinson, Haydel & Killen (2000) found that although preadolescent overweight girls, but not boys, had mildly more depressive symptoms than their normal-weight peers, this relationship was mediated by overweight concerns in girls. Interestingly, overweight girls who did not report overweight concerns did not report any more depressive symptoms than their normal weight peers. Together these findings suggest that individuals who have aspirations toward a thinner shape, regardless of actual size, experience greater dissatisfaction if they perceive they have not achieved this ideal.

In summary, body image dissatisfaction and low self-esteem have been linked with dieting and disordered eating. The perception of being overweight has been associated with low self-esteem and actually being overweight has been associated with only some aspects of reduced self-esteem.

Causal Sequences

In a longitudinal study, designed to explore possible causal sequences in the development of body image and eating disturbance, a procedure called covariance structure modelling has been used to clarify the nature of relationships between obesity, body image, teasing, psychological function, and eating disturbance (Thompson, Covert, Richards, Johnson & Cattarin 1995). In the longitudinal component, Time one levels of obesity and teasing predicted Time two levels of weight and appearance satisfaction. Interestingly, actual level of obesity had no unique impact on body image and its effect was mediated by teasing history. Both

body image and teasing history predicted restrictive eating, which was a precursor to bulimic symptomatology. In a later study, designed to further elucidate directional influences, the results indicated that body image mediated the effect of teasing on eating disturbance (Thompson, Covert & Stormer 1999). Overall, these studies further highlight the presence of a teasing history in the development of eating and weight concerns in young people. The impact of peer victimisation will be considered in more detail in the next section of this review.

1.4 TEASING AND VICTIMISATION

Teasing is an interpersonal behaviour that some people perceive to be good-natured fun and an attempt to joke with others, while other people view teasing as cruel and a means of hurting someone's feelings. Teasing is difficult to study because sometimes it can have positive effects and strengthen social bonds (Eder 1991) but at other times it can imply interpersonal rejection and social exclusion (Kowalski 2000). However, Scambler, Harris & Milich (1998) suggest childhood teasing is less ambiguous and if humour is involved it is usually meant for the benefit of the witness at the expense of the recipient. Therefore childhood teasing is more hurtful, and more often associated with taunting, verbal abuse, and insults, than adult teasing. Research findings have shown that school students list their primary fear as the fear of being teased (Shapiro, Baumeister & Kessler 1991) which demonstrates that many young people do not perceive teasing to be good-natured fun.

Teasing and bullying among children is widespread. The experience of being teased is one of the most common negative peer interactions (Gleason, Alexander & Somers 2000). Although figures regarding the frequency of bullying vary, due to sampling and methodological differences between studies, it has been estimated to affect between 10-20% of children (Boulton & Smith 1995; Boulton & Underwood 1992). Teasing and bullying have been found to be more prevalent in younger children. Whitney & Smith (1993) in the largest UK survey of bullying found that 27% of primary school and 10% of secondary school pupils reported being bullied 'sometimes' or more frequently during the school term. However, these figures could be an underestimate due to reluctance among children to admit

bullying or victimisation (Rigby & Slee 1990; Smith 1991). In an interesting study using focus group methodology, Walker, Colvin & Ramsey (1995) found that all the participants indicated they had been victims of teasing and that teasing was a major, negative factor in their lives.

Very few studies have examined childhood perceptions of teasing. In an attempt to address this omission, Shapiro, Baumister & Kessler (1991) undertook an exploratory study to assess perceptions of teasing. These authors found the most commonly reported forms of teasing were name-calling and making fun of an attribute or behaviour, while the most common topics for teasing were physical appearance and intellectual performance. Children have also been found to identify several characteristics that they consider make other children targets of teasing, which include, being unskilled in important domains, being different from others, or overreacting to teasing (Walker, Colvin & Ramsey 1995). Walker et al (1995) also identified a sex difference and suggested that boys use teasing more for domination whereas girls employ teasing to convey rejection or social cruelty.

Psychological Consequences of Childhood Teasing

Childhood teasing has serious negative psychological consequences. Research has shown that victimised children experience lower self-esteem, greater unhappiness at school, and greater isolation from peers than non-victimised children (Rigby & Slee 1991). Boulton & Smith (1995) using the SPPC found victims of teasing scored significantly lower on the athletic competence, social acceptance and global self-worth dimensions. Sharp (1995) in a large-scale survey, of 723 adolescents, found approximately one third of students who were bullied felt nervous and panicky in school, experienced recurring memories of the incident, and reported impaired concentration in school. Furthermore, the consequences of teasing have been linked with depression (Kaltiala-Heino, Rimpela, Marttunen, Rimpela & Rantanen 1999; Slee 1995), body image dissatisfaction and eating disturbance (e.g. Levine, Smolak & Hayden 1994; Fabian & Thompson 1989; Grilo et al 1994).

It is possible that different kinds of teasing have different psychological consequences. Children report the most frequent type of childhood teasing is about

appearance and it is also described as the most hurtful type of teasing (Shapiro et al 1991; Scambler, Harris, Milich 1998). Gleason, Alexander & Somers (2000) looked at the association between the recollection of different types of childhood teasing with body image and self-esteem in adulthood. These authors found that a history of being teased about weight was a significant predictor of low male body-image, while female body image was related to all three forms of teasing measured: weight, appearance and competence. The gender differences were interpreted as reflecting sociocultural norms suggesting that women are more sensitive about body image and therefore this pressure permeates females' sense of self at all levels. Gleason et al (2000) highlight the need for further studies examining the effects of teasing on both male and females and the need for studies to investigate more specific forms of teasing.

Measurement of Teasing

Thompson, Fabian, Moulton, Dunn & Altabe (1991) developed a measure of teasing history, specifically related to size, weight and general physical appearance and termed it the Physical Appearance Related Teasing Scale. However, this measure did not detail the nature and source of teasing. Thompson, Cattarin, Fowler & Fisher (1995) revised and extended this measure and developed the Perception of Teasing Scale (POTS) taking account of the limitations of the previous measure to produce a valid and reliable measure of teasing history in non-clinical samples of college women. However, both scales are limited by the reliance on retrospective accounts of weight-related teasing history. This is a problem because of the lack of corroborative data to ensure the accuracy of participants' recall and the possibility of retrospective recall bias regarding the degree of teasing experienced as a result of negative body image or poor self-esteem in adulthood. Overall, adult studies (e.g. Grilo et al 1994; Gleason et al 2000) have mainly used retrospective self-report measures of weight-related teasing. There is, therefore, limited cross-sectional research in this area and limited research that specifies the nature of teasing experienced in childhood.

Several researchers have considered the best way to directly measure teasing and bullying experiences of children and adolescents. Ahmad & Smith (1990)

compared a number of different methods for measuring teasing and bullying and concluded the best method to use with children was anonymous self-report questionnaires. However, as mentioned previously, research has shown that many children are reluctant to admit to bullying others and reluctant to admit to being victimised (Rigby & Slee 1990; Smith 1991). Furthermore, Rivers & Smith (1994) suggested the social situation in the classroom could potentially prevent children from disclosing victimisation. If the assessment of bully/victim problems were made less salient the methodological limitations with direct assessment of victimisation could be addressed.

In response to some of these limitations of direct bully/victim assessment Neary & Joseph (1994) developed a six-item self-report Peer Victimisation Scale, designed to be immersed within Harter's (1985) 36-item Self-Perception Profile for Children (SPPC), with the aim of reducing the salience of the items concerning victimisation. Neary & Joseph (1994) conducted a validation study using the Peer Victimisation Scale and self- and peer nominations of bullying in a sample of 60 schoolgirls. They found that 12 girls identified themselves as being bullied while 30 girls were identified by at least one other member of their class as someone who bullied, which seem to confirm that many children would prefer not to admit to being bullied. The cut-off point on the peer victimisation scale of 2.20 on the SPPC corresponded to peer identification and a score of around 2.7 to self-identification. Similarly, Callaghan & Joseph (1995) found the Peer Victimisation scale was able to differentiate between bullied and non-bullied children, as assessed through self- and peer-reports. The figures from this study were similar to those from Neary & Joseph's study and a score of 2.33 corresponded with peer-identification of bullying and a score of 2.82 corresponded with self-identification. Together these findings suggest the Peer Victimisation scale is a good scale to use to assess victimisation in children.

Austin & Joseph (1996) developed this work further and designed a 6-item self-report scale designed to detect bullying behaviour (BBS) that could also be immersed within the SPPC. Rigby & Slee (1990) have suggested that the tendency towards bullying behaviour is not the polar opposite of the tendency towards being victimised. Furthermore, research has demonstrated that some children are victims only, some

children are bullies only, and some children are both bullies and victims (Smith, Boulton & Cowie 1993). Therefore, Austin & Joseph (1996) developed the Bullying Behaviour Scale to be used in conjunction with the Peer Victimization Scale to allow researchers to classify children into these groups.

Recent research has adapted the Peer Victimization Scale and Bullying Behaviour Scale to include specific overweight-related teasing items (Murphy 1999). These authors used the adapted scale with adolescents and concluded overweight-related victimisation was relatively common and associated with several aspects of low self-esteem and dieting behaviour. To date no study has looked at the direct overweight-related teasing experiences of pre-adolescent boys and girls. The present study therefore aims to measure the extent of overweight-related victimisation in pre-adolescent boys and girls and to investigate the association with body image, self-esteem and eating behaviour.

1.5 PEER RELATIONSHIPS

Another aspect of peer influence on body image and eating concern involves childhood perceptions of popularity and attractiveness. Aspiration towards peer approval is a powerful influence on young people. The immediate friendship environment, particularly for girls, provides a subculture that has the potential to either enhance or diminish the importance of attaining the ideal body image (Heaven 1994).

Several studies have considered childhood perceptions of overweight in relation to perceptions of attractiveness and popularity. For example, one study found that in some adolescents thinness was perceived to be an important factor for membership in the popular group (Nichter & Vuckovic 1994). Similarly, in young girls (10-12 years), it has been shown that dieters thought they would be better liked by their peers if they were thinner (Edlund et al 1999). However, another study found that although overweight and obese nine-year old girls received fewer attractiveness ratings from their peers they did not receive fewer popularity ratings (Phillips & Hill 1998). Therefore, the perception that being thinner improves popularity does not appear to be confirmed by the peer group.

However, studies have found an association between overweight and attributions of attractiveness. Sobal, Nicolopoulos & Lee (1995) found negative attitudes towards dating overweight peers in adolescents and another study found adolescent girls considered an attractive appearance essential for popularity with boys (Nichter & Vuckovic 1994). Furthermore, Norris (1995) found that boys selected thin body shapes to represent what they would find as attractive in girls and a large proportion of the boys considered a slim figure very important in determining attractiveness in girls. These findings suggest both boys and girls have internalised beliefs regarding the relationship between thinness and attractiveness.

Friendships are extremely influential in children and adolescents and have been found to prevent the development of eating problems. One study, Wertheim, Paxton, Schutz & Muir (1997) found a number of girls reported that other girls had stopped vomiting after friends dissuaded them from such a weight loss strategy. Furthermore, lack of perceived peer support or friendships have been associated with greater eating disturbance. Paxton (1996) in a review of the literature cites research that has found greater insecurity in social relationships, low perceived support from friends, and low social competence in those diagnosed with an eating disorder. Similarly, Killen, Taylor, Hammer & Litt (1993) found self-rated unpopularity was greater in girls who later developed eating problems.

The victims of teasing and bullying have also been found to report poor relationships with their peers. Boulton & Underwood (1992) found victims of bullying were more likely to report feeling unhappy and lonely at school, and to report having fewer good friends. These findings suggest a strong link between a child being a victim and peer rejection. The current research will investigate ratings of peer popularity and attractiveness from the peer group in relation to individuals who are teased about overweight.

1.6 RESPONDING TO TEASING

Victimisation is increasingly recognised as a psychologically harmful, physically damaging and socially isolating aspect of school life for some children (Slee 1995)

which highlights the need for effective intervention strategies in this area. In order to design effective intervention strategies, research has attempted to identify protective factors that prevent some children from being teased or prevent some children from being adversely affected by bullying. Masten, Best & Garmezy (1990) suggests protective factors fall into three broad categories, personal attributes, a supportive family environment and environmental supports.

In considering personal attributes in more detail, one hypothesis might be that children with low self-esteem are more likely to be victimised. However, research has shown that children with low and high self-esteem both experienced bullying behaviour from their peers (Sharp 1996). It is of note that the effect of the bullying was different and participants with low self-esteem and passive response styles experienced greater stress as a result of the bullying. Sharp (1996) found that students who responded actively to bullying behaviour experienced less stress when they were bullied. Similarly, another study looked at adult experiences of obesity stigmatisation and found no particular coping style was effective, but found that the absence of some coping responses, such as, avoidance and self-criticism, was associated with better psychological adjustment (Myers & Rosen, 1999). Overall, passive response styles have been associated with greater distress.

Jenkins, Smith & Graham (1989) introduced inventive techniques for assessing the way children cope with daily hassles, that involved reading children stories about parental quarrels and asking them to predict what the child in the story would do, as well as what they themselves would do in the depicted situation. This methodology has the advantage of normalising daily hassles and as a result reducing associated anxiety. The present study will use a similar methodology to assess children's responses to teasing scenarios.

There has been very little research that has looked at children's evaluation of responses to teasing. Scambler, Harris, and Milich (1998) asked 113 boys and girls, between eight years and eleven years, about their usual response to teasing and how effective they found different responses. The main responses were ignore it or walk away, tease back, tell an adult, laugh or turn it into a joke and get upset or cry. The present study will use these categories as response options for

questions concerning teasing. These authors then asked children for their judgements of three different videotaped responses to a teasing incident, they found the humorous response was judged to be more effective than ignoring which was judged more effective than the hostile response. In the current study, participants will be given a short scenario about teasing and asked to identify how they would respond in the same situation. Incorporated into the response options will be an item concerning changing something about themselves, an internalising or passive response. The hypothesis is that overweight-related victimised children will be more likely to respond with the item changing something about themselves and will be less likely to choose the humorous response option.

1.7 CHARACTERISTICS OF VICTIMISERS

Research has shown that the psychological wellbeing of bullies is impaired and the tendency to bully has been associated with unhappiness and a dislike for school (Olweus 1995). Slee (1995) also found a clear relationship between with the tendency to bully and depression. Similarly, Kaltiala-Heino, Rimpela, Marttunen, Rimpela & Rantanen (1999) found an increased risk of depression and suicide in adolescents who bully. These studies highlight the need for prevention strategies to address problems associated with bullying behaviour.

Olweus (1995) having conducted extensive research into bullying behaviour describes the typical bullies as distinctive in their aggression towards peers and adults and their strong need to dominate other people. In addition, recent research has shown that children and adolescents who bully share with victims lower levels of self-esteem than peers who have never bullied or been bullied (O'Moore 2000). These findings support previous research that has demonstrated the link between bullying and low self-esteem (O'Moore & Hillery 1991), but contrast research that has not found such a relationship (Rigby & Slee 1991). Interestingly, Rigby & Cox (1996) found that low self-esteem in girls, but not boys, was associated with reported bullying behaviour.

Using a more broad measure of self-esteem, such as the SPCC, might help to clarify the inconsistencies in the research findings in this area. For example, Murphy (1999) using the SPPC found that overweight-related victimisers had lower self-esteem in the areas

of scholastic competence and behavioural conduct, while found that global self-worth was maintained. This finding demonstrates the value of investigating characteristics associated with bullying behaviour in order to inform preventative work in this area.

1.8 THE PRESENT STUDY

The present study aims to replicate the previous research concerning overweight-related victimisation in adolescents using a younger age group. Murphy (1999) found that 11.6% of adolescent girls reported overweight related victimisation and 15.9% of boys reported overweight related victimisation. This study will investigate the extent of overweight-related victimisation and related psychological correlates in younger boys and girls, aged nine years old.

There are several reasons for choosing this age group. Studies have identified body image and eating concerns in children as young as eight years old (Hill & Pallin 1998; Mellin, Irwin & Scully 1992; Thelen, Powell, Lawrence & Kuhert 1992). In addition, it is known that younger children have an awareness of dieting (Hill & Pallin 1998), an awareness of teasing and bullying (Smith & Levan 1995), and it is also possible to use questionnaire methodology with children as young as eight (Harter 1985). Overall, there is a lack of research that has directly investigated overweight-related teasing experiences in childhood. Furthermore, the majority of research has estimated the extent of eating disturbances in females and there is a need for more research in eating attitudes and behaviours in males. This study aims to look at the characteristics of preadolescent girls and boys who are victimised for overweight in order to provide detailed information to guide prevention strategies in this area.

1.9 AIMS AND HYPOTHESES

The main aims of the study are:

1. To estimate the frequency of overweight-related victimisation and bullying in pre-adolescent girls and boys.
2. To investigate the associations between overweight-related victimisation, gender, weight and self-perception.

3. To examine the relationship between overweight-related victimisation and dieting behaviour.
4. To investigate the association between overweight-related victimisation and peer relationships.
5. To explore the responses of pre-adolescent children to overweight related teasing.
6. To describe characteristics of overweight-related victimisers.

It is hypothesised that overweight-related victimised children will have lower self-esteem, more body dissatisfaction and be more likely to report dieting to lose weight.

METHODOLOGY

2.1 PARTICIPANTS

383 children took part in the study, with a mean age of 9 years 8 months (range 9 to 10.9 years). All the children were attending local Comprehensive Primary Schools in the Leeds area. The participants were in Year 5 at the time of data collection.

There were 200 boys and 183 girls in this sample, which represented 91% of the school roll for this group. Of the children who were not included in the study, approximately, 7% were absent at the time of testing. In 1% of cases parental consent was refused. In a further 1% of cases questionnaires were incomplete. No information is available on participants not included in the study.

2.2 MEASURES

A total of seven different measures were used in this study. They were presented to the participants in the order they are described here.

1) Body Shape Preferences

Stunkard, Sorensen, & Schulsinger (1983) originally designed a simple pictorial scale to measure body shape preference. Hill, Draper, & Stack (1994) adapted the scale for use with boys and girls (Appendix 2). The measure has been widely used and is regarded as suitable to use with children as young as eight years (Hill & Pallin 1998). The scale was printed on green paper for the girls and blue paper for the boys to assist the researcher at the time of data collection.

The scale consists of seven line drawings of body shapes that increase in size from a thin shape to a large shape. Participants were asked to select a body shape from the scale in response to the following questions:

Question 1: Which figure is most like you now?

Question 2: Which figure would you most like to look like?

The measure was used to assess participants' perceptions of their current and ideal body shape. The responses were scored on a scale of 1-7 (1=thinnest and 7=largest). A measure of body shape satisfaction was then calculated by subtracting the rating for ideal body shape from the current body shape rating. Overall, a difference of zero indicated body shape satisfaction, a negative score indicated a preference for a thinner shape, and a positive score indicated a preference for a larger shape.

2) Questionnaire on Food and Eating

The measure used in this study was adapted from a general questionnaire about eating behaviour and dieting (Edmunds & Hill 1998). The adapted scale used in this study included a total of fourteen items. The first four questions were derived from Edmunds and Hill's questionnaire. Questions 1 and 2 related to height and weight satisfaction, participants chose one of seven responses concerning how they felt about their height and weight. Question 3 concerned the pattern of daily food intake, and asked how often participants ate breakfast, lunch, teatime meal, supper, and snacks between meals. The response format consisted of a five-point Likert Scale (Never, Sometimes, Often, Very often, Always). Question 4 asked whether participants were currently dieting and had a yes/no response format.

The scale also included ten items from the Dutch Eating Behaviour Questionnaire (DEBQ) devised by Van Strien, Fritjers, Bergers & Defares (1986) to obtain a measure of restrained eating behaviour (question 5-14, see Appendix 3). The response format consisted of a five-point Likert scale (Never, Seldom, Sometimes, Often, Very Often). A mean score from these items was calculated and used as a measure of dietary restraint. The DEBQ has been used with children as young as nine years.

3) The Self-Perception Profile for Children

The Self-Perception Profile for Children (Harter 1985) measures several different aspects of self-esteem. The 36-item questionnaire consists of six subscales, each containing six-items, which measures perceived competence in five domains and

also global self-worth (Appendix 5). The five domains are called scholastic competence, social acceptance, athletic competence, physical appearance, and behavioural conduct.

The measure used a structured response format specifically designed to reduce the tendency for socially desirable responses. The participant chooses one of two statements about what children are like, and decides whether the statement is 'sort of true for me' or 'really true for me'. Each of the four possible responses is scored on a scale of 1-4, where a score of 1 indicates low-perceived competence or adequacy and 4 indicates high-perceived competence or adequacy.

The measure also includes an additional ten-item scale that assesses the importance of each domain to the individual and is entitled 'How important are these things to how you feel about yourself as a person?'(Appendix 4). The scale uses the same forced-choice response format, as described above, to statements concerning what children think is important in order to feel good as a person.

Overall, the SPPC is a good measure for use with the age group in this study as it was designed for children age 8-14 years. It also has good subscale reliabilities.

4) Peer Victimization and Bullying Behaviour

Researchers have developed two six-item self-report scales to assess bully-victim problems at school, the Peer Victimization Scale (Neary & Joseph 1994) and Bullying Behaviour Scale (Austin & Joseph 1996). The scales were designed so they could be embedded within the SPPC to reduce saliency of the items. For the purposes of this study, three items concerning general teasing, bullying, and name-calling, from the PVS and the BBS were used to measure general victimisation and bullying behaviour (Appendix 8). In addition, as the focus of this study concerns victimisation in relation to overweight, three items concerning overweight-related victimisation and three items concerning overweight-related bullying, developed by Murphy (1999), were included in the victimisation and bullying sub-scales.

The new scales were immersed within the SPPC, creating the final 48-item questionnaire presented to participants (Appendix 5). These scales use the same forced-choice response format previously described. The responses were scored on a scale of 1-4, where higher scores indicate greater experience of victimisation or bullying.

5) Responding to Teasing

This scale was designed to explore responses to overweight-related teasing. The participants were presented four questions, each containing a description of different teasing scenarios, including an overweight-related teasing scenario (Appendix 6). Participants were asked how they would respond if they were in the same situation. There were six possible response options, five of which were categories derived from research by Scambler, Harris and Milich (1998) and included, get upset, ignore it, tease back, turn it into a joke, tell a friend or adult. The sixth response option was an item concerning changing something about themselves.

The questionnaire also included a question asking the participants to choose one of four teasing categories they felt would be worst for them, being teased about wearing glasses, being fat, being stupid or being teacher's pet. This question was designed to assess participants' perceptions of different types of teasing.

6) Peer Popularity and Attractiveness

Phillips & Hill (1998) developed a scale that uses peer nominations to measure popularity and attractiveness (Appendix 7). In this study, participants were asked to make three nominations from a list of their class group in response to four questions. The first two questions in the Peer Nomination Questionnaire (PNQ) concerned same sex nominations. The questions were as follows:

Question 1: Which boys/girls would you most like to sit next to in class?

Question 2: Which boys/girls would you most like to be with at break time?

These questions generated two sets of within class nominations that were added together to form a popularity score for each child.

The third and fourth questions in the PNQ concerned peer attractiveness nominations from both boys and girls. These were as follows:

Question 3: Which boys do you think are the most attractive in your class?

Question 4: Which girls do you think are the most attractive in your class?

These questions generated two sets of within class nominations from boys and girls that were added to produce an overall attractiveness score.

7) Height and Weight measurements.

Body weight and height data were measured using standard apparatus. Weight and height measurements were recorded at school, without footwear or heavy items of clothing. This was used to calculate each child's body mass index (BMI), which is derived using the formula kg/m^2 (Hannan, Wrate, Cowen & Freeman 1995).

2.3 PROCEDURE

Initial consent for the study was given by the Headteachers of participating schools, which was followed by an explanatory letter to Parents seeking consent for their child to take part in the study (see Appendix 1).

The questionnaires were administered within the school environment, in the classroom, with the assistance of the class teacher. The questionnaires were read aloud to the children to enable children of all abilities to participate in this study. Prior to administering the questionnaires children who had problems, such as reading/writing difficulties, were identified. Support teachers were present to assist these children in the majority of cases.

A standardised set of instructions was given to all participants. The research was introduced as 'a study of how you feel about yourself and how you see yourself'.

Participants were asked to work alone and complete each questionnaire fully. Emphasis was made on confidentiality and children were informed that there were no right or wrong answers. The aim of these instructions was to reduce any sense of discomfort or anxiety. Before each measure was completed the type of response required was clearly demonstrated. Participants were encouraged to ask questions if they had any problems completing the questionnaires or did not fully understand the instructions. The importance of completing the measures honestly and accurately was emphasised and participants were again assured that the responses would remain confidential to the researchers. On completing the measures the participants were reminded to ensure their name was on the questionnaire and to check that all questions had been completed.

Following the completion of all questionnaires, which took approximately 45 minutes, a second data collection session was arranged with the Class Teacher to take the participants height and weight measurements.

2.4 DATA ANALYSIS

The data were analysed using Statistical Packages for Social Scientists (SPSS 9.0). Internal reliability checks were performed on the general victimisation and bullying scales adapted from Austin & Joseph's (1996) Peer Victimization Scale and Bullying Behaviour scale.

Participants in this study were classified and placed into one of two categories of the basis of findings from the sub-scale concerning overweight-related victimisation. The categories were:

- i) those who were not victimised for overweight (NORV) or
- ii) those who were victimised for overweight (ORV).

Comparisons of these groups (NORV & ORV), and gender, controlling for BMI, were made using a two-way analysis of co-variance on a range of dependent variables. Chi-squares were used to analyse frequency data.

RESULTS

3.1 TEASING AND BULLYING

New Scale Reliabilities

Internal reliability checks were performed on the victimisation and bullying subscales that were adapted from Austin & Joseph's (1996) Peer Victimisation Scale (PVS) and Bullying Behaviour Scale (BBS) and immersed within the Self-Perception Profile for Children (SPPC: Harter 1985). The adapted Peer Victimisation Scale and Bullying Behaviour Scale each contained three of the original six-item self-report scales, as described earlier. The modified scales were used to assess levels of general victimisation and bullying.

There were good internal reliabilities found for both scales. The findings for the adapted PVS were good for girls (Cronbach's $\alpha=0.74$) and boys (Cronbach's $\alpha=0.79$). The findings for the adapted BBS were also good for girls (Cronbach's $\alpha=0.71$) and for boys (Cronbach's $\alpha=0.74$).

The overweight-related victimisation (ORVS) scale and overweight-related bullying (ORBS) scale each contained a three self-report items and were used to assess levels of overweight-related victimisation and bullying (Murphy 1999). Good internal reliabilities were found for both scales. The findings for the ORVS were good for girls (Cronbach's $\alpha=0.87$) and for boys (Cronbach's $\alpha=0.80$). The findings for the ORBS were also good for girls (Cronbach's $\alpha=0.73$) and for boys (Cronbach's $\alpha=0.72$).

Measurement of Teasing and Bullying

Table 1: Mean (SE) scores for each bully/victim category.

	Girls	Boys
Peer Victimisation Scale	1.81 (.07)	1.62 (.06)
Bullying Behaviour Scale G***	1.62 (.05)	1.86 (.05)
Overweight-related Victimisation G*	1.81 (.07)	1.62 (.06)
Overweight-related Bullying	1.62 (.05)	1.62 (.05)

G: main effect of gender
*p<.05; **p<.01, ***p<.001

Independent t-tests were performed on the data in Table 1 and significant gender differences were found on the BBS ($t(381)=3.50, p=.001$) and on the ORVS ($t(381)= -2.14, p<.05$). Table 1 shows that boys were more likely to report bullying behaviour than girls, and girls were more likely to report being victimised for overweight than boys.

T-tests on individual items of each scale were performed to examine gender differences. No significant gender differences were found on items of the PVS. However, significant gender differences were found for all items of the BBS with boys more likely than girls to report teasing others ($t(381)=3.61, p<.001$), calling others horrible names ($t(381)=2.46, p<.05$) and bullying others ($t(381)=2.39, p<.05$).

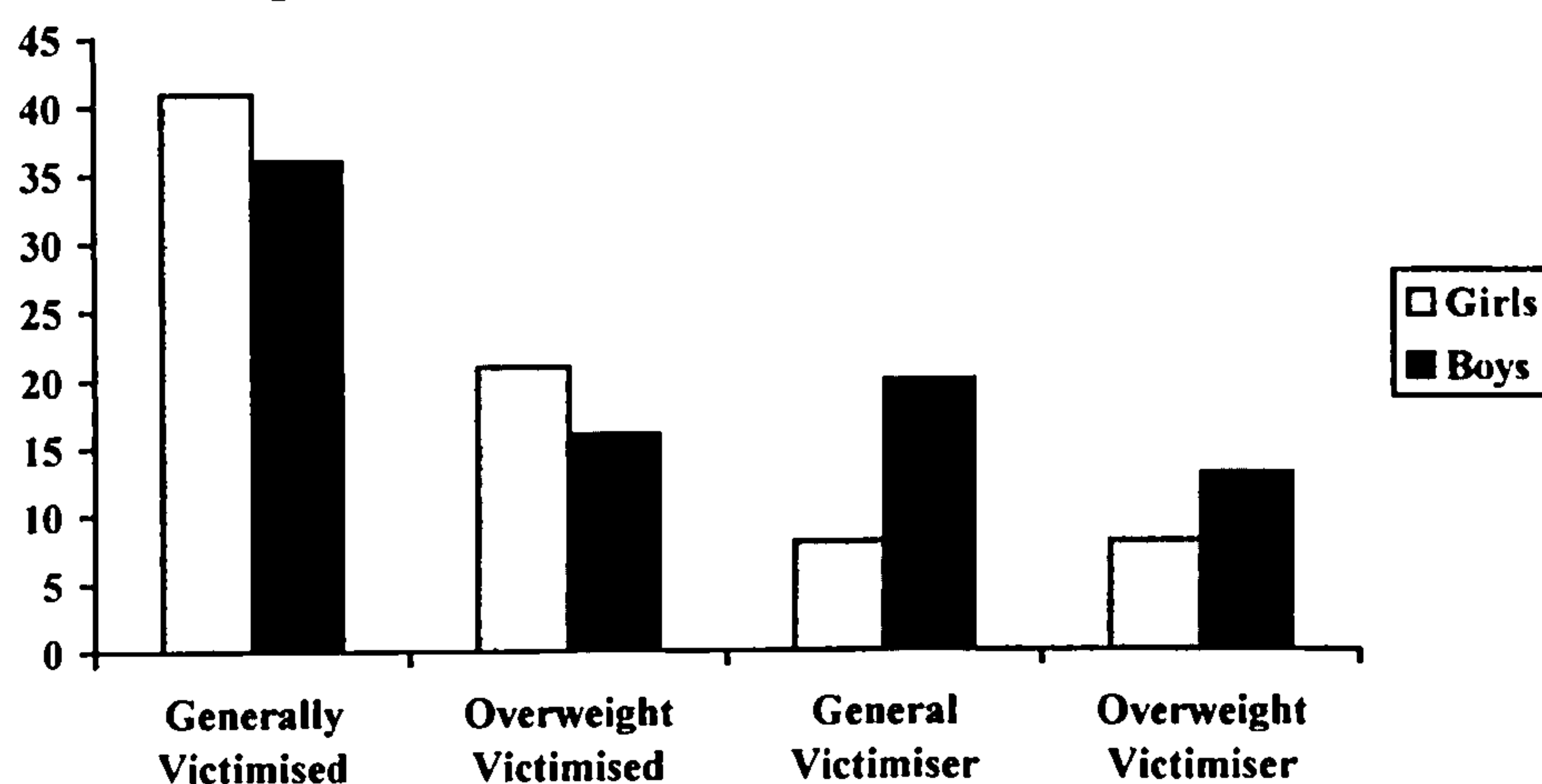
On the ORVS t-tests on individual items found there was a significant gender difference for one item. Girls reported being teased about being fat to a greater extent than boys ($t(381)=2.46, p<.05$). No significant gender differences were found on items 'called horrible names about being fat' or 'bullied for being fat'. On the ORBS t-tests on individual items also found a significant gender difference,

boys were more likely than girls to report calling other children names for being fat ($t(381)=1.97, p=.05$). However, no significant gender differences were found on items concerning teasing others for being fat and bullying others for being fat.

Classification of Children into Bully/Victim Categories

For the purpose of further analysis of the data it was necessary to determine a cut-off score on the adapted PVS and BBS, and on the ORVS and ORBS, in order to categorise children into different groups. Previous research has found that mean scores of 2.20-2.33 correspond with peer-identification of bullying and 2.70-2.82 corresponds with self-identification (Callaghan & Joseph 1995; Neary & Joseph 1994). Using this research Austin & Joseph (1996) chose a cut-off score of 2.5 on the PVS and BBS to classify children into bully/victim categories. These authors note that a score of 2.5 is face valid and more research is required to assess convergent validity of these scales. However, they also suggest 2.5 is a conservative estimate of the presence of bullying, as this is higher than the mean scores found in previous research to correspond with peer-identified bullied children (Callaghan & Joseph 1995).

Figure 1: Percentage of participants in each bully/victim category



Therefore, in the current study, a score of 2.5 was also used to categorise participants into different groups. As can be seen in Figure 1, a slightly larger proportion of girls were generally victimised and victimised for overweight in comparison with boys, whereas more boys general victimised and victimised for overweight. For the purposes of this study, the overweight victimised group will be focused on throughout these results. Accordingly, 39 girls (21.3%) and 32 boys (16%) were classified as victimised for overweight.

Frequency of General Victimization & Overweight-Related Victimization

Table 2: Number of participants reporting general victimisation.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Not generally victimised	100	8	119	9
Generally victimised	44	31	49	23

Overall, the reported levels of general victimisation and victimisation for overweight were found to be related. There were significant associations found for girls ($\chi^2(1)=30.38, p<.001$) and boys ($\chi^2(1)=21.28, p<.001$). Therefore the participants who were victimised for overweight were also more likely to report general victimisation.

The findings in Table 2 demonstrate that 79.5% of girls victimised for overweight also reported general victimisation and 71.9% of boys victimised for overweight also reported general victimisation. In contrast, of those not victimised for overweight 30.5% of girls reported general victimisation and 29.2% of boys reported general victimisation. Therefore both girls and boys who were teased for overweight were more likely to be teased in general.

Frequency of Overweight-Related Victimization and Overweight-Related Bullying

Table 3: Number of participants reporting overweight-related bullying.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Does not generally victimise for overweight	137	31	155	13
Does generally victimise for overweight	7	8	19	13

There was a significant association found between those who were victimised for overweight and those who victimised others for overweight, for boys ($\chi^2(1)=25.71$, $p<.001$) and girls ($\chi^2(1)=9.99$, $p<.01$). Therefore being a victim of overweight-related teasing and bullying was found to be associated with victimising others for overweight. Overall, 50% of boys and 20% of girls teased about overweight also teased others about overweight.

3.2 PHYSICAL CHARACTERISTICS OF SAMPLE

Table 4: Summary of participants means (SE) for age, height, weight, and Body Mass Index.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Number of Participants	144	39	168	32
Age (yrs,mths)	9.88 (.04)	9.86 (.09)	9.80 (.04)	9.84 (.09)
Height (m)	1.39 (.01)	1.41 (.01)	1.39 (.01)	1.41 (.02)
Weight (kg) OV***	34.00 (.65)	41.49 (1.54)	33.16 (.53)	40.84 (2.03)
BMI (kg/m2) OV***	17.44 (.26)	20.86 (.72)	17.14 (.20)	20.34 (.76)

OV: main effect of overweight victimisation
 ***p<.001

Table 4 is a summary of the physical characteristics of the complete sample, placed into categories according to gender and overweight-related victimisation. There were no significant differences in age or height across gender and across the overweight related victimisation category. There were no significant differences in weight across gender. However, those victimised for overweight were significantly heavier than their non-victimised counterparts ($F(1,379)=51.46$, $p<0.001$) and had significantly higher BMIs ($F(1,379)=62.01$, $p<0.001$).

3.3 OVERWEIGHT-RELATED VICTIMISATION IN RELATION TO BODY-SHAPE PERCEPTION

Table 5: Summary of participants mean (SE) ratings of satisfaction with height, weight, and body shape preference.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Height Perception	4.06 (.09)	4.13 (.15)	4.11 (.09)	3.97 (.17)
Weight Perception	3.87 (.07)	4.87 (.18)	3.83 (.06)	4.63 (.19)
OV***				
Which figure is most like you	3.41 (.06)	4.26 (0.19)	3.79 (0.08)	4.78 (0.19)
OV*** G***				
Which figure would you most like to look like	3.18 (.06)	3.33 (0.13)	4.04 (0.07)	3.97 (0.21)
G***				
Body Shape Satisfaction	-0.23 (.06)	-0.92 (0.15)	0.24 (.09)	-0.81 (.28)
OV**				

OV: main effect of overweight victimisation

G: main effect of gender

p<.01; *p<.001

Table 5 is a summary of participants' perception of their height, weight, and body shape. A multivariate analysis of co-variance (MANCOVA), controlling for BMI, was performed on the data in Table 5. Overall main effects were found for overweight-related victimisation ($F(4,370)=9.19, p<.001$) and for gender ($F(4,370)=14.10, p<.001$).

On further analysis, no significant differences were found across gender and overweight-related victimisation for height perception. In contrast, on the measure of weight perception and body shape satisfaction, participants victimised for overweight were significantly more dissatisfied with their weight ($F(1,373)=22.7, p<0.001$) and body-shape ($F(1,373)=10.13, p<0.01$) than their non-overweight victimised peers. Those victimised for overweight did not differ from non-

overweight victimised participants on ratings of ideal body shape, however they did rate themselves significantly larger than those not victimised for overweight ($F(1,373)=19.26, p<0.001$). Significant gender differences were found on the body-shape preferences, girls rated themselves significantly smaller than boys ($F(1,373)=20.82, p<0.001$) and rated the figure they would most like to look like thinner than boys ($F(1,373)=47.34, p<0.001$).

In summary, those victimised for overweight were less satisfied with their weight, even when controlling for differences in BMI, and rated the figure most like themselves larger than their non-victimised counterparts. Finally, girls had a greater desire to be thinner than boys while also rating themselves smaller than boys rated themselves.

3.4 OVERWEIGHT-RELATED VICTIMISATION IN RELATION TO SELF-PERCEPTION

Table 6: Summary of participants means (SE) for each sub-scale of the Self-Perception Profile for Children (SPPC)

	Girls		Boys	
	NORV	ORV	NORV	ORV
Scholastic Comp. OV***	2.71 (0.05)	2.52 (0.09)	2.75 (0.05)	2.47 (0.10)
Social Acceptance OV***	2.99 (0.05)	2.56 (0.13)	3.02 (.05)	2.68 (0.12)
Athletic Comp. OV** G***	2.58 (0.05)	2.32 (0.10)	2.93 (0.05)	2.54 (0.11)
Physical Appearance OV** G**	2.67 (0.05)	2.44 (0.11)	2.99 (0.05)	2.59 (0.11)
Behavioural Conduct OV** G***	3.15 (0.04)	2.94 (0.11)	2.76 (0.05)	2.42 (0.09)
Global Self-Worth OV***	3.09 (0.05)	2.59 (0.13)	3.15 (0.05)	2.73 (0.11)

OV: main effect of overweight victimisation

G: main effect of gender

** $p<.01$; *** $p<.001$

From the Self-Perception Profile for Children (SPPC) scores were categorised into five domain-specific subscales, and one sub-scale measuring global self-worth, which were analysed in relation to gender and overweight-related victimisation. A multivariate analysis of co-variance (MANCOVA), controlling for BMI, was performed on the data in Table 6. Overall main effects were found for overweight-related victimisation ($F(6,372)=5.83, p<0.001$) and gender ($F(6,372)=9.26, p<0.001$). There was no victimisation by gender interaction.

Further analysis found that participants who reported victimisation for overweight had lower self-esteem in all areas of the SPPC, namely, scholastic competence ($F(1,377)=13.56, p<.001$), social acceptance ($F(1,377)=18.08, p<.001$), athletic competence ($F(1,377)=10.21, p<.01$), physical appearance ($F(1,377)=9.98, p<.01$), behavioural conduct ($F(1,377)=8.99, p<.01$), and global self-worth ($F(1,377)=24.69, p<.001$).

Post-hoc t-tests for independent samples were performed on the data to further compare means. Significant differences were found for boys on all sub-scales of the SPPC (smallest $t(198)=2.45, p<.05$). Significant differences were found for girls on four sub-scales, namely, social acceptance ($t(180)=3.61, p<.001$), athletic competence ($t(181)=2.24, p<.05$), behavioural conduct ($t(181)=2.01, p<.05$), and global self-worth ($t(181)=4.25, p<.001$).

Gender differences were found on measures of athletic competence, physical appearance, and behavioural conduct. From Table 6 it can be seen that girls had lower scores than boys for athletic competence ($F(1,377)=11.41, p<.001$) and physical appearance ($F(1,377)=7.49, p<.01$), but higher scores than boys for behavioural conduct ($F(1,377)=32.73, p<.001$).

A further multivariate analysis of co-variance (MANCOVA), controlling for BMI, was performed on the importance scale of the SPPC. A main effect was found for gender ($F(5,371)=4.14, p=.001$) but not for overweight-related victimisation. Significant gender differences were found on the athletic competence scale only

($F(1,375)=7.54, p<.01$), boys rated the importance of athletic competence higher than girls.

3.5 OVERWEIGHT-RELATED VICTIMISATION IN RELATION TO EATING AND DIETING BEHAVIOUR

Table 7: Mean (SE) dietary restraint scores and eating behaviours.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Dietary Restraint OV**	2.27 (.06)	2.86 (0.14)	2.10 (.06)	2.58 (.13)
Breakfast	4.02 (.11)	3.85 (.22)	4.10 (.10)	4.19 (.22)
Lunch	4.41 (.08)	4.15 (.20)	4.46 (.07)	4.29 (.19)
Teatime Meal	4.37 (.09)	4.23 (.20)	4.27 (0.09)	4.03 (.22)
Supper	2.94 (.12)	2.67 (.22)	2.93 (.11)	2.65 (.22)
Snacks between meals	2.75 (.11)	3.03 (.23)	2.89 (.10)	2.55 (.23)

OV: main effect of overweight victimisation

** $p<.01$

From the Eating Behaviour Questionnaire a dietary restraint score was calculated, which was then analysed in relation to gender and overweight-related victimisation. A multivariate analysis of co-variance (MANCOVA), controlling for BMI, was performed on the data in Table 7. An overall main effect was found for overweight-related victimisation ($F(6,368)=2.57, p<0.05$).

Those victimised for overweight were more likely to engage in dietary restraint behaviours as compared with participants who were not victimised for overweight ($F(1,373)=8.82, p<.01$). There were no significant differences found for the frequency of eating behaviour questions. Therefore, those victimised for

overweight were more likely to engage in dietary restraint behaviours than non-overweight victimised participants but they did not report a consistent decrease in meal or snack frequency.

Table 8: Number of participants dieting to lose weight.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Not Dieting	131	26	148	22
Dieting	13	12	18	10

Overall, in this sample 13.7% of girls and 14.1% of boys reported they were currently dieting to lose weight. A positive association was found between dieting and victimisation concerning overweight. Significant associations were found for girls ($\chi^2(1)=12.90$, $p<.001$) and for boys ($\chi^2(1)=9.20$, $p<.01$). In addition, children who were dieting had significantly higher dietary restraint scores than non-dieters (boys ($t(196)=6.39$, $p<.001$, girls ($t(180)=6.33$, $p<.001$)).

Overall, those victimised for overweight were three times more likely to report dieting at the time of study than participants not victimised for overweight. Of the girls victimised for overweight 31.6% reported dieting to lose weight. In contrast, of the non-overweight victimised girls 9% reported dieting. For boys who were victimised for overweight 31.3% reported dieting to lose weight. Whereas of the boys not victimised for overweight 10.8% reported dieting.

3.6 PEER POPULARITY AND ATTRACTIVENESS

Table 9: Summary of participants means (SE) for peer nominations of popularity and attractiveness.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Peer Popularity OV*	5.86 (.31)	5.30 (.55)	6.00 (.29)	4.26 (.67)
Peer Attractiveness OV* G*	6.67 (.48)	4.61 (.83)	5.07 (.43)	3.06 (.62)

OV: main effect of overweight victimisation

G: main effect of gender

*p<.05

A multivariate analysis of co-variance (MANCOVA), controlling for BMI, was performed on the data in Table 9. An overall main effect was found for overweight-related victimisation ($F(2,331)=3.19, p<0.05$). Participants victimised for overweight received significantly less peer ratings for popularity ($F(1,332)=5.89, p<0.05$) and less peer nominations for attractiveness ($F(1,332)=3.90, p<0.05$) than those not victimised for overweight.

Post-hoc t-tests for independent samples were performed on the data to further compare means. Boys victimised for overweight received significantly fewer peer attractiveness nominations ($t(180)=2.01, p<0.05$) and peer popularity nominations ($t(180)=2.45, p<0.05$) than non-overweight victimised boys. Girls victimised for overweight received significantly fewer peer attractiveness ratings ($t(153)=2.02, p<0.05$) than non-overweight victimised girls but there was no difference in popularity nominations for girls.

3.7 OVERWEIGHT-RELATED VICTIMISATION IN RELATION TO ACTUAL WEIGHT

Participants were placed into one of four weight categories according to the BMI distribution, underweight (bottom 15% of sample), normal weight (15-85% of sample), overweight (85-95% of sample) and obese (95%+). These categories were used based on recommendations by Himes & Dietz (1994) which suggested

the use of these percentile definitions for measuring overweight and obesity. In this sample, the cut-off scores for overweight girls and boys were 22.34 and 20.89 respectively. The cut off BMI scores for obese girls and boys were 25.62 and 24.28 respectively.

Table 10: Number of participants in each weight category.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Bottom 15% of the sample	25	2	28	2
Normal weight (15-85%)	107	22	124	16
Overweight (85-95%)	9	9	12	8
Obese (95%+)	3	6	4	5

Overall, BMI was found to be associated with overweight-related victimisation. There were significant associations found for girls ($\chi^2(1)=24.38, p<.001$) and boys ($\chi^2(1)=23.65, p<.001$). These findings show that heavier children were more likely to report victimisation for overweight.

However, of the normal weight participants 17.1% of girls and 11.4% of boys also reported being victimised for overweight. Furthermore, of the overweight and obese participants 44.4% of girls and 55.2% of boys did not report victimisation for overweight. These findings demonstrate that actual weight did not have a simple association with being teased about overweight.

3.8 RESPONDING TO TEASING

Table 11: How participants would respond in a fat teasing scenario.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Get upset	11 (7%)	11 (28%)	5 (3%)	5 (16%)
Ignore it	38 (27%)	7 (18%)	46 (27%)	6 (19%)
Change how I look	16 (11%)	0	14 (8%)	0
Tease back	9 (6%)	3 (8%)	26 (16%)	6 (19%)
Turn it into a joke	3 (2%)	2 (5%)	7 (4%)	4 (12%)
Tell a friend or adult	65 (40%)	16 (41%)	70 (42%)	11 (34%)

From Table 11 it can be seen that of the participants who did not report victimisation for overweight, 11% of girls and 8% of boys reported that their response to teasing would be 'changing how I look'. Interestingly, none of the boys or girls victimised for overweight chose change as a response to being teased about being fat.

Furthermore, over four times as many participants in the overweight victimised group reported they would get upset as a response to being teased about fat (28% of girls and 16% of boys) in comparison with the non-victimised group (7% of girls and 5% of boys).

Table 12: Number of participants ratings of the worst types of teasing.

	Girls		Boys	
	NORV	ORV	NORV	ORV
Being fat	79	30	65	22
Being stupid	22	4	43	3
Wearing glasses	19	3	24	3
Teacher's Pet	19	2	34	3

As might be expected, Table 12 shows that among those who were victimised for overweight 76.9% of girls and 71% of boys rated being teased about being fat worse than being teased about wearing glasses, being stupid, or being teacher's pet. It is also of interest that 56.8% on non-victimised girls and 39.2% on non-victimised boys rated being teased about being fat the worst form of teasing.

Being teased about being fat had the highest percentage of nominations from both girls (61.6%) and boys (44.2%). These findings demonstrate that being teased about being fat was considered worse than the other targets for teasing assessed in the current study.

3.9 OVERWEIGHT VICTIMISERS

The main body of analysis, so far, has focused on the participants who reported victimisation for overweight. Further analysis was performed on the data comparing the group of participants who reported victimising others for overweight (overweight victimiser OVT) with those who did not victimise others for overweight (not overweight victimiser NOVT). The participants who were victimised for overweight (even if they victimised back) were selected out of the sample and statistical analysis was performed on the remaining data set.

Physical Characteristics

Table 13: Summary of means (SE) for age, height, weight and Body Mass Index.

	Girls		Boys	
	NOVT	OVT	NOVT	OVT
Number of Participants	137	7	155	13
Age (yrs,mths)	9.88 (.04)	9.90 (.14)	9.80 (.04)	9.79 (.12)
Height (m)	1.39 (.01)	1.38 (.03)	1.39 (.01)	1.38 (.02)
Weight (kg)	34.06 (.67)	32.66 (2.98)	32.90 (.53)	36.26 (2.69)
BMI (kg/m ²)	17.46 (.27)	16.99 (.73)	17.00 (.20)	18.82 (1.06)

Table 13 is a summary of the physical characteristics of the sample with the participants victimised for overweight not included in the analysis. A multivariate analysis of variance (MANOVA) was performed on the data in Table 13. There were no significant main effects for gender or overweight-related victimisers.

Body-shape perception and Self-perception

Table 14: Mean (SE) body-shape and weight perception.

	Girls		Boys	
	NOVT	OVT	NOVT	OVT
Body Shape Perception G***	-.21 (.07)	-.57 (.20)	.26 (.08)	.00 (.49)
Weight Perception	3.90 (.08)	3.43 (.37)	3.84 (.06)	3.67 (.22)

OT: main effect of overweight victimising

G: main effect of gender

*** P<.001

A multivariate analysis of variance (MANOVA) was performed on the data in Table 14. There were no significant main effects across overweight-related victimisers for height perception, weight perception, or body-shape perception. A main effect was found for gender ($F(4,300)=6.96, p<.001$) on the measure of body-shape perception. On further analysis it was found that girls rated their ideal figure thinner than boys ($F(1,303)=25.40, p<.001$).

Table 15: Summary of means (SE) for selected sub-scales of the SPPC and Importance Scale.

	Girls		Boys	
	NOVT	OVT	NOVT	OVT
Behavioural Conduct OT***	3.19 (.04)	2.33 (.18)	2.79 (.05)	2.41 (.15)
Global Self Worth OT*	3.12 (.05)	2.60 (.34)	3.17 (.05)	2.96 (.15)
Importance Dimension Athletic Competence G**	2.62 (.07)	3.36 (.32)	2.94 (.07)	2.85 (.25)
Importance Dimension Physical Appearance OT*	2.45 (.07)	3.12 (.28)	2.33 (.06)	2.62 (.19)
Importance Dimension Behavioural Conduct OT***G*	3.42 (.05)	2.93 (.37)	3.24 (.06)	2.65 (.21)

OT: main effect of overweight victimising

G: main effect of gender

* $p<.05$; ** $P<.01$; *** $P<.001$

A multivariate analysis of variance (MANOVA) was conducted on the self-esteem sub-scales of the SPPC. A main effect for overweight-related victimisers was found ($F(6,302)=4.61, p<.001$) but not for gender. As can be seen from Table 15 overweight-related victimisers had lower behavioural conduct esteem ($F(1,307)=19.52, p<0.001$) and lower global self-worth ($F(1,307)=6.51, p<0.05$).

A multivariate analysis of variance (MANOVA) was conducted on the importance sub-scales of the SPPC. Main effects were found for overweight victimisers ($F(5,302)=3.87, p=.01$) and gender ($F(5,302)=4.25, p=.001$). Overweight-related victimisers rated behavioural conduct less important than non-victimising counterparts ($F(1,306)=13.29, p<0.001$) and rated physical appearance more important ($F(1,306)=5.18, p<0.05$). Overall, boys rated behavioural conduct as less important than girls ($F(1,306)=5.35, p<0.05$), but rated athletic competence more important than girls ($F(1,306)=7.74, p<0.01$).

Eating Behaviour

Table 16: Means (SE) of eating behaviour measures.

	Girls		Boys	
	NOVT	OVT	NOVT	OVT
Dietary Restraint	2.25 (.06)	2.59 (.32)	2.07 (.06)	2.45 (.25)
Breakfast OT***G*	4.11 (.10)	2.29 (.52)	4.12 (.10)	3.85 (.39)
Lunch OT*	4.45 (.08)	3.57 (.57)	4.47 (.07)	4.31 (.26)
Teatime meal OT*	4.40 (.09)	3.71 (.52)	4.32 (.09)	3.58 (.50)
Supper	2.97 (.12)	2.29 (.52)	2.95 (.11)	2.58 (.50)
Snacks	2.74 (.11)	3.00 (.72)	2.86 (.10)	3.17 (.47)

OT: main effect of overweight victimising

G: main effect of gender

* $p<.05$; ** $P<.01$; *** $P<.001$

A multivariate analysis of variance (MANOVA) was performed on the data in Table 16. A main effect for overweight-related victimisers was found ($F(6,299)=3.52, p<.01$). As can be seen from Table 16 overweight-related victimisers reported eating breakfast ($F(1,304)=13.02, p<0.001$) and lunch ($F(1,304)=6.04, p<0.05$) and teatime meal ($F(1,304)=6.79, p<0.05$) significantly

less often than non-overweight-related victimisers. Girls reported eating breakfast less often than boys ($F(1,304)=5.96, p<0.05$). No significant difference for overweight-related victimisers or gender was found for dietary restraint.

DISCUSSION

The main aims of the current study were to investigate the frequency of overweight-related victimisation and bullying in girls and boys, age nine years, and the related psychological correlates. The preceding analysis of the data was conducted to explore the differences between overweight-related victimised children and their non-victimised counterparts and, where possible, the influence of BMI was controlled for. A summary of these results is presented below.

From the sample of 383 participants, 21% of girls and 16% of boys reported overweight-related victimisation, which included being teased, bullied and called names about being fat. There was also a positive association between being victimised about being overweight and being victimised in general. Participants who were victimised for overweight were significantly heavier than their non-victimised counterparts. As hypothesised, boys and girls who were victimised for overweight were more likely to report dieting and restrained eating behaviours than non-overweight victimised participants. Those victimised for overweight had greater levels of body image dissatisfaction, even when controlling for body weight, and had significantly lower self-esteem in all areas of the SPPC than participants not victimised for overweight. Moreover, they received less popularity and attractiveness nominations from their peers than non-overweight victimised participants. The overweight-related victimised participants rated fat teasing worse than several other types of teasing measured and interestingly this was also reflected in the responses of the non-overweight victimised participants. Not surprisingly fat teasing was the most upsetting kind of teasing for the participants who were victimised for being overweight. The current study also found that victimising others for overweight was associated with lower self-esteem in the areas of behavioural conduct self-esteem and global self-worth.

These results will be discussed in relation to previous research findings and in relation to the sociocultural model. In addition, the clinical implications of the current research findings will be considered and the methodological limitations identified.

4.1 LEVELS OF TEASING AND BULLYING

Previous research has estimated that teasing and bullying affect between 10-20% of children (Boulton & Smith 1995) and figures have been found to be higher in younger children (Whitney & Smith 1993). It is also known there is a reluctance among children to admit to bullying others or to admit to being victimised (Rigby & Slee 1990; Smith 1991). Indeed, using newly developed assessment tools (PVS and BBS) designed to reduce socially desirable responding, Austin & Joseph (1996) found that 37% of children (8-11 years) reported victimisation.

The current study found levels of general victimisation in pre-adolescent children that were remarkably similar to Austin & Joseph's figures. The present study, using Murphy (1999) adapted version of the PVS and BBS found that 41% girls and 36% boys reported general victimisation (being teased, bullied, called names). The similarity in prevalence rates between these studies suggests these figures represent an accurate reflection of the frequency of bully/victim problems in pre-adolescent boys and girls.

Of greater interest to the current study was the frequency of a specific kind of teasing, namely, being teased about being fat. The results showed that 21.3% girls and 16% of boys reported victimisation for overweight, which is similar to previous research that found 11.6% of adolescent girls and 15.9% of adolescent boys reported being teased about overweight (Murphy 1999). The current study also found that 8% of girls and 13% of boys victimised others about being fat, whereas, in adolescents 3% of girls and 16.3% of boys were found to be involved in the victimisation of others for overweight (Murphy 1999). It is possible that victimisation for overweight decreases among girls, but not among boys, with increasing age. However, because these studies were conducted using different samples, at different ages, there are potential confounding factors, such as cohort effects, that make interpretations of this sort problematic. Overall, the current research found that the modified version of the PVS and BBS enabled detection of overweight-related bullying and victimisation.

Further research is required to assess the validity of the modified versions of the PVS and BBS for measuring the frequency of overweight related victimisation. Assessing validity becomes complicated because of the complex nature of victimisation. For example, external validity would be difficult to measure. Unless it was simply overt levels of overweight-related victimisation that were being measured it would not be possible to compare the results against other measures, such as direct observation, due to the covert nature and subjective experience of victimisation. Further research could consider assessing concurrent validity and, for example, use peer nominations to assess the validity of the modified PVS and BBS. A similar technique that has been used in previous studies (Neary & Joseph 1994; Callaghan & Joseph 1995). Qualitative research could be conducted to further understanding of children's definitions of fat teasing which could inform future studies investigating the frequency of this particular type of teasing.

Overall, these findings are important because the majority of previous research into weight related victimisation has used retrospective reports by adults and therefore actual levels of overweight-related victimisation have been difficult to estimate. This is the only study to survey a community sample of preadolescent girls and boys and measure the frequency of fat teasing and bullying in children aged nine years.

4.2 PHYSICAL CHARACTERISTICS

In this study children victimised for overweight were significantly heavier and had significantly higher BMIs than children not victimised for overweight. There were no differences in age and height across groups. It is highly likely that being overweight increases the likelihood of being victimised for overweight, although causal predictions can only be speculative from this kind of cross-sectional research. From the sociocultural perspective this finding does appear to reflect the presence of obesity stigmatisation in childhood.

Interestingly, the association between overweight and victimisation was not straightforward. In this sample, 17.1% of normal weight girls and 11.4% of normal

weight boys reported victimisation for overweight. These results reflect previous findings in which Murphy (1999) found 10% of normal weight girls and 16% of normal weight boys reported being victimised for overweight. Therefore a proportion of children report being teased about being fat despite being of normal stature.

Furthermore, a large number of overweight children did not report being teased or bullied about being fat. In the overweight and obese group 44% of girls and 55% of boys did not report victimisation of overweight. Therefore, nearly half of the overweight participants were not victimised for being fat or did not report it. A follow-up interview with the non-victimised in the overweight and obese group, focusing on how children cope with or prevent victimisation, could shed further light on this area.

The mean weight and height for girls and boys at age nine years have been shown to be virtually identical (Hill, Draper & Stack 1994) and, similarly, the current study did not find any significant differences in age, height, weight or BMI across gender. Girls enter pubertal development earlier than boys and quickly gain more weight and height than their male peer group. Therefore investigating gender differences in body-shape perception is of particular interest at this age when there is temporary similarity in physical stature and will be considered in more detail in a later section.

4.3 EATING AND DIETING BEHAVIOUR

Several studies have demonstrated the presence of disordered eating and weight-control practices in pre-adolescent girls, although less research has considered eating practices in young males (Mellin, Irwin & Scully 1992; Koff & Rierden 1991; Thelen, Powell, Lawrence & Kuhnert 1992; Wardle & Marsland 1990). Moreover, studies have suggested eating disturbance is a negative consequence of appearance related teasing (Edlund et al 1999; Thompson 1991; Thompson & Psaltis 1988). Therefore, a central issue for this thesis was the association between overweight-related victimisation and dieting behaviour.

The present study investigated dieting in several ways including dietary restraint questions, a single question inquiring if participants were currently dieting, and several questions regarding the pattern of daily food consumption. Each of these

measures was included in order to provide detailed information on this complex issue. For example, although eating behaviour was measured using a dietary restraint scale, this scale does not distinguish between attempts to lose weight, maintain current weight or prevent weight gain. Therefore a single question inquiring if participants were currently dieting was included in the study. Furthermore, the information gained on pattern of daily food consumption was included to gain understanding of how dieting behaviour influences meal and snack frequency.

The present study found that 13.7% of girls and 14.1% of boys reported currently dieting at the time of the data collection. Research has often neglected to look at male eating behaviour and this study highlights the presence of reported eating control in pre-adolescent boys.

It was hypothesised that participants who reported being victimised for overweight would be more likely to engage in weight control through dieting than their non-victimised counterparts. As expected a positive association was found between being victimised for overweight and dieting. Of the girls victimised for overweight 31.6% reported dieting to lose weight whereas only 9% of the non-overweight victimised girls reported dieting. Similarly, of the boys who were victimised for overweight 31.3% reported dieting to lose weight whereas only 10.8% the boys not victimised for overweight reported dieting. In summary, participants who were victimised for overweight were three times more likely to report dieting than participants not victimised for overweight.

Furthermore, children who were victimised for overweight had significantly higher dietary restraint scores than non-dieters, although they did not report a consistent decrease in meal or snack frequency. Therefore, although overweight victimised participants were more restrained in their eating they did not report eating less frequently.

The present study did not find any gender differences in eating behaviour. In contrast, Murphy (1999) found adolescent girls were more likely to engage in dieting and extreme dieting behaviours than boys, and girls victimised for

overweight were more likely to do so even when compared to overweight related victimised boys. As discussed earlier there is a temporary similarity in physical stature at age nine years, whereas in adolescence girls gain weight and height more quickly than boys and as a result may be more likely to engage in weight-control strategies than boys.

In summary, overweight related victimisation seems to be a factor associated with dieting and weight control practices. In conjunction with previous research that has linked teasing with eating disturbance (e.g. Levine, Smolak & Hayden 1994; Fabian & Thompson 1989; Grilo et al 1994), the current findings provide further support for an emerging model highlighting the role of peer victimisation, particularly about overweight, in the etiology of disordered eating.

4.4 BODY-SHAPE PERCEPTION

Body dissatisfaction has also been considered one of the negative consequences of appearance related teasing (Fabian & Thompson 1989; Thompson 1991; Thompson & Psaltis 1988) and research has shown that body image dissatisfaction reliably predicts later eating disturbance (Cattarin & Thompson 1994; Attie & Brooks-Gunn 1989). Confirming the findings from previous research this study found that participants who were victimised for overweight had increased levels of body dissatisfaction. Participants victimised for overweight rated their current body shape as significantly larger than those not victimised for overweight, even when controlling for BMI, although they did not differ from non-overweight victimised participants on ratings of ideal body shape. As a result, overweight-related victimised participants had a greater disparity between ratings of their current shape and their ideal shape and, therefore, they had greater levels of body dissatisfaction. Furthermore, participants who were victimised for overweight were less satisfied with their weight than non-victimised participants. No significant differences were found across gender or overweight-related victimisation for height satisfaction.

The current study also considered the association between gender and body image satisfaction. Sociocultural norms are perhaps reflected in the finding that girls rated the figure they would most like to look like as thinner than boys, despite their similarity in

physical stature. This finding suggests the cultural image of thin as desirable for females has been somewhat internalised in girls, age nine years, and reflects previous work that suggests body image ideals are different for males and females. While overweight is stigmatised for both girls and boys, the male preferred body shape seems to be larger than females (Raudenbush & Zellner 1997; Cash, Winstead & Janda 1986; Kearney-Cooke and Steichen-Asch 1990).

As mentioned previously, the overweight victimised participants were significantly heavier than their non-victimised counterparts, which could explain the difference in body image satisfaction. However, the current study found that even after controlling for body weight the individuals who were teased about being overweight remained less satisfied and experienced greater body image dissatisfaction. Thus, it could be victimisation for overweight, rather than weight itself, that affects body image satisfaction. Although causal predictions are not possible from cross-sectional research one tentative interpretation of the findings is that overweight-related victimisation affects perception of overweight, which has been linked with motivation to engage in weight loss behaviours (Hill, Oliver & Rogers 1992; Hill & Pallin 1998). Furthermore, research has identified subjective feelings of fat, and teasing, as triggers associated with adolescent girls' decision to begin dieting (Muir, Wertheim & Paxton 1999). With a recognition that feelings of being overweight are likely to trigger the decision to lose weight it is possible that overweight-related victimisation increases the likelihood of individuals perceiving themselves as overweight and therefore deciding to engage in weight loss behaviours. This could be one explanation for the finding that overweight-related victimisation is associated with body image dissatisfaction and eating disturbance.

4.5 SELF-PERCEPTION

Research findings have also shown that the perception of being overweight adversely affects self-esteem (Cash & Hicks 1990). In addition, low self-esteem has been considered a negative consequence of teasing and bullying (Boulton & Smith 1995) and may be a risk factor for eating disorders (Button et al 1996). As hypothesised, the children in this study who reported being teased about being fat had significantly lower self-esteem than non-overweight victimised boys and girls.

On further analysis it was found that boys victimised for overweight had significantly lower self-esteem than non-overweight victimised boys in all areas of the SPPC, whereas girls victimised for overweight had significantly lower self-esteem in four areas of self-esteem: social acceptance, athletic competence, behavioural conduct and global self-worth. Gender differences in self-esteem were also found and girls had lower physical appearance and athletic competence esteem than boys, whereas girls had higher behavioural conduct esteem.

The association found in this study between victimisation for overweight and low self-esteem may help to account for the confusion in the literature concerning the association between overweight and self-esteem. French et al (1995) in a large-scale review of research did not find any association between obesity and self-esteem in children age seven-nine year olds, whereas there was some association found in over half of the adolescent studies reviewed. It is possible that it is not simply overweight that is associated with low self-esteem. Rather that it is overweight stigmatisation, through teasing, that is a factor related to low self-esteem. Murphy (1999) showed that in overweight and obese participants who were not victimised for overweight self-esteem was higher in the areas of social acceptance, physical appearance, and global self-worth when compared to their overweight victimised counterparts.

From this study the direction of the association between victimisation and self-esteem is not clear. Low self-esteem could be a consequence of victimisation about overweight. Alternatively low self-esteem could be a vulnerability factor for victimisation perhaps making it difficult for the child to find strategies to cope. Longitudinal research is required to help elucidate the direction of the association. Never-the-less, it is likely that the presence of low self-esteem increases the distress associated with peer victimisation of overweight. One study has shown that while children with low and high self-esteem both experienced bullying behaviour from their peers, participants with low self-esteem experienced greater stress as a result of the bullying (Sharp 1996). These findings have important implications for intervention work in this area, such as, focussing on improving self-esteem with this vulnerable group of children.

4.6 PEER POPULARITY & ATTRACTIVENESS

The present study found that participants victimised for overweight had lower physical appearance esteem and lower social acceptance esteem than non-victimised participants. It seems that children victimised for overweight have less confidence in their appearance, and in their friendships, than non-overweight victimised children. Research has demonstrated that victimised children perceive themselves as less popular (Boulton & Underwood 1992) as do children with eating problems (Paxton 1996).

The present study found that participants victimised for overweight received significantly fewer peer popularity and attractiveness nominations. Similarly, research in an adolescent population found that overweight victimised children received significantly less peer nominations for attractiveness (Murphy 1999). These findings are not surprising given the literature on the stigmatisation of obesity. However, on further analysis a pattern emerged in which overweight victimised boys, but not girls, received significantly fewer popularity nominations. In a related study, Phillips & Hill (1998) found that peer nominated popularity in 9 year old girls did not differ according to weight categorisation. Popularity for girls, at this age and in early adolescence (Murphy 1999), does not appear to be related to body size or overweight-related victimisation, which has important implications for challenging the perception among girls that thinness is linked to greater popularity (Nichter & Vuckovic 1994; Edlund et al 1999). However, boys victimised for overweight did receive fewer peer nominations for popularity and both boys and girls received fewer peer attractiveness nominations.

It appears that the low physical appearance self-esteem of children teased about being fat and the lack of satisfaction with their own body shape was confirmed by their peers in the lack of nominations for attractiveness. Perhaps if a child feels unattractive, others perceive them in that light. Alternatively negative feedback from peers about appearance has an impact on a child's perception of their own attractiveness. Either way the current findings highlight the need for intervention programmes to work with the peer group and address issues associated with the stigmatisation of obesity by challenging sociocultural images of attractiveness and

encouraging greater tolerance of difference. The negative consequences of victimisation and teasing about weight need to be understood and better relationships within the peer group encouraged. This is particularly important given research that shown friendships can be important in preventing eating disordered behaviour, at least in girls (Wertheim et al 1997).

4.7 RESPONSES TO TEASING

The current study also aimed to explore children's perceptions and responses to different types of teasing. The original hypothesis was that participants victimised about overweight, when asked about what they would do if teased about being fat, would be more likely to choose the response option 'change how I look'. It was expected that this internalising response would be an aspect of the decision to diet or alter eating behaviour. The current findings do not support this hypothesis. Of the participants who were not victimised for overweight 9.5% chose 'change how I look' as their preferred response to fat teasing. In contrast none of the overweight victimised participants chose 'change how I look' as a response to being teased about being fat. One explanation for this finding is that children who are victimised for overweight have reduced self-efficacy and feel it is too difficult to lose weight or change how they look. Alternatively they may feel that if they did change it would not make any difference.

A further hypothesis was that children victimised for overweight would be less likely to choose 'turn it into a joke' as a response to being teased about being fat, however, this was not found to be the case. As it turns out, both overweight-related victimised participants and non-victimised participants were least likely to choose the humorous response option in comparison with all the other options. Interestingly, Scambler et al (1998) showed that children believed the humorous response was the most effective response to teasing, however humour was also the least reported response to teasing. Using humour might be quite a difficult skill, particularly in teasing situations. Perhaps teaching children to use humour and to respond assertively in intimidating situations would be an effective way to reduce the negative psychological effects associated with victimisation. Further research,

using focus group methodology, could help to explore in more detail the complexities involved in children's coping responses to victimisation.

Perhaps less surprisingly individuals who were teased about being fat found this type of teasing most upsetting. Three to four times as many participants in the overweight victimised group reported they would get upset as a response to being teased about fat (28% of girls and 16% of boys) in comparison with the non-victimised group (7% of girls and 5% of boys). This finding has particular relevance when considered alongside research that has shown children believe targets of victimisation include children who overreact to teasing. It is possible that bullies hope to get a reaction, which in turn encourages more victimisation. For example, Olweus (1995) observes that bullies are often people with a strong need to dominate others. Interventions for bullying and victimisation need to teach children to respond assertively, particularly given research that indicates passive responses are associated with more distress for the victim.

Children's evaluations' of different types of teasing were explored in this study. Participants were asked to rate the worst type of teasing from four options: being teased about being fat, being stupid, wearing glasses or being teacher's pet. Overall, 61.6% of girls and 44.2% of boys rated being teased about being fat worst and not surprisingly this figure was higher among overweight-victimised participants with 74.3% rating fat teasing the worst kind of teasing. These findings suggest the fear of being teased about weight is present even in non-overweight victimised children.

It is possible that different types of teasing affect children differently. For example, children who wear glasses and who are teased about wearing glasses may be likely to rate this form of victimisation worse than being teased about being fat. Unfortunately this study was not able to investigate childhood teasing in this much detail. Despite this limitation, a high percentage of participants, nearly half, agreed that fat teasing was worse than the other types of teasing. The current results appear to confirm previous research that has found the most frequent and hurtful of childhood teasing is about appearance (Scambler et al 1998) and suggest overweight-related teasing is a particularly hurtful form of victimisation.

4.8 CHARACTERISTICS OF VICTIMISERS

Rigby & Slee (1990) made the observation that being a victim or being a bully towards others do not represent discrete categories of behaviour and do not simply lie at opposite ends of a single continuum. Therefore, any intervention aimed at reducing overweight related victimisation needs to consider both victims and victimisers to be effective. Previous research has considered the association between bullying behaviour and self-esteem, however, there have been conflicting findings. Some studies have reported an association between bullying behaviour and low self-esteem (O'Moore & Hillery 1991) while others have demonstrated maintained self-esteem (Olweus 1995). As Phillips & Hill (1998) observe within the literature on self-esteem, the problem often concerns the measure of self-perception itself.

Therefore, using a measure to identify domain specific self-esteem, the current study found overweight-related victimisers had lower behavioural conduct esteem and lower global self-worth than non-victimisers. In adolescents, it has been shown that overweight-related victimisers had reduced behavioural conduct and scholastic competence self-esteem, although they maintained global self-esteem (Murphy 1999). Both these findings are in line with previous work that has found bullies experience greater unhappiness at school and have behavioural problems (Olweus, 1995). However, there appears to be a difference in global self-esteem between these age groups. Prevention strategies for bullying behaviour should consider aiming to improve self-esteem in bullies and aim to help them to recognise the damaging effects of bullying behaviour.

Using the importance scale this study explored the meaning of self-competence in different domains in both overweight victimised participants and in overweight victimisers. The only differences found, in both analyses, were that overweight-related victimisers rated behavioural conduct less important and rated physical appearance more important to self-worth than non-victimising counterparts. This could represent a defining feature of overweight-related victimisers. If good behaviour is not rated an important aspect for self-worth then victimising behaviour may be less inhibited. Furthermore, if physical appearance is considered an important aspect of self-worth

these children may be more susceptible to sociocultural pressures regarding appearance, and in particular, may value thinness as an ideal and fear fatness. Further confirming this hypothesis, overweight-related victimisers reported eating breakfast, lunch and teatime meal significantly less often than non-overweight-related victimisers. Further research could investigate whether overweight-related victimisers are more appearance/eating conscious than their victims.

4.9 CLINICAL IMPLICATIONS

In the current sociocultural environment excessive weight and fat are considered undesirable and social ridicule is one mechanism through which these messages are reinforced. This study has shown that overweight-related victimisation is associated with dieting behaviours, body image dissatisfaction, and poor self-image which are considered predisposing factors for the development of eating disorders. The current findings, along with those of Cattarin & Thompson (1994) and Attie & Brooks-Gunn (1989), strongly suggest a need for intervention with the peer group to prevent teasing and bullying about overweight. Furthermore, intervention programmes should acknowledge the presence of different sociocultural pressures on girls and boys. This study confirms the finding that body shape and weight concerns begin in childhood, however most programs designed to prevent eating disorders target adolescent girls and college women (Irving 2000). Therefore, efforts to prevent antifat attitudes and body dissatisfaction should take place in childhood.

Prevention interventions in the area of eating disorder have been usefully divided into three categories, primary, secondary and tertiary prevention (Paxton 1996). Primary prevention refers to the prevention of uptake of health risk behaviours, secondary prevention refers to early intervention with health problems and tertiary prevention involves intervention with a health problem once it has developed. The area of primary prevention in the field of eating disorders is still in the developmental phase and has mainly involved educational interventions, aimed to moderate attitudes and intentions to diet (Moreno & Thelen 1993), and inform about the risks of eating disorders (Killen et al 1993). Paxton (1996) observes that educational approaches have had disappointing results and proposes that prevention interventions could be made more effective by focussing on the peer group. Interventions have mainly involved individual or family

therapy at the tertiary level, whereas, the results of the current study indicate the need for primary peer-group prevention strategies aimed at addressing the damaging effects of fat teasing.

Although the current study suggests that being overweight increases the likelihood of being victimised for overweight, it also showed that overweight is not a prerequisite for such victimisation. Therefore, interventions designed for weight loss might not be entirely effective and, in addition, could have the negative consequence of further stigmatising overweight. This study showed that the perception of being overweight was associated with reduced body image satisfaction, regardless of actual weight. Interventions need to be designed to encourage acceptance of size diversity and reduce prejudicial attitudes towards overweight.

A primary finding from the current research was the presence of high levels of overweight-related victimisation in pre-adolescent girls and boys. It was also found that victims of overweight-related victimisation had lower self-esteem in the majority of areas than non-overweight victimised participants. Strategies designed to improve self-esteem would be an important aspect of any intervention. For example, social competence esteem in girls could be improved through challenging the belief that being thinner will improve friendships (Edlund et al 1999). As this study found, at least for girls, popularity nominations were not associated with victimisation for overweight. Therefore, primary prevention programs could be aimed towards redressing the notion that losing weight will improve relationships and be the solution to loneliness or social isolation.

Interventions could be designed to improve victims responses to bullying. The current research has not shown any one response of the typical responses children use (Scambler et al 1998), to be particularly effective in responding to victimisation. One way to address this problem is for schools and parents to actively teach children and young people to behave assertively and constructively to situations where they are faced with threatening and intimidating behaviour (Sharp 1996). Sharp & Cowie (1994) found that in students who were taught assertiveness and stress management techniques there was a significant increase in self-esteem that was maintained two terms later, and

the majority of students who took part felt more confident when they encountered bullying.

This study also highlights the importance of including victimisers in any intervention strategy, which could include addressing the skills deficits associated with bullying behaviour. Olweus (1995) has conducted research that demonstrates bullies lack social skills and may resort to bullying as a consequence of the deficit in problem solving abilities. The current study shows victimisers have lower behavioural conduct esteem and if this is the result of a behavioural deficit, or lack of problem solving-skills, strategies designed to increase their skills in this area may improve their behavioural conduct and self-worth. Hoover & Hazler (1991) called for research-validated guidelines for school-wide management of teasing and bullying, and suggest interventions should include problem-solving skills, assertiveness training, and confidence building strategies and implementation should be in groups that include parents and teachers.

School-based programs have been used to successfully promote cross-race friendships (Carter & Rice 1997) and reduce gender-related stereotypes (Gash & Morgan 1993), which suggests the school environment provides an opportune context to implement programs designed to prevent prejudicial attitudes, and associated behaviour, such as teasing and victimisation. School based intervention could include helping students to identify cultural and societal influences on beliefs and attitudes about body image and weight, learn coping skills for teasing and increase personal knowledge of nutrition, exercise and self-acceptance (Gabel & Kearney 1998).

One young innovative intervention program, using puppets to promote size acceptance in children, reached 2,400 children and had successful results (Irving 2000). Greater acceptance of diverse body shapes was achieved, by discouraging teasing and encouraging students to treat everybody well. Students reported the program's most important message was 'not to tease others' and to 'be a good friend'. Figure rating scale data, pre and post intervention, showed the program reduces negative stereotypes about large body shapes. The puppet program involved life-size puppet characters that performed three scripts written to address issues relating to body acceptance, dieting and emotional distress and raise awareness of the harmful effects of teasing and

discrimination about weight and shape. The evaluation had several methodological limitations and the researchers highlight the limited power of a 'one-shot intervention' to truly prevent antifat attitudes from developing. They suggest more research is required and that interventions may need to be employed more regularly and systematically. Never the less, these findings further indicate the importance of intervention at the peer group level.

Theory and research suggest the need for a systemic approach to primary intervention in eating disorders. Olweus (1995) developed and evaluated a school-based, anti-bullying, intervention program in Norwegian schools, in which, 2,500 students (11-14 years) were followed over a period of two and a half years. The intervention program was designed from research concerning the modification of problem behaviours, and included a questionnaire survey, a school conference, better supervision at break times, class rules against bullying, regular class meetings with students, and serious talks with bullies and victims, including parents of involved students. The results of this intervention included marked reductions, by 50% or more, in bully-victim problems, and further reductions in general antisocial behaviour, such as, vandalism, fighting, stealing, drunkenness and truancy. Furthermore, there was a generally more positive attitudes to schoolwork and social relationships and an increase in satisfaction with school life. Olweus (1995) reported the program had the additional effect of considerably reducing the number of new victims. This programme has been evaluated in the UK, based on 23 schools in Sheffield, with positive results (Sharp & Smith 1994). The anti-bullying program can be implemented in schools with relative ease and has the potential to prevent victimisation and as a result improve quality of life for all school children. The measures used in the current research (modified PVS and BBS, immersed into the SPCC) could be a useful and easily implemented resource to enable schools to identify and address problems related to overweight victimisation and low self-esteem.

4.10 METHODOLOGICAL ISSUES

It is important to consider some of the limitations of the study.

The environment for data collection presented several limitations. Participants completed questionnaires in the classroom environment, where noise levels,

distraction, opportunity to read others answers, and lack of understanding of items could have impacted on the accuracy of the responses. These environmental effects are common in field studies, which inevitably lack the controlled experimental conditions of the laboratory. Several techniques were employed to reduce the influence of the environmental distractions. The participants were requested to work alone, in silence, and to request help if needed. In addition, class teachers and support teachers were present to help ensure a good working environment. Furthermore, the researcher was present at the time of data collection to clarify questions asked and encourage serious participation in the study. The advantages of the method of data collection employed were that a large amount of data could be collected from a large number of participants.

Collecting data from a large number of participants, on a group basis, places constraints on the level of individual detail that can be gathered from participants. However, the advantage of the large-scale survey approach is that it generates confidence in the generalizability of information collected. Furthermore, participants might be less likely to report victimisation or bullying on an individual basis and the current methodology had the added benefit of reducing saliency of bully/victim assessment. In the future, the use of focus group methodology could provide more detailed information concerning the experience of overweight-related victimisation and to identify protective factors against the damaging effects of victimisation. This would also serve to extend the research into coping with teasing which was limited in the present study.

A further constraint was the cross-sectional design of this study, which does not allow for strong causal inferences. Longitudinal exploration of the relationships between overweight related teasing, body image dissatisfaction, and dieting behaviours would further understanding of the causal relationships between these factors.

In a study of a sensitive issue, such as victimisation, and in the use of questionnaire methodology there is the potential problem of response bias. For example, there is often a tendency for people to respond in a way they believe will show them in a good light, which is called the social desirability response bias. Alternatively, some

respondents may not treat the exercise seriously although this may not be easy to detect. Several measures were taken to reduce the potential response biases. The participants were informed that results would be confidential to the researcher and the importance of responding honestly and accurately was explained. In addition, the forced choice response formats used in the SPPC, and the related sub-scales (PVS & BBS), were designed to reduce socially desirable responding. Overall, the reliance on self-report data limits the confidence that can be placed in the findings and stronger conclusions could be drawn if, for example, behavioural observations were also used. However, behavioural observation is time consuming and difficult due to the hidden nature of bully/victim interactions.

The impact of ethnicity was not explored within this study, although the sample included around 10% of participants from multicultural backgrounds. French et al (1995) note that the value of thinness for white adolescent females may be greater than for black or other non-white ethnic groups. Kumanyika (1994) comments the black culture is thought to be more tolerant of overweight and obesity, which may therefore be a less stigmatising physical condition. Further studies are needed to examine the effect of cultural background on weight and body shape perception and associated eating patterns.

Finally, the subject matter was potentially upsetting for participants and no special systems other than those generally available in school were put in place to help children to cope if issues were raised by the study. Ideally, counselling should be made available for individuals to discuss issues raised in the study and strategies for addressing bully/victim problems should be made available to schools.

4.11 CONCLUSIONS

The current study has found that one in five pre-adolescent girls and one in six boys report being victimised for overweight. The results showed that being heavier was associated with overweight related victimisation, however, a substantial number of overweight and obese participants were not victimised for overweight. Overweight-related victimisation was associated with reduced body image satisfaction and reduced self-esteem, even when controlling for BMI, and these children were more likely to be

dieting and more likely to be restrained in their eating than the non-overweight victimised participants.

It was suggested that overweight-related stigmatisation might affect the perception of being overweight and therefore increase the likelihood in these participants engaging in weight control measures. However, due to the limitations of cross-sectional design causal interpretations are problematic and further longitudinal research is required to explore causal influences on eating disturbance.

This study also found that overweight-related victimised participants were more likely to rate fat teasing the worst type of teasing and it was more upsetting to them than other types of teasing assessed. They were much less likely to decide to change as a response to teasing and both victimised and non-victimised participants were least likely to use humour in response to fat teasing. Further research, such as a focus group, could investigate protective factors and responses to teasing in more detail. For example, exploring the coping strategies of the non-victimised in the overweight and obese group could be an important route for further inquiry.

The current research also considered factors associated with victimising others about being fat and found that victimisers had lower behavioural conduct esteem and lower global self-worth. These participants felt physical appearance was more important for self-worth than non-overweight victimisers. In conjunction with the finding that peer nominations for attractiveness were lower for the overweight victimised group there is a role for intervention through addressing sociocultural perceptions of attractiveness and challenging the prejudice and discrimination towards overweight that is apparent even in childhood. Interventions could also consider addressing the self-esteem problems of bullies and be aimed at reducing problem behaviour.

The results from this thesis have a number of prevention and intervention implications including a need for intervention with the peer group at a young age. Skills-based interventions could aim to teach children how to respond assertively to threatening behaviour and address the self-esteem problems of victims. Group intervention could aim to raise awareness of the negative consequences of teasing and bullying about overweight and help children to identify sociocultural influences on beliefs and attitudes

about body image and weight. An overall systemic approach to address bully/victim problems, including regular efforts to modify and monitor these behaviours in schools, would be an effective way to address the problem of peer victimisation and this study supports the need for school based intervention with these problems.

In summary, teachers, parents and children need to be educated about the potential damaging effects of teasing others about weight. Overall, the belief that appearance teasing is good-natured, harmless fun needs to be challenged and the recognition that teasing can have a significant impact on self-image needs to be understood more widely. To conclude, this study highlights the presence of eating and weight concern in preadolescent boys and girls and identifies the potential role that overweight-related victimisation plays in the emergence of these problems.

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**APPENDIX 1
LETTER TO PARENTS REQUESTING CONSENT**

**To the Parents/Guardian
Of all Year 5 children**

February, 2000
2734

Dear Parent/Guardian

We are conducting a research project involving children in Year 5. We would like to explain a little about the project and what it entails, and ask for your consent for your child to take part.

The project is a survey of children's self-perception and their attitudes to food. The children would be asked to complete standard questionnaires measuring these issues during school time. The questions asked are straightforward and take only a short time to complete. While we need your child's name to be on the questionnaire, this would be for reference only and would be removed after the questionnaires have been examined. All information will be treated as strictly confidential.

The headteacher has kindly given permission for the school to be involved in this study and for us to approach the parents involved. Can we thank you in advance for allowing your child to take part on this educational and research project. **This requires no further action on your part.** If, however, you are unwilling to consent to your child's participation, would you complete the slip at the bottom of this letter and return it to your child's form teacher.

With many thanks for your help.

Yours sincerely,

Clea Waterston, M.A.(Hons)
Clinical Psychologist in Training

Andrew J. Hill, Ph.D., C.Psychol.
Senior Lecturer in Behavioural Sciences

Only return this slip if you are UNWILLING to allow your child to take part.

I **do not** give my approval for my child (name) to take part in this study.

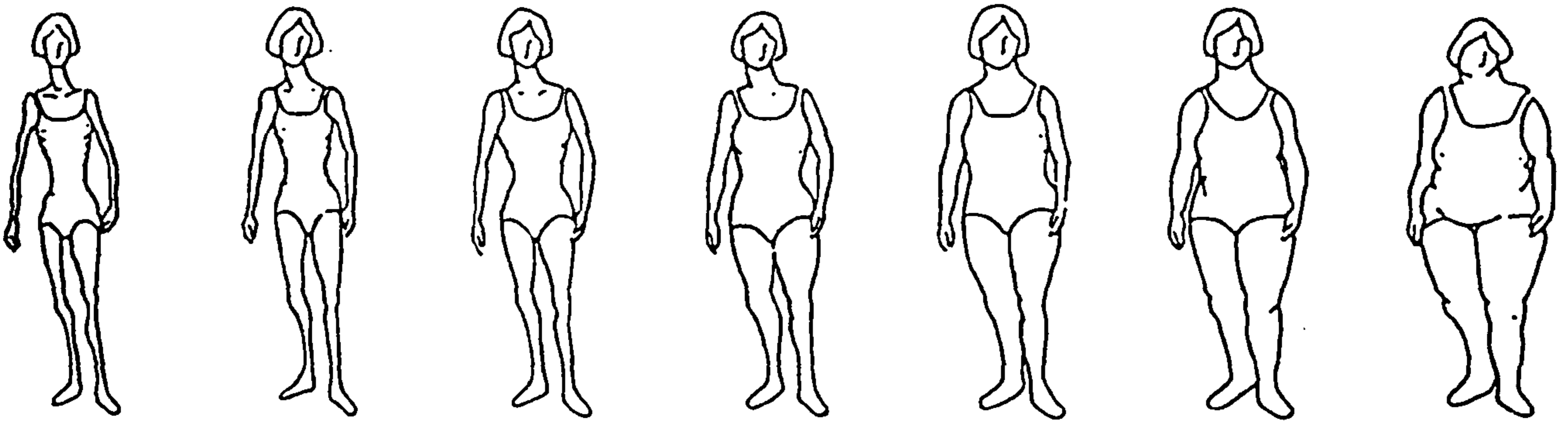
Signed

APPENDIX 2
BODY SHAPE PREFERENCE MEASURE

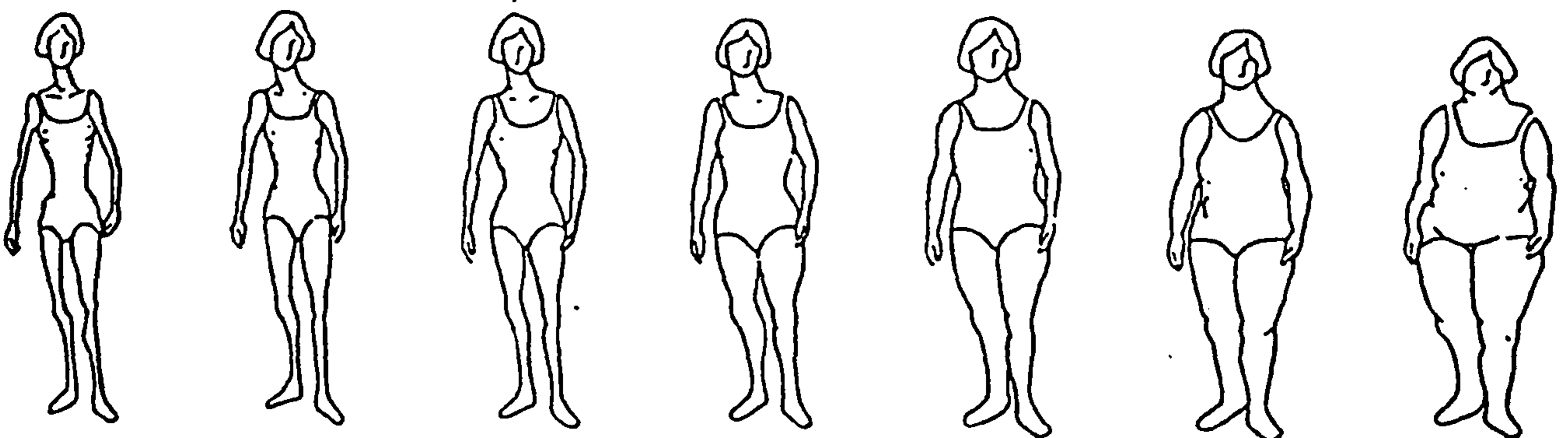
Name _____ School _____

Class _____

1. Which figure is most like you now?



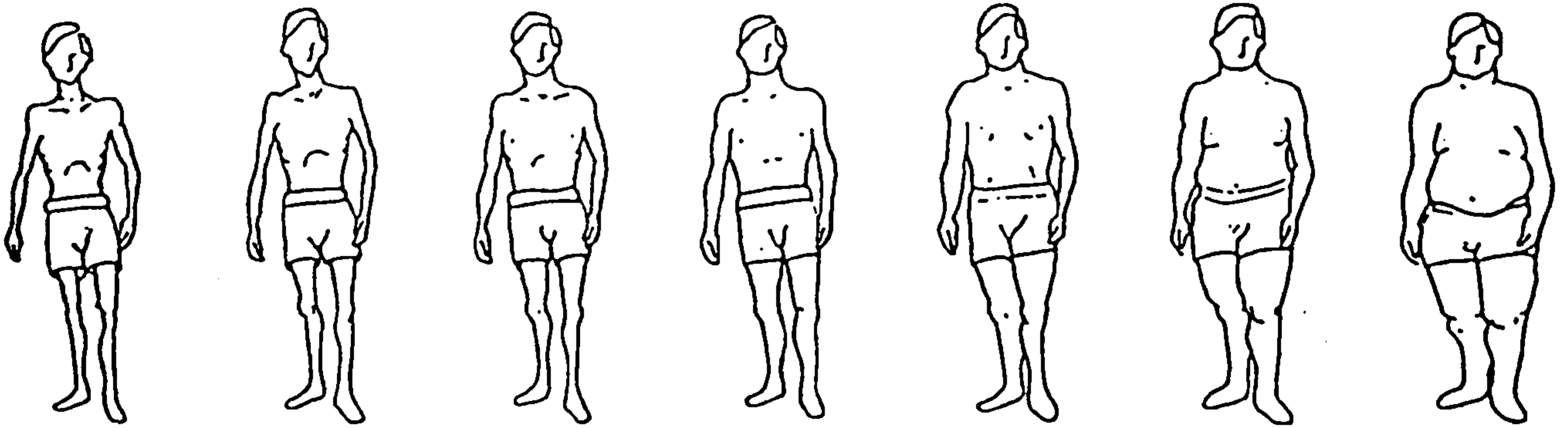
2. Which figure would you most like to look like?



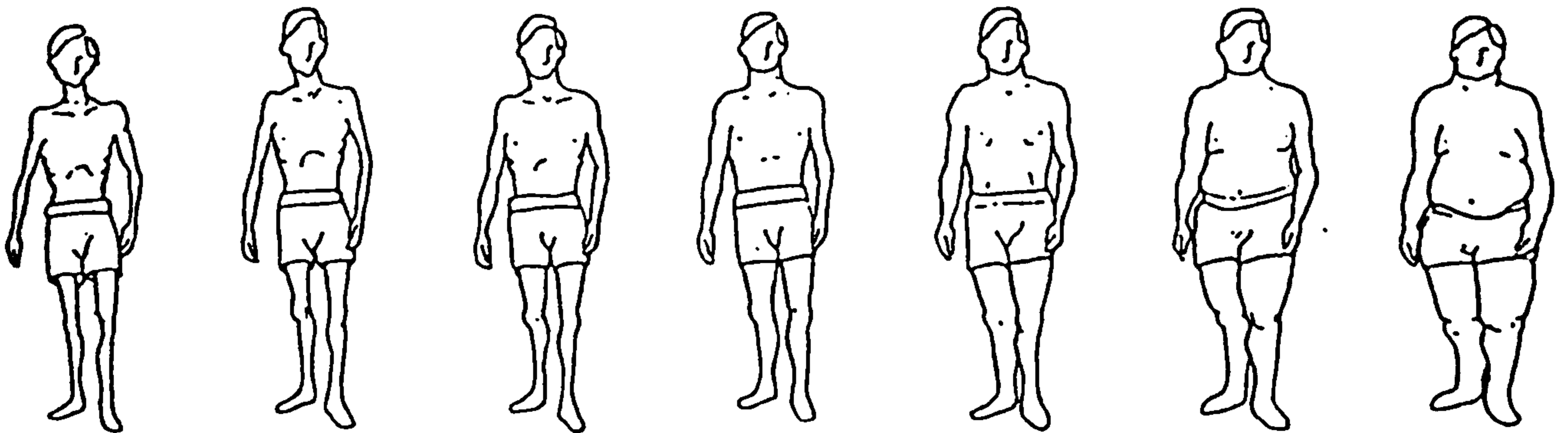
Name _____ School _____

Class _____

1. Which figure is most like you now?



2. Which figure would you most like to look like?



APPENDIX 3 QUESTIONNAIRE ON FOOD AND EATING

Name:

Date:

Please answer the following questions as honestly as possible. Most of the questions simply need you to **circle** the answer you choose. Try not to leave any questions unanswered. If there is anything you don't understand then ask.

- | | |
|---|---|
| <p>1. Do you feel yourself to be:</p> <ul style="list-style-type: none"> Very much too tall Moderately too tall Slightly too tall About the right height Slightly too short Moderately too short Very much too short | <p>2. Do you feel yourself to be:</p> <ul style="list-style-type: none"> Very overweight Moderately overweight Slightly overweight About the right weight Slightly underweight Moderately underweight Very underweight |
|---|---|

3. How often do you eat:

Breakfast	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>	<i>Very often</i>	<i>Always</i>
Lunch	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>	<i>Very often</i>	<i>Always</i>
Teatime meal	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>	<i>Very often</i>	<i>Always</i>
Supper	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>	<i>Very often</i>	<i>Always</i>
Snacks between meals	<i>Never</i>	<i>Sometimes</i>	<i>Often</i>	<i>Very often</i>	<i>Always</i>

4. Are you dieting at the moment? *Yes / No*

5. If you have put on weight, do you try to eat less than you usually do?

Never Seldom Sometimes Often Very often

6. Do you try to eat less at mealtimes than you would like to eat?

Never Seldom Sometimes Often Very often

7. How often do you refuse food or drink offered because you are worried about how much you weigh?

Never Seldom Sometimes Often Very often

8. Do you watch exactly how much you eat?

Never Seldom Sometimes Often Very often

9. Do you deliberately eat foods that are slimming?

Never Seldom Sometimes Often Very often

10. When you have eaten too much, do you eat less than usual on the following days?

Never Seldom Sometimes Often Very often

11. Do you deliberately eat less in order not to become heavier?

Never Seldom Sometimes Often Very often

12. How often do you try not to eat between meals because you are watching your weight?

Never Seldom Sometimes Often Very often

13. How often in the evening do you try not to eat because you are watching your weight?

Never Seldom Sometimes Often Very often

14. Do you think about how much you weigh before deciding how much to eat?

Never Seldom Sometimes Often Very often

APPENDIX 4 THE IMPORTANCE SCALE

HOW IMPORTANT ARE THESE THINGS TO HOW YOU FEEL ABOUT YOURSELF AS A PERSON?

	Really True For Me	Sort of True For Me		BUT		Sort of True For Me	Really True For Me
1	<input type="checkbox"/>	<input type="checkbox"/>	Some children think it is important to do well at schoolwork in order to feel good as a person	BUT	Other children don't think how well they do at schoolwork is that important.	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	Some children don't think that having a lot of friends is all that important	BUT	Other children think that having a lot of friends is important to how they feel as a person.	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	Some children think it's important to be good at sports	BUT	Other children don't think how good you are at sports is that important.	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	Some children think it's important to be good looking in order to feel good about themselves	BUT	Other children don't think that's very important at all.	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	Some children think that it's important to behave the way they should	BUT	Other children don't think that how they behave is that important.	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	Some children don't think that getting good marks is all that important to how they feel about themselves	BUT	Other children think that getting good marks is important.	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	Some children think it's important to be popular	BUT	Other children don't think that being popular is all that important to how they feel about themselves.	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	Some children don't think doing well at sports is that important to how they feel about themselves as a person	BUT	Other children feel that doing well at sports is important.	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	Some children don't think that how they look is important to how they feel about themselves as a person	BUT	Other children think that how they look is important.	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>	Some children don't think that how they act is all that important	BUT	Other children think it's important to act the way you are supposed to.	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX 5 MEASURE OF SELF-PERCEPTION

Name _____

	Really True For Me	Sort of True For Me		BUT		Sort of True For Me	Really True For Me
	<input type="checkbox"/>	<input type="checkbox"/>	Some children would rather play outdoors in their spare time		Other children would rather watch TV.	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>							
	<input type="checkbox"/>	<input type="checkbox"/>	Some children feel that they are very <i>good</i> at their school work		Other children <i>worry</i> about whether they can do the school work set for them.	<input type="checkbox"/>	<input type="checkbox"/>
1	<input type="checkbox"/>	<input type="checkbox"/>	Some children find it <i>hard</i> to make friends		Other children find it's pretty <i>easy</i> to make friends.	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>often</i> teased by other children		Other children are <i>not</i> teased by other children.	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	Some children do very <i>well</i> at all kinds of sports		Other children <i>don't</i> feel that they are very good when it comes to sports.	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>happy</i> with the way they look		Other children are <i>not</i> happy with the way they look.	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	Some children often do <i>not</i> like the way they <i>behave</i>		Other children usually <i>like</i> the way they behave.	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	Some children do <i>not</i> tease other children		Other children <i>often</i> tease other children.	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	Some children are often <i>unhappy</i> with themselves		Other children are pretty <i>pleased</i> with themselves	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>

	Really True For Me	Sort of True For Me			Sort of True For Me	Really True For Me	
9	<input type="checkbox"/>	<input type="checkbox"/>	Some children feel like they are <i>just as clever</i> as other children their age	BUT	Other children aren't so sure and <i>wonder</i> if they are as clever.	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>	Some children have a <i>lot</i> of friends	BUT	Other children <i>don't</i> have very many friends.	<input type="checkbox"/>	<input type="checkbox"/>
11	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>not</i> bullied at school	BUT	Other children are <i>often</i> bullied by other children.	<input type="checkbox"/>	<input type="checkbox"/>
12	<input type="checkbox"/>	<input type="checkbox"/>	Some children wish they could be a lot <i>better</i> at sports	BUT	Other children feel they are <i>good enough</i> at sports.	<input type="checkbox"/>	<input type="checkbox"/>
13	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>happy</i> with their height and weight	BUT	Other children wish their height and weight were <i>different</i> .	<input type="checkbox"/>	<input type="checkbox"/>
14	<input type="checkbox"/>	<input type="checkbox"/>	Some children usually do the <i>right</i> thing	BUT	Other children often <i>don't</i> do the right thing.	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	<input type="checkbox"/>	Some children often bully other children	BUT	Other children <i>do not</i> bully others.	<input type="checkbox"/>	<input type="checkbox"/>
16	<input type="checkbox"/>	<input type="checkbox"/>	Some children <i>don't</i> like the way they are leading their life	BUT	Other children <i>do</i> like the way they are leading their life.	<input type="checkbox"/>	<input type="checkbox"/>
17	<input type="checkbox"/>	<input type="checkbox"/>	Some children are pretty <i>slow</i> in finishing their school work	BUT	Other children can do their school work <i>quickly</i> .	<input type="checkbox"/>	<input type="checkbox"/>
18	<input type="checkbox"/>	<input type="checkbox"/>	Some children would like to have a lot <i>more</i> friends	BUT	Other children have <i>as many</i> friends as they want.	<input type="checkbox"/>	<input type="checkbox"/>

	Really True For Me	Sort of True For Me		BUT		Sort of True For Me	Really True For Me
19	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>often</i> called horrible names by other children		Other children are <i>not</i> called horrible names.	<input type="checkbox"/>	<input type="checkbox"/>
20	<input type="checkbox"/>	<input type="checkbox"/>	Some children think they could <i>do well</i> at just about any new sports activity they haven't tried before		Other children are afraid they might <i>not</i> do well at sports they haven't every tried.	<input type="checkbox"/>	<input type="checkbox"/>
21	<input type="checkbox"/>	<input type="checkbox"/>	Some children wish their body was <i>different</i>		Other children <i>like</i> their body the way it is.	<input type="checkbox"/>	<input type="checkbox"/>
22	<input type="checkbox"/>	<input type="checkbox"/>	Some children usually act the way they know they are <i>supposed</i> to		Other children often <i>don't</i> act the way they are supposed to.	<input type="checkbox"/>	<input type="checkbox"/>
23	<input type="checkbox"/>	<input type="checkbox"/>	Some children <i>do not</i> call other children horrible names		Other children <i>often</i> call other children horrible names.	<input type="checkbox"/>	<input type="checkbox"/>
24	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>happy</i> with themselves as a person		Other children are often <i>not</i> happy with themselves.	<input type="checkbox"/>	<input type="checkbox"/>
25	<input type="checkbox"/>	<input type="checkbox"/>	Some children often <i>forget</i> what they learn		Other children can remember things <i>easily</i> .	<input type="checkbox"/>	<input type="checkbox"/>
26	<input type="checkbox"/>	<input type="checkbox"/>	Some children are always doing things with <i>a lot</i> of children		Other children usually do things <i>by themselves</i> .	<input type="checkbox"/>	<input type="checkbox"/>
27	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>not</i> teased about being fat		Other children are <i>often</i> teased about being fat.	<input type="checkbox"/>	<input type="checkbox"/>
28	<input type="checkbox"/>	<input type="checkbox"/>	Some children feel that they are <i>better</i> than others their age at sports		Other children <i>don't</i> feel they can play as well.	<input type="checkbox"/>	<input type="checkbox"/>

	Really True For Me	Sort of True For Me			Sort of True For Me	Really True For Me	
29	<input type="checkbox"/>	<input type="checkbox"/>	Some children wish their physical appearance (how they look) was <i>different</i>	BUT	Other children <i>like</i> their physical appearance the way it is.	<input type="checkbox"/>	<input type="checkbox"/>
30	<input type="checkbox"/>	<input type="checkbox"/>	Some children usually get in <i>trouble</i> because of things they do	BUT	Other children usually <i>don't</i> do things that get them in trouble.	<input type="checkbox"/>	<input type="checkbox"/>
31	<input type="checkbox"/>	<input type="checkbox"/>	Some children <i>often</i> tease other children about being fat	BUT	Other children <i>don't</i> tease children about being fat.	<input type="checkbox"/>	<input type="checkbox"/>
32	<input type="checkbox"/>	<input type="checkbox"/>	Some children <i>like</i> the kind of person they are	BUT	Other children often wish they were someone else.	<input type="checkbox"/>	<input type="checkbox"/>
33	<input type="checkbox"/>	<input type="checkbox"/>	Some children do <i>very well</i> at their classwork	BUT	Other children <i>don't</i> do very well at their classwork.	<input type="checkbox"/>	<input type="checkbox"/>
34	<input type="checkbox"/>	<input type="checkbox"/>	Some children wish that more people their age liked them	BUT	Other children feel that most people their age <i>do</i> like them.	<input type="checkbox"/>	<input type="checkbox"/>
35	<input type="checkbox"/>	<input type="checkbox"/>	Some children are often bullied for being fat	BUT	Other children are <i>not</i> bullied for being fat.	<input type="checkbox"/>	<input type="checkbox"/>
36	<input type="checkbox"/>	<input type="checkbox"/>	In games and sports some children usually <i>watch</i> instead of play	BUT	Other children usually <i>play</i> rather than just watch.	<input type="checkbox"/>	<input type="checkbox"/>
37	<input type="checkbox"/>	<input type="checkbox"/>	Some children wish something about their face or hair looked <i>different</i>	BUT	Other children <i>like</i> their face and hair the way they are.	<input type="checkbox"/>	<input type="checkbox"/>
38	<input type="checkbox"/>	<input type="checkbox"/>	Some children do things they know they <i>shouldn't</i> do	BUT	Other children <i>hardly</i> ever do things they know they shouldn't do.	<input type="checkbox"/>	<input type="checkbox"/>

	Really True For Me	Sort of True For Me		BUT		Sort of True For Me	Really True For Me
39	<input type="checkbox"/>	<input type="checkbox"/>	Some children <i>do not</i> bully other children for being fat		Other children <i>often</i> bully others for being fat.	<input type="checkbox"/>	<input type="checkbox"/>
40	<input type="checkbox"/>	<input type="checkbox"/>	Some children are very <i>happy</i> being the way they are		Other children wish they were <i>different</i> .	<input type="checkbox"/>	<input type="checkbox"/>
41	<input type="checkbox"/>	<input type="checkbox"/>	Some children have <i>trouble</i> working out the answers in school		Other children almost <i>always</i> can work out the answers.	<input type="checkbox"/>	<input type="checkbox"/>
42	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>popular</i> with others their age		Other children are <i>not</i> very popular.	<input type="checkbox"/>	<input type="checkbox"/>
43	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>not</i> called horrible names for being fat		Other children are <i>often</i> called horrible names for being fat.	<input type="checkbox"/>	<input type="checkbox"/>
44	<input type="checkbox"/>	<input type="checkbox"/>	Some children <i>don't</i> do well at new outdoor games		Other children are <i>good</i> at new games straight away.	<input type="checkbox"/>	<input type="checkbox"/>
45	<input type="checkbox"/>	<input type="checkbox"/>	Some children think that they are <i>good looking</i>		Other children think that they are <i>not</i> very good looking.	<input type="checkbox"/>	<input type="checkbox"/>
46	<input type="checkbox"/>	<input type="checkbox"/>	Some children behave themselves <i>very well</i>		Other children often find it <i>hard</i> to behave themselves.	<input type="checkbox"/>	<input type="checkbox"/>
47	<input type="checkbox"/>	<input type="checkbox"/>	Some children <i>often</i> call other children horrible names for being fat		Other children <i>do not</i> call others names for being fat.	<input type="checkbox"/>	<input type="checkbox"/>
48	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>not</i> very happy with the way they do a lot of things		Other children think the way they do things is <i>fine</i> .	<input type="checkbox"/>	<input type="checkbox"/>

**APPENDIX 6
RESPONDING TO TEASING**

Name:

Date:

In these situations, can you imagine what you would do? Put a circle round only one answer.

1. *PAUL SOMETIMES TEASES MARTIN ABOUT WEARING GLASSES. PAUL CALLS HIM NAMES AND LAUGHS AT HIM.*

What would I do if I were Martin?

**Get upset
Ignore it
Try to change the way you look**

**Tease him back
Turn it into a joke
Tell a friend or adult**

2. *ANDREW SOMETIMES TEASES KARL ABOUT BEING FAT. ANDREW CALLS HIM NAMES AND LAUGHS AT HIM.*

What would I do if I were Karl?

**Get upset
Ignore it
Try to change the way you look**

**Tease him back
Turn it into a joke
Tell a friend or adult**

3. *DAVID SOMETIMES TEASES TIM ABOUT BEING STUPID. DAVID CALLS HIM NAMES AND LAUGHS AT HIM.*

What would I do if I were Tim?

**Get upset
Ignore it
Try to change the way you look**

**Tease him back
Turn it into a joke
Tell a friend or adult**

4. *STEVEN SOMETIMES TEASES BRIAN ABOUT BEING A SWOT. STEVEN CALLS HIM NAMES AND LAUGHS AT HIM.*

What would I do if I were Brian?

**Get upset
Ignore it
Try to change the way you look**

**Tease him back
Turn it into a joke
Tell a friend or adult**

5. *WHICH OF THESE WOULD BE WORST FOR YOU?*

**Being teased
about: Wearing glasses Being fat Being stupid Being a swot**

WHAT WOULD I DO?

Name:

Date:

In these situations, can you imagine what you would do? Put a circle round only one answer.

1. *LYNN SOMETIMES TEASES SARAH ABOUT WEARING GLASSES. LYNN CALLS HER NAMES AND LAUGHS AT HER.*

What would I do if I were Sarah?

Get upset

Ignore it

Try to change the way you look

Tease her back

Turn it into a joke

Tell a friend or adult

2. *JANE SOMETIMES TEASES ANNE ABOUT BEING FAT. JANE CALLS HER NAMES AND LAUGHS AT HER.*

What would I do if I were Anne?

Get upset

Ignore it

Try to change the way you look

Tease her back

Turn it into a joke

Tell a friend or adult

3. *CLAIRE SOMETIMES TEASES JOANNE ABOUT BEING STUPID. CLAIRE CALLS HER NAMES AND LAUGHS AT HER.*

What would I do if I were Joanne?

Get upset

Ignore it

Try to change the way you look

Tease her back

Turn it into a joke

Tell a friend or adult

4. *DEBBIE SOMETIMES TEASES LISA ABOUT BEING A SWOT. DEBBIE CALLS HER NAMES AND LAUGHS AT HER.*

What would I do if I were Lisa?

Get upset

Ignore it

Try to change the way you look

Tease her back

Turn it into a joke

Tell a friend or adult

5. *WHICH OF THESE WOULD BE WORST FOR YOU?*

Being teased

about: Wearing glasses Being fat Being stupid Being a swot

APPENDIX 7
PEER POPULARITY AND ATTRACTIVENESS

Question 1

Which boys would you most like to sit next to in class?

Look at the list of the boys in your class and put a tick next to the people you choose. Please choose only **three** boys and please don't choose yourself.

Question 2

Which boys would you most like to be with at break time?

Remember to only choose **three** boys and please do not choose yourself.

Question 3

Which boys do you think are the most attractive in your class?

Again, look at the list of the boys in your class and put a tick next to the boys you choose. Remember to choose only **three** boys and please don't choose yourself.

Question 4

Which girls do you think are the most attractive in your class?

Look at the list of the girls in your class and put a tick next to the girls you choose. Please choose only **three** girls.

Question 1

Which girls would you most like to sit next to in class?

Look at the list of the girls in your class and put a tick next to the girls you choose. Please choose only **three** girls and please don't choose yourself.

Question 2

Which girls would you most like to be with at break time?

Look at the list of girls in your class and put a tick next to the girls you choose. Remember to only choose **three** girls and please do not choose yourself.

Question 3

Which boys do you think are the most attractive in your class?

Again, look at the list of the boys in your class and put a tick next to the boys you choose. Remember to choose only **three** boys and please don't choose yourself.

Question 4

Which girls do you think are the most attractive in your class?

Look at the list of the girls in your class and put a tick next to the girls you choose. Please choose only **three** girls.

APPENDIX 8
VICTIMISATION AND BULLYING SCALES

Victimisation and bullying items in SPPC

	Really True For Me	Sort of True For Me			Sort of True For Me	Really True For Me	
<u>General victimisation</u>							
3	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>often</i> teased by other children	BUT	Other children are <i>not</i> teased by other children.	<input type="checkbox"/>	<input type="checkbox"/>
11	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>not</i> bullied at school	BUT	Other children are <i>often</i> bullied by other children.	<input type="checkbox"/>	<input type="checkbox"/>
19	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>often</i> called horrible names by other children	BUT	Other children are <i>not</i> called horrible names.	<input type="checkbox"/>	<input type="checkbox"/>
<u>General bullying</u>							
7	<input type="checkbox"/>	<input type="checkbox"/>	Some children do <i>not</i> tease other children	BUT	Other children <i>often</i> tease other children.	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	<input type="checkbox"/>	Some children often bully other children	BUT	Other children <i>do not</i> bully others.	<input type="checkbox"/>	<input type="checkbox"/>
23	<input type="checkbox"/>	<input type="checkbox"/>	Some children <i>do not</i> call other children horrible names	BUT	Other children <i>often</i> call other children horrible names.	<input type="checkbox"/>	<input type="checkbox"/>
<u>Overweight-related victimisation</u>							
27	<input type="checkbox"/>	<input type="checkbox"/>	Some children are <i>not</i> teased about being fat	BUT	Other children are <i>often</i> teased about being fat.	<input type="checkbox"/>	<input type="checkbox"/>
35	<input type="checkbox"/>	<input type="checkbox"/>	Some children are often bullied for being fat	BUT	Other children are <i>not</i> bullied for being fat.	<input type="checkbox"/>	<input type="checkbox"/>

43

Some children are *not* called horrible names for being fat

BUT

Other children are *often* called horrible names for being fat.

Overweight-related bullying

31

Some children *often* tease other children about being fat

BUT

Other children *don't* tease children about being fat.

39

Some children *do not* bully other children for being fat.

BUT

Other children *often* bully others for being fat.

47

Some children *often* call other children horrible names for being fat

BUT

Other children *do not* call others names for being fat.

**APPENDIX 9
LIST OF ABBREVIATIONS**

BBS	Bullying Behaviour Scale
BMI	Body Mass Index
DEBQ	Dutch Eating Behaviour Questionnaire
G	Main effect of Gender
ORBS	Overweight-Related Bullying Scale
ORVS	Overweight-Related Victimisation Scale
NORV	Overweight-Related Victimised
ORV	Overweight-Related Victimised
OV	Main effect of Overweight-Related Victimisation
PNQ	Peer Nomination Questionnaire
PVS	Peer Victimisation Scale
NOVT	Not Overweight-Related Victimiser
OVT	Overweight-Related Victimiser
OT	Main effect of Overweight-Related Victimising
SE	Standard Error
SPPC	Self-Perception Profile for Children