EXPLORATION OF THE RELATIONSHIP BETWEEN CHILDHOOD OVERWEIGHT STATUS, WEIGHT-BASED TEASING, AND BODY IMAGE DISSATISFACTION IN FORMERLY OVERWEIGHT ADULTS

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Abstract

EXPLORATION OF THE RELATIONSHIP BETWEEN CHILDHOOD OVERWEIGHT STATUS, WEIGHT-BASED TEASING, AND BODY IMAGE DISSATISFACTION IN FORMERLY OVERWEIGHT ADULTS

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Obesity's impact on psychological health and well-being has been the subject of a growing body of literature. Body image dissatisfaction is a psychological variable that is influenced by overweight status and has been linked with negative psychosocial outcomes. Women have reported higher body image dissatisfaction scores than men, but both groups show similar trends. Research into body image dissatisfaction has investigated adults and children who are currently overweight, and adults who have experienced weight-loss interventions. The relationship between frequency and perceived effect of weight-based teasing and body image dissatisfaction in overweight and obese children has been explored. Very little research has looked at weight loss's impact on normal-weight adults who were formerly overweight as children. The role of frequency and effect of weight-based teasing on body image dissatisfaction for this population has also been seldom considered. This study assessed, in normal-weight adults, if being overweight and experiencing weight-based teasing in childhood negatively impacted body image. Hypothesis one predicted body image dissatisfaction would be higher for the adults who were overweight in childhood, versus adults who had never been overweight.

Hypothesis two predicted that adults who were overweight as children, and who experienced a higher frequency and perceived effect of weight-based teasing would have higher body image dissatisfaction scores than formerly overweight adults who experienced a lesser frequency and perceived effect of weight-based teasing. For both hypotheses, women were predicted to show a greater overall effect than men. A stepwise linear regression analysis was used for both hypotheses. Hypothesis one was confirmed in that having experienced former overweight status before age 18 resulted in higher BID scores. For hypothesis two, higher frequency of weight-based teasing in former overweight adults resulted in significant increases in BID. Perceived effect of teasing did not have a significant effect on BID. Gender was also was also found to be a significant predictor of BID, with being a woman resulting in higher body image dissatisfaction than men. Overall, the results of the analysis suggest that in currently "normal" weight adults, having been previously overweight before age 18, and having experienced higher frequency of weight-based teasing, and being female contributes to higher BID scores as an adult. Future work should address refining assessments and outreach for body image studies to more diverse populations, such as men, individuals across different ethnicities, age ranges, orientations and gender identifications to better evaluate the applicability of this studies findings.

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Review of Literature

Overweight in Youth

In the last forty years, the percentage of obese youth living in the U.S. age 2-19 years has increased three fold, and the percentage of obese adults age 20-74 has increased 2.5 times over (Fryar, Carroll, & Ogden, 2010; Flegal et al., 2012). Currently, one-third of children and adolescents aged 6 to 19 are considered overweight or obese, and 1 in 6 are considered obese (Ogden, et al., 2012). One in three adults is considered overweight or obese (Ogden & Carroll, 2010). As the number of overweight and obese Americans increases, weight-related illness and issues are being addressed with increasing frequency.

General Impact on Health

Overweight and obesity are defined as abnormal or excessive fat accumulation that has a potential to impair health (World Health Organization, 2000). At this time body mass index (BMI) is an index of weight-for-height that is widely used to classify overweight and obesity in adults and children. BMI is calculated by dividing an individual's weight in kilograms by his or her height in meters squared. A BMI equal to or greater then 25 is classified as overweight, and a BMI of 30 or more is obese (World Health Organization, 2000).

Obesity is considered a strong risk factor for poor physical health. In children and adolescents, health consequences shown to be associated with obesity include: incidence of abnormal blood lipids, atherosclerosis, chronic inflammation, elevated insulin levels,

endothelial dysfunction, heart disease, hypertension, increased tendency for blood clotting, kidney dysfunction, liver dysfunction, type 2 diabetes, and pulmonary, hepatic, renal, musculoskeletal, or neurological complications (Ebbeling, Pawlak, & Ludwig, 2002). Adults with increased weight levels that classify as overweight and obese carry with them an increased risk for the following health conditions: coronary heart disease, certain cancers, hypertension, dyslipidemia, stroke, liver and gallbladder disease, osteoarthritis, gynecological problems, sleep apnea and respiratory problems (USDHHS, 1998).

Psychosocial Impact

In addition to negative health consequences, obese individuals are at risk for negative psychosocial impact. These psychological and social correlates of obesity are important to identify because such a large percentage of the population is potentially affected, and research has devoted less time to understanding how obesity shapes our psychological experience than to physical health outcomes of obesity.

In children and adolescents, psychological correlates that have been shown to be associated with overweight and obese status include depression, poor self-esteem, body dissatisfaction, anxiety, eating disordered symptoms, and adoption of high-risk behaviors (Cornette, 2008; Decaluwe et al., 2003; Ebbeling et al., 2002; Hesketh et al., 2004). Social correlates have included stigma, social isolation, discrimination, and poor academic performance (Ebbeling et al., 2002; Puhl & Latner, 2007).

Behaviors that have been found to be correlated with overweight in adolescents include more time spent participating in sedentary activities, and less time engaging in

physical activities, as well as increased consumption of “convenience food” (food not prepared at home), and decreased consumption of breakfast (Mellin, Neumark, Story, Ireland, & Resnick, 2002; Patrick et al., 2004; USDHHS). Overweight girls are also more likely than their non-overweight peers to participate in unhealthy dieting behaviors such as skipping meals and binge eating.

Studies have found that measuring only obesity as a determining factor for negative psychological outcomes has shown conflicting results (Eldredge & Agras, 1996; Foster, Wadden, & Vogt, 1997; Matz, Foster, Faith, & Wadden, 2002; Sarwer, Wadden, & Foster, 1998; Wilfley et al., 2000). Meta-analyses by Friedman and Brownell (1995), and Wardle and Cooke (2005) suggest that obesity alone is not correlated with poorer mental health or impaired self esteem relative to normal-weight peers. To help explain negative psychosocial outcomes, researchers have utilized the concept of body image. Body image involves cognitive mediation processes that can potentially explain the interaction between variables such as weight-based teasing or concern over body weight and shape and negative outcomes such as body image disturbance, lowered self-esteem, and disturbed eating (Adams & Bukowski, 2008; Matz, Foster, Faith, & Wadden, 2002).

Body Image

Self-concept. Body image is a component of self-concept. Shavelson, Hubner, and Stanton (1976) broadly defined self-concept as a person’s perception of him or herself. Self-concept is hierarchical, multidimensional, context dependent, evaluative, developmental, dynamic, and categorical. A person can possess a physical self-concept that is related to but distinct from social self-concept. Physical self-concept can be further

divided into physical abilities and physical appearance. Self-concept is formed by one's interaction with the environment, especially by way of environmental reinforcements, input from significant others, and the individual's own understanding of the attributions of their behavior. Because self-concept is our sense of "who we are", there are behavioral implications. "Who we are" influences current behavior patterns, the evaluations we make about past behaviors and experiences, and predicts our future behaviors (Bracken 1992). Self-concept is a lens through which we interpret our environment, and its stability gives us a sense of continuity as to "who we are". At the same time ongoing experiences with the environment slowly shape self-concept, giving it a dynamic quality over time. Bracken (1992) proposed that self-concept includes six domains: social, competence, affect, family, physical and academic.

Body Image Definition. In the last three decades research on body image has produced various definitions, as researchers have interpreted the term differently. Most definitions have described body image as multidimensional, and include cognitive, affective, and behavioral aspects (Banfield & McCabe, 2002; Cash, 1994; Cash & Fleming, 2002; Kostanski, Fisher, & Gullone, 2004; Thompson, Altabe, Johnson, & Stormer, 1994; Tiggemann, 1996). Much of the current research defines body image as an individual's internalized self-perceptions and attitudes regarding their physical appearance (Cash & Fleming, 2002; Thompson, Roehrig, Cafri, & Heinberg, 2005). Body image plays a role in how we perceive ourselves, which in turn influences our emotions, thoughts, behaviors, and our interactions and relationships with others (Cash & Pruzinsky, [chapter 1] 2002; Rosen, 1990).

Body Image development. Contemporary studies of body image research often use an integrative cognitive-behavioral or sociocultural perspective, although feminist, information-processing, and psychodynamic perspectives are used as well (Cash, 2002).

Cash (2002) describes body image development as the result of cognitive mediation processes between characteristics of an individual and contact with environmental reinforcements. These variables are interdependent and studies of body image often utilize factors from all three categories to investigate and explain body image development and body image disturbance.

Cognitive mediation processes refers to self-schemas. As a child grows up they absorb and internalize information related to their physical appearance, such as what is desirable or undesirable. An appearance schema, or cognitive representation of body image, develops in accordance with this information. This appearance schema also includes individuals' beliefs about their appearance, the degree of investment in importance of body image, and self-evaluative components (Cash, 1996). These appearance schemas are highly subjective and their associated positive or negative evaluations influence emotions and behaviors.

Characteristics of an individual refer to psychological correlates that can influence body image development. Negative affect, autonomy, attachment, perfectionism, gender-based attitudes and values, and internalization of societal body image ideals have been shown to affect body image development (Ricciardelli et al., 2003; Smolak & Levine, 2001; Wardle & Cooke, 2005).

Physical characteristics can include BMI, body type, developmental changes to the body that occur over the lifespan, and a “goodness of fit” between one’s physical appearance and societal standards of physical attractiveness (Cash, 2002).

Environmental stimuli that influence body image development include feedback and interpersonal experiences with others. These others are caregivers, family, peers, and even strangers. Larger society reinforces physical appearance ideals and norms through media, advertising, and print (Cash, 2002).

In addition to cognitive mediation, personal and physical characteristics, and environmental reinforcements, Thompson et al. (2005) included activating events as an important factor for development. Certain traumas and stressors are thought to be a precipitating event for the onset of body image disturbance and development of disordered eating (Fauerbach et al., 2000; Kearney-Cooke & Ackard, 2000; Sack, Boroske-Leiner, & Lahmann, 2010).

Factors that impact body image development may have happened in the past but continue to exert a maintaining influence on attitudes and perceptions of body image. Cash (2002) proposed that these influencing factors be separated into past and present events. Personal attributes, environmental reinforcements, and experiences that have occurred in the past but continue to influence how one thinks, feels, and acts in relation to their body are referred to as historical factors. Current life events, personal attributes, and environmental reinforcements that have a precipitating and maintaining effect on body image beliefs and evaluations are referred to as proximal or concurrent factors.

Body Image Dissatisfaction

Body image dissatisfaction (BID) is defined as the discrepancy between one's perceived body image and their ideal body image (Wood, Becker, & Thompson, 1996). This dissatisfaction with one's internalized image of their body can be focused on weight, shape, or appearance (Wertheim, Paxton, & Blaney, 2009).

BID has been linked to eating disordered behaviors such as dieting, skipping meals, fasting, purging, and use of diet pills or laxatives (Neumark-Sztainer et al., 2006; Stice, Mazotti, Krebs, & Martin, 1998). Dissatisfaction with one's body image has also been associated with eating disorders, including bulimia nervosa, anorexia nervosa, and binge eating disorder, as well as depression and low self-esteem (Pinhas, Toner,Ali, Garfinkel, & Stuckless, 1999; Smolak & Levine, 2001; Tiggeman & Stevens, 1999; Wiederman & Hurst,1998).

Children as young as age five have reported weight concerns & BID (Ricciardelli & McCabe, 2001; Smolak & Levine, 2001). BID is also linked to low self-esteem and depression, especially in overweight and obese youth (Heinberg & Thompson, 2009; Smolak & Thompson, 2009; Stice & Bearman, 2001; & Tiggmann, 1997).

Much of the research on BID has focused on women and girls because of the higher prevalence of BID in females. In Western societies the female physical ideal is one that is increasingly thin, as the average weight and waistline of women is gradually increasing (Thompson & Heinberg, 1999). Women's dissatisfaction with body image is so common that it is referred to as "normative discontent" (Rodin, Silberstein, & Striegel-Moore, 1985). Cash & Henry (1995) found in a national survey that almost half the

women participating gave a negative evaluation of their overall appearance, and reported a preoccupation with becoming or being overweight. Areas of dissatisfaction most commonly cited for both women and men are weight and waist/abdomen circumference (Sawyer & Thompson, 2002). Although dissatisfaction with weight has been repeatedly demonstrated to a higher degree in women, Caucasians, and among those individuals who have more greatly internalized western sociocultural appearance standards, dissatisfaction with weight has been indicated across ethnicity, gender, and age (Cash & Henry, 1995; Gabe & Hyde, 2006; Robinson, Chang, Haydel, & Killen, 2001).

Women consistently report being more dissatisfied with their body image then men, although acknowledgement of BID being present among boys and men is growing (Jones, 2004; Kostanski, Fisher, & Gullone, 2004). Current studies of BID are acknowledging that male physical ideals for Western Societies include physical traits of muscularity and little body fat. For men this may translate into a desire to lose weight or to be bigger (more muscular). In studies of BID in male populations, males do in fact appear to be evenly divided between those who want to lose weight and those who want to gain weight, and a preoccupation with muscularity is expressed (Cohane & Pope, 2000; Galli & Reel, 2009; Jones, 2004; McCreary & Sasse, 2000; Smolak, Murnen, & Thompson, 2005).

In Western Society physical appearance plays a much greater role for women than men with regard to status, while a broader range of qualities are important for status in men. These qualities may include physical appearance, as well as intelligence, wealth, or power (Wilcox, 1997). While physical appearance and related weight status may not play

as pivotal a role for men as women, men still exhibit BID. Men in western society face social norms that differ from women in a way that might make assessing the perceived importance of body image difficult. Men have expressed that while they acknowledge feeling "pressure to be perfect" which includes attaining muscularity with very low body fat, a strong investment in one's appearance or exercising for the sake of appearance is not acceptable (Adams, Turner, & Bucks, 2005; Grogan & Richards, 2002). In a study by Adams, Turner, and Bucks (2005), men who described experiences of body image dissatisfaction were quick to point to "health reasons" as their motivation for working out to lose weight/gain muscle, as opposed to "appearance reasons".

Sexual Orientation and Body Image

The interaction of sexual orientation and body image is still unclear. In a study investigating the importance of appearance, satisfaction with body parts, and concern with dieting and thinness, heterosexual women and gay men exhibited more dissatisfaction with areas of their body, placed more importance on physical appearance, and were more concerned with thinness (for heterosexual women) and muscularity (for gay men) then heterosexual men and lesbian women (Conner, Johnson, & Grogan, 2004; Kelly, Neufeld, & Musher-Eizenman, 2010). Compared to heterosexual men, gay men have displayed more dissatisfaction with current muscularity, demonstrated a higher desire to be more muscular, engaged in behaviors to increase muscularity, and disclosed that appearance was important to them and an important part of how others viewed them (Yelland & Tiggmann, 2003). Yelland and Tiggmann (2003) suggest that gay male culture emphasizes physical attractiveness as having more importance to self-worth, and

is perceived as more important to how others will regard them than for heterosexual male culture. Share and Mince (2002) found that lesbian women possessed higher sexual attractiveness body esteem than heterosexual women. Lesbian women also demonstrated less internalization of cultural standards for female attractiveness than heterosexual women (Bergeron & Senn, 1998; Share & Mince, 2002). With regards to female body norms, lesbian women have demonstrated a wider range of body acceptance than heterosexual women (Bergeron & Senn, 1998). For all these differences, there have also been studies that have found that BID and body image investment do not vary across sexual orientation (Beren, Hayden, Wilfley, & Grilo, 1996; Herzog, Newman, & Warshaw, 1991). It appears that although some research is beginning to point in the direction that gay men experienced higher BID than heterosexual men, and lesbian women experience lower BID than heterosexual women, there still exists contradictory findings.

Overweight and Body Image

In Western cultures thinness or leanness is often associated with attractiveness, popularity, and personal success (Smolak, Murnen, & Thompson, 2005; Thompson & Heinberg, 1999). Youth who grow up overweight not only fail to conform to cultural ideals of thinness, they are more likely to experience discrimination due to their weight and negative stereotyping by peers, parents, and teachers (Davison & Birch, 2004; Latner & Stunkard, 2003; Neumark-Sztainer et al., 2002; Neumark-Sztainer, Story, & Harris, 1999). These stereotypes include being labeled as sloppy, lazy, lacking in self-discipline, overindulgent, and possessing poor hygiene (Puhl & Brownell, 2001). Children are more

hesitant to play with overweight than normal weight peers, and are more likely to describe overweight peers as dirty, ugly, stupid, lonely, lazy, and sad (Bell & Morgan, 2000; Brylinskey & Moore, 1994; Cramer & Steinwert, 1998; Turnbull, Heaslip, & McLeod, 2000; Wardle & Golding, 1995).

Overweight youth also deal with pressures to conform to a physical body shape that is difficult or impossible to attain. For both youth and adults, body weight and shape is viewed as essentially "in the control" of the individual, conferring a sense of responsibility and failure on the part of the overweight individual to not obtain a lower body weight (McKinley & Hyde, 1996; Tiggmann & Rothblum, 1997). Negative feedback from several different settings and an implied sense of personal responsibility for one's weight status can contribute to the development of body image dissatisfaction for overweight youth and adults.

Body Image over the Lifespan

Men and women gain roughly 10 lbs. (4.6 kg) per decade of life until their 50's, which health-wise is associated with lower mortality (Andres, 1989). As women age this weight gain is typically expressed as increased fat mass and decreased muscle mass (Frontera, Hughes, Lutz, & Evans, 1991; Hughes et al., 2004). Given the natural change in body composition and greater societal emphasis on women's appearance, it might be assumed that women's BID would increase as they age. Instead of increasing, women's BID throughout adulthood has been shown to remain relatively stable, across relationship status, occupational status, and education level (Stevens & Tiggemann,1998; Webster & Tiggemann, 2003). Other research has suggested that women's desire to be thinner,

preoccupation with weight, and negative appearance evaluation is also consistent across age groups (Allaz, Bernstein, Rouget, Archinard, & Morabia, 1998; Cash & Henry, 1995; Cash, Winstead, & Janda, 1986; Hetherington & Burnett, 1994). Studies using Fallon and Rozin's (1985) Figure Rating Scale have found BID scores to be similar across age groups (Altabe & Thompson, 1993; Rozin & Fallon, 1988; Stevens & Tiggemann, 1998).

In a study of adult men, concerns about aging were correlated with concerns about appearance and drive for thinness (Gupta & Schork, 1993). At every age, men's satisfaction with their bodies is higher and they rate themselves as better looking than women rate themselves (Feingold & Mazella, 1998). However, this difference between men and women's BID gets smaller with age, as adult men show an gradual increase in the levels of BID they experience (Feingold & Mazella, 1998).

Although there does not appear to be significant change to men and women's BID scores in later years, some studies have investigated the perceived importance of body image to adults age 50 and over (Cash et al., 1986; Pliner, Chaiken, & Flett, 1990). In this age group the importance placed on size and shape of body decreased, which could be interpreted as BID being experienced as less distressing at this age. This phenomenon has been termed "secondary control" by researchers (Thompson et al., 1998). Tiggemann (2004) hypothesized that older women coped with the reality that changes to their body moved them further away from their imagined "ideal" by minimizing the importance and centrality of appearance related attributes to who they are. Studies showing that older aged women demonstrate less anxiety about their appearance, a lower drive for thinness,

and less disturbed eating behaviors than younger women might be explained by this hypothesis (Lewis & Cachelin, 2001; Tiggemann & Lynch, 2001).

Environmental Influences

Cultural ideals of physical attractiveness are determined by the society that an individual lives in. Messages about what is physically attractive, how much someone is expected to conform to this ideal, and acceptable methods of changing one's physical appearance to better match ideals are largely communicated through parents, peers, and mass media (Cash, 2002). Parental, peer, and mass media influence on children's body image and BID are among the most commonly looked at environmental factors in current body image development research.

Parental Influences. Children's developing body image and eating behaviors are especially influenced by parental input (Smolak & Levine, 2001). Parents provide the child with food and care for his or her appearance, and can give negative, neutral, or positive input about the child's appearance and eating habits (Smolak & Levine, 2001). A study with 9-year-old girls showed that girls who received more parental and peer reinforcement for thin body ideals exhibited greater fat stereotyping. Some of the parental reinforcement of thin ideals that have been studied is use of direct statements and modeling weight concern (Smolak et al., 1999; Thelen & Cormier, 1995). A significant correlation has been found between parents making weight-based comments to their children and children exhibiting impacted body esteem (Smolak et al., 1999; Thelen & Cormier, 1995). Mothers who have complained about their own weight or exhibit high

dietary restraint scores were found more likely to have daughters with negative body esteem or high dietary restraint scores (Hill & Franklin, 1998; Smolak et al., 1999).

Peer Influences. In youth peer relationships are social contexts that have the potential to greatly influence body image development (Jones, 2004). Peers create a "social world" with norms and expectations that reflect greater society and shape attitudes around areas such as academic performance, antisocial activities, and appearance (Capaldi, Dishion, Stoolmiller & Yoerger, 2001). Jones (2004) proposed the term "appearance training" to describe the conversations about clothing, looks, and attractiveness that provide context for attending to and interpreting information relevant to appearance norms. For children, the large amount of time spent with peers and importance of peer relationships can mean that this appearance training becomes a strong mechanism of shaping body image and BID. Overweight children are at the disadvantage of possessing a visible appearance trait (weight) that is not endorsed by mainstream cultural ideals. Pro-thinness or anti-fat messages can be woven into the appearance training that obese children receive, further reinforcing BID experiences.

Teasing and Body Image

It has been estimated that 9% to 15% of children in the United States are the victims of chronic teasing and bullying (U.S. Department of Education, 1999). Teasing is a complex social interaction consisting of verbal and nonverbal communication, the intent and interpretation of which may be playful or humorous, annoying, or even hurtful and distressing (Mooney, Creeser, & Baltchford, 1991; Shapiro, Baumeister, & Kessler, 1991). Teasing is a complex concept to study because it can be used as positive or

affectionate communication, referred to as prosocial teasing, or can be insulting or abusive, referred to as antisocial teasing (Keltner, et. al., 2001). For the purposes of this study, only antisocial teasing was looked into as a relevant concept, and will be referred to as "teasing". Bullying is a related concept to teasing. Teasing and bullying have been categorized together under acts of "peer victimization", which can be detrimental to the victim's immediate and long-term emotional and psychological well-being (Horowitz et. al., 2004). Bullying has been defined as consisting of repetitive, persistent patterns of verbal or physical behaviors that are intended to inflict deliberate physical, verbal, or emotional abuse on a targeted child (Banks, 1997; Olweus, 1997). With bullying there typically exists a power differential between the perpetrator and victim in which the victim is unable to defend themself (Storch & Marsia-Warner, 2004). Teasing differs from bullying in that bullying can encompass a variety of pervasive behaviors, the intent of which is aggressive and harmful, and a power differential exists between perpetrator and victim (Olweus, 1997). Teasing involves verbal communication that communicates rejection, which may or may not be as persistent or threatening in nature as bullying, and may or may not involve a power differential between individuals involved (Keltner et. al., 2001).

In children and adolescents teasing has been associated with social anxiety, depression, loneliness, poor self-esteem, low social competency and low levels of social acceptance (Callaghan & Joseph, 1995; Neary & Joseph, 1994; Walter & Inderbitzen, 1998). More frequent teasing experience in childhood was also found to have a positive

relationship with depression, anxiety, and loneliness in adulthood (McCabe et. al., 2010; Storch et. al, 2004;).

While many children may experience teasing, some children are targeted more than others. Teasing is often directed at one's physical appearance, and overweight is an aspect of physical appearance which teasing is commonly focused on (Cash, 1995; Mooney et al., 1991; Sweeting & West, 2001; Thompson et al., 1995). Eisenberg, Neumark-Sztainer, and Story (2003) reported that overweight and obese children experienced more incidences of teasing and bully victimization than healthy weight children. This weight-based teasing was consistently associated with low body satisfaction, low self-esteem, high depressive symptoms, and suicidal ideation. This was true for both boys and girls across racial, ethnic, and weight groups. Overweight children have reported that the source of most teasing is peers, but that parents, teachers, and other family members had teased them also (Hayden-Wade et al., 2005). Children who have experienced teasing from two or more sources have been shown to experience a higher frequency of emotional health problems than children who experienced teasing from a single source or no teasing. (Eisenberg, Neumark-Sztainer, & Story, 2003).

There is evidence that weight-based teasing in childhood can affect body image later in life (Gleason, Alexander & Somers, 2000; Thompson et al., 1991; Grilo, Wifley, Brownell, Rodin, 1994). Weight-based teasing experiences have been shown to be related to later development of body image disturbance, in addition to predicting higher BID and disordered eating behaviors in both men and women (Gleason et al., 2000; Grilo et. al., 2005; Thompson, Cattarin, Fowler, & Fisher, 1995). Some children and adolescents seem

to be more susceptible to the effects of teasing, by developing negative outcomes associated with teasing while others do not. Cash (1995) interviewed young adult women about weight-based teasing they experienced before the age 18. Cash found that young women's perceived severity of teasing that they experienced was related to development of future BID rather than the presence or absence of teasing.

Weight Loss and Body Image

It has been assumed that weight loss will repair the negative psychological and emotional impacts of BID. There has been conflicting research as to the validity of this assumption (Mayhew, McVey, Bardick, & Ireland, 2012).

Cash (1994) found that women who participated in a weight loss intervention and lost weight had improved body image post-weight loss, while other studies have suggested that improvements in BID may not be influenced exclusively by weight loss. Foster, Wadden, & Vogt (1997) found that after a weight-loss intervention, weight loss predicted lowered BID. This change in BID was achieved after only a modest loss in weight, and did not continue to decrease the more weight was lost. This study also supplemented the weight-loss intervention with cognitive-behavioral therapy, which might have contributed to the decrease in BID (Foster, et al., 1997). Rosen, Orosan, and Reiter (1995) targeted BID with therapy in a sample of overweight women and achieved significant decreases in BID scores without concurrent weight loss.

Another study suggests that the amount of weight lost may determine the degree of improvement to BID. Wilson (1993) found that participants who were heaviest (obese)

experienced a greater decrease in body image dissatisfaction after weight loss than the "less" obese or overweight individuals.

Annis, Cash, and Hrabosky (2004) assessed body image and psychosocial differences between nonclinical populations of stable average weight (SAW), currently overweight (NOW), and formerly overweight (FOW) women. FOW women experienced poorer BID than SAW women but not by a significant amount. FOW women were similar to NOW women with greater occurrence of fat anxiety, weight vigilance, dieting, eating restraint, and dysfunctional appearance investment than SAW women. Findings from this study suggested that although BID may have decreased for the FOW group, preoccupation about their weight and appearance persisted. Adami, Meneghelli, Bressani, and Scopinaro (1999), and Cash, Counts, and Huffine (1990) also found that concerns about weight and elevated body image dissatisfaction persisted even though weight loss had occurred.

Adami et al. (1998) investigated post-obese individuals who had received a weight-loss intervention. Pre-intervention both early-onset obesity (onset in childhood or adolescence) and adult-onset obesity participants had equivalent BID scores. BID scores for both groups were higher than for never-obese controls. Post-intervention, early-onset obesity participants had higher BID scores than adult-onset obesity participants. Adult-onset obesity participants had BID scores post weight loss roughly equivalent to never-obese controls. This study suggests that timing of onset of overweight may contribute to higher BID in formerly overweight individuals. Other studies have confirmed that individuals who experience early-onset obesity have higher BID scores than individuals

with adult-onset obesity, after controlling for current BMI (Grilo, Wilfley, Brownell, & Rodin, 1994; Stunkard & Burt, 1967; Wardle, Waller, & Fox, 2002).

Statement of the Problem

Obesity is a risk factor for many negative physical and psychosocial outcomes (Cornette, 2008; Decaluwe et al., 2003; Ebbeling, Pawlak, & Ludwig, 2002; Hesketh et al., 2004; Puhl & Latner, 2007). In childhood these psychological correlates include depression, poor self-esteem, body dissatisfaction, anxiety, eating disordered symptoms, and adoption of high-risk behaviors (Cornette, 2008; Decaluwe et al., 2003; Ebbeling et al., 2002; Hesketh et al., 2004). Social correlates include stigma, social isolation, discrimination, and poor academic performance (Ebbeling et al., 2002; Puhl & Latner, 2007). Obese children are at an increased risk of becoming overweight adults (Singh, Mulder, Twisk, Van Mechelen, & Chinapaw, 2008). Overweight adults show increased risk for numerous health problems, as well as lower earning potential, stigmatization and bias, lower self-esteem and body image disturbance (Adams & Bukowski, 2008; Matz, Foster, Faith, & Wadden, 2002; Puhl & Latner, 2007; Puhl & Heuer, 2009).

Since obesity alone does not lead to these various negative correlates, researchers have looked at the concept of body image as a mediating factor between obesity and psychosocial risks (Adams & Bukowski, 2008; Matz, Foster, Faith, & Wadden, 2002). Body image, a component of self-concept, is formed by interaction between the personal factors of the individual, environmental stimuli, and mediating self-schemas around body image (Cash, 2002). In Western societies thin ideals of physical beauty are the mainstream norm (Thompson, & Heinberg, 1999). Parents, peers, and media are major environmental sources of information in the formation of children's body image (Cash,

2002). In childhood and adolescence weight-based teasing delivers specific, focused negative messages to the child about their weight and can become internalized. These negative body image messages the child internalizes can develop into disturbed body image, or body image dissatisfaction (BID). BID is the discrepancy between one's perceived body image and ideal body image (Wood, Becker, & Thompson, 1996).

Body image dissatisfaction has been associated with depression, disordered eating behaviors, diagnosis of eating disorders, and lower self-esteem (Foster, Wadden, & Vogt, 1997; Neumark-Sztainer et al., 2006; Sarwer, Wadden, & Foster, 1998; Smolak & Levine, 2001; Stice, Mazotti, Krebs, & Martin, 1998). Body image dissatisfaction is higher in individuals who are overweight versus average weight, and is more prevalent in women than men (Clark & Tiggeman, 2008; Rodin, et al., 1985; Puhl & Brownell, 2001). Individuals who were formerly obese but have lost weight have shown scores of elevated body image dissatisfaction as compared with normal-weight individuals who have never been overweight. Body image is subjective and represents how an individual perceives their body to look like, not what their objective physical appearance may be. If an individual has been overweight their internalized image may still match their overweight self even though they have lost weight. This has implications for some of the negative psychosocial correlates associated with overweight individuals, such as depression, disordered eating, and risk behaviors (Grilo, Wilfley, Brownell, & Rodin, 1994; Stunkard & Burt, 1967; Wardle, Waller, & Fox, 2002).

Being overweight in childhood and adolescence may be especially impactful to body image because of the importance of these stages to identity formation. If these

formerly overweight adults also experienced weight-based teasing, the impact might be strengthened. Therefore, in adults who were overweight as children, high BID may persist even as adults eventually lose excess weight.

This study focused on normal weight adults (as determined by self-reported BMI), and assessed for elevated body image dissatisfaction resulting from experiences being overweight in childhood or adolescence. Of the participants who were overweight in childhood or adolescence, perceptions of weight-based teasing were also evaluated, as this factor was hypothesized to further elevate body image dissatisfaction scores.

Hypotheses

The first hypothesis predicted a relationship between having experienced overweight status as a child, and higher body image dissatisfaction (BID) scores as a normal-weight adult. These results will be reflected in both males and females, with males showing less of an overall effect.

1. There will be significant differences between formerly overweight and never overweight BID scores in current normal-weight adults.

    a. BID scores are predicted to be higher for women than for men.

2. In formerly overweight adults there will be a positive correlation between the frequency and perceived importance of weight-based teasing experiences and BID scores.

    a. BID scores are predicted to be higher for women than for men independent of teasing experiences.

Method

Participants and Procedures

Of the 199 participants in this study, 83.9% of the respondents identified as female (n = 167), 13.1% identified as male (*n* = 26), 1.5% identified as transgender (*n* = 3), and 1.5% (n = 3) identified as other. The most common age range for women, men, and other was 29-31, and the most common age range for transgender was 25-28. Reported ethnicities included 0.5% African/African (*n* = 1), 1.5% American Indian or Alaskan Native (*n* = 3), 1.5% Asian (*n* = 3), 76.9% Caucasian (*n* = 153), 6% Latino (*n* = 12), 2.5% other (*n* = 5), 9.5% more than one ethnicity (*n* = 19), and 3% (*n* = 3) who declined to respond to this question. Participants were recruited through posts to the social networking site Facebook, and the online community board Craigslist, Humboldt County chapter. The post (Appendix A) invited participation in this study, described it as an investigation into the relationship between body image, childhood weight status, teasing experiences, and gender. The description included estimated time to complete the study (10-15 minutes), and a hotlink to the SurveyMonkey® website. My name and contact information was included for questions or comments that might arise. Information about informed consent was also included on the post, and by clicking the hyperlink and statement “I agree”, participants were agreeing to terms of informed consent and were confirming that they were at least 18 years of age.

SurveyMonkey® is a web-based company that provides a forum for researchers to post surveys and questionnaires that participants can complete online. Use of

SurveyMonkey® allowed for ease in obtaining participants because participants could complete the questionnaires when their schedule allowed anywhere that they had access to a computer. SurveyMonkey® also ensured anonymity of the participants.

The invitation to participate and informed consent document was the first page each participant encountered in this survey. To prevent priming effects the order of the next five forms used in this survey (the Perception of Teasing Scale, the Body Shape Questionnaire, demographic questionnaire, BMI estimation, and overweight status in youth questions) appeared in random order. The final form ("thank you for participating and available resources") appeared last for all participants. The surveys in total took participants 5 to 10 minutes to complete, but as much time as needed could be used to complete the surveys.

Measures

Demographic questionnaire. All participants were asked to provide demographic information (gender, age, and ethnicity, and sexual orientation).

Estimation of current BMI. Body Mass Index (BMI) was assessed by asking participants to estimate their current weight and height on a self-report measure. BMI was calculated by BMI = weight (lb) / [height (in.)]2 x 703 (Stommel & Schoenborn, 2009). English units (feet, inches, and pounds) were used for measuring height and weight. Categories for BMI's are: underweight < 18.5, normal = 18.5 - 24.9, overweight = 25.0 – 29.9 and obese > 30.0. Self-reported measures of height and weight were selected because self-reports of height and weight have shown high correlations with objectively measured height and weight (Kuczmarski, Kuczmarski, & Najjar, 2001; Tehard, van

Liere, Com Nougue, & Clavel-Chapelon, 2002). Other studies have shown self-reported height and weight are considered to have acceptable adequacy (Spencer, Appleby, Davey, & Key, 2001; Weaver, Kushi, McGovern, Potter, Rich, King et al., 1996). A validation study of self-reported BMI's in a sub-sample of 124 Project EAT-II participants found high correlations between self-report and objective measures of weight (Kuczmarski, Kuczmarski, & Najjar, 2001).

Weight estimation in Youth. Participants were asked if they experienced being overweight before the age of 18, and if so, if overweight was the result of pregnancy.

The Perception of Teasing Scale (POTS). The POTS (Thompson, Cattarin, Fowler, & Fisher, 1995) is a revised extension of the Physical Appearance-Related Teasing Scale (Thompson, Fabian, Moulton, Dunn, & Altabe, 1991). The POTS consists of 21 items answered on a five-point scale. The first 12 items measure the frequency and effect of being teased about weight in childhood and adolescence. The next 10 items measure the frequency and effect of being teased about abilities/competencies in childhood and adolescence. For this purposes of this study, only the first 12 items pertaining to weight-based teasing was used in data analysis, although participants received the full measure to maintain the integrity of the instrument (see appendix F). For each question measuring the frequency that a teasing behavior was experienced, unless the participant responded "never", they filled out an accompanying question about "how upset" they felt. Scoring involved taking the sum of all frequency questions for overall frequency of teasing, and the sum divided by the number of effect questions completed. Higher scores reflect higher frequencies of weight-based teasing experiences growing up.

The POTS yields a six-item weight-related teasing subscale and a five-item competency-related teasing subscale, both formed by summing the applicable items. It has shown high convergence with other measures of teasing and exhibits acceptable internal consistency and reliability (Thompson et al., 1995).

Body Shape Questionnaire (BSQ 8-C; Evans and Dolan, 1993). The BSQ 8-C is a shortened version of the Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987). The original BSQ is a self-report questionnaire, consisting of 34 questions measuring the extent of psychopathology of concerns about body shape. The BSQ-8C is a short version of the BSQ that measures body shape dissatisfaction, and consists of eight items taken from the full version (see appendix G). The BSQ-8C has been shown to possess excellent psychometric properties when administered as a stand-alone instrument (Pook, Tuschen-Caffier, & Brahler, 2008; Welch, Lagerstrom, & Ghaderi, 2012). The items are rated on a 6-point Likert scale ranging from "never" to "always." Another potential advantage of the BSQ-8C is its gender non-specificity. In the original version of the BSQ, wording of some of the questions are gender-specific to females, making it less appropriate for use with males. The BSQ-8C does not contain any items that could be interpreted as exclusively for females. For example, “Has seeing your reflection (e.g., in a mirror or shop window) made you feel bad about your shape” is a gender-neutral question. The BSQ-8C is a one-dimensional instrument with high internal consistency, excellent test–retest reliability and high convergent validity (Pook, Tuschen-Caffier, & Brahler, 2008; Welch, Lagerstrom, & Ghaderi, 2012).

Data Analysis

For all data analysis, IBM's SPSS 21 was used. SPSS was selected because it is a commonly used statistical package in social sciences. For hypothesis one, a linear regression model was selected to determine whether childhood weight status, or gender independent of childhood weight, predicted body image dissatisfaction (BID) in adulthood. Weight status and gender were entered as predictors for BID. For hypothesis two, a linear regression model was used to determine whether teasing experiences, as well as gender independent of childhood teasing experiences predicted BID in formerly overweight individuals. The teasing experiences variable was determined by two factors: the perceived frequency of teasing experiences (teasing frequency), and the perceived effect of teasing experiences (teasing effect). With the teasing frequency variable, a median split was preformed and frequency of teasing was divided into high (teasing score > 14) and low (teasing score < 14) groups. Teasing frequency, teasing effect, and gender were entered as predictors for BID. Significance for all tests was determined at $\alpha = .05$.

Summary statistics

A total of 235 individuals responded to the survey, with 199 participants completing all the questions. Due to the small response size, participants who identified as transgender ($n = 3$) and other ($n = 3$) were removed from analysis. Because this study is focused on adults who currently fall within the "normal" weight range (defined as BMI = 18.5 - 24.99), BMI was calculated for remaining participants using height and weight totals they provided. A total of ($n = 86$) participants met the requirements for current BMI = 18.5 – 24.99. Participants ($n = 107$) were eliminated from analysis because their current

weight fell below (n = 5) or above (n = 102) the “average” weight range of interest. For both hypotheses, data was checked for outliers, defined as values that were more than two standard deviations from the mean. No outliers were identified.

Sample size for the regression analysis included 60 individuals (n = 52 female, n = 8 male), who were not overweight before age 18, and 26 individuals (n = 23 female, n = 3 male), who were overweight before age 18. For participants who were overweight in youth, BID scores were M = 27.92, SD= 10.37 (women M = 29.78, SD = 9.43, men M = 13.66, SD = 4.6), and for participants who were never overweight, BID scores were M = 21.9, SD = 7.61 (women M = 22.67, SD = 7.69, men M = 16.87, SD = 4.88).

Results

For descriptive statistics, see tables one and two. The variables former weight status and gender explained 20% of the variance in BID scores (R^2 = .20, adjusted R^2 = .18, $F(2, 83) = 10.60$, $p < .05$). Consistent with the predictions of the first hypothesis, never overweight individuals had significantly lower BID scores than former overweight individuals, $\beta = -.304$, t (85) = -3.10, $p < .01$. Gender was also significantly associated with higher BID. Specifically, women had significantly higher BID than men, even controlling for former weight status, $\beta = .326$, t (85) = 3.36, $p < .01$

The variables teasing frequency and gender explained 41% of the variance in BID scores (R^2 = .41, adjusted R^2 = .36, $F(2, 23) = 7.87$, $p < .05$). Former overweight individuals who experienced a high frequency of weight-based teasing had significantly higher BID scores than those who experienced a low frequency of weight-based teasing, $\beta = .388$, t (25) = 2.41, $p < .05$. Gender remained a significant predictor of BID after controlling for childhood teasing, with being a woman contributing to higher BID scores $\beta = .481$, t (25) = 2.99, $p < .01$.

The variables teasing effect and gender explained 26% of the variance in BID scores (R^2 = .26, adjusted R^2 = .19, $F(2, 23) = 4.00$, $p < .05$). There was no significant relationship between perceived effect of teasing on BID in adulthood, $\beta = .045$, t (25) = .25, $p > .05$. Gender remained a significant predictor of BID after controlling for perceived effect of teasing. Being a woman was associated with a significantly higher BID, $\beta = .497$, t (25) = 2.70, $p < .05$.

Table 1

Formerly Overweight and Never Overweight Descriptive Statistics

Variables	BID			
	Frequency	Percentage	*M*	*SD*
Former Overweight	*n* = 26	30 %	27.92	10.37
Female	*n* = 23	88 %	29.78	9.43
Male	*n* = 3	12 %	13.66	4.60
Never Overweight	*n* = 60	70 %	21.90	7.61
Female	*n* = 52	87 %	22.67	7.69
Male	*n* = 8	13 %	16.87	4.88

Table 2

Descriptive Statistics for Teasing Frequency and Teasing Effect Scores

Variables	BID			
	Frequency	Percentage	*M*	*SD*
Teasing Frequency	*n* = 26			
High	*n* = 12	46 %	32.83	8.82
Low	*n* = 14	53 %	23.71	9.99
Teasing Effect	*n* = 26		27.92	10.37

Discussion

This study investigated the effect of childhood weight status, gender, and weight-based teasing on body image dissatisfaction (BID). Participants who were selected for analysis were currently "average" weight (BMI = 18.5 – 24.99). Participants were asked about their body weight history before age 18, and were divided into two groups: those who had been overweight sometime before age 18 not due to pregnancy, or those who had not been overweight before 18. Hypothesis one included both formerly overweight and never overweight weight-status groups, and investigated former weight status's contribution to BID. Women were expected to show a greater overall effect then men. Hypothesis two included only formerly overweight adults who had experienced overweight status sometime before age 18 that was not due to pregnancy. Participants were asked about weight-based childhood teasing experiences, and rated the "frequency" of teasing experienced and the subjective "effect", or distress experienced around weight-based teasing. Higher frequency and effect scores were anticipated to contribute to higher BID scores.

Results from hypothesis one suggest that former weight status influences BID in current "average" weight adults. In hypothesis two, support was found for the prediction that greater frequency of weight-based teasing experienced in childhood in formerly overweight adults led to increased BID. However, a median split was preformed when analyzing the data for the regression model that included frequency of teasing and gender. This split may have decreased statistical power through reducing sample size.

In hypothesis one and two, gender was also found to be a significant predictor of BID. If the scale used to assess BID and body image concerns in men used language and concepts more specific to the male experience, this outcome might be affected. It is possible that assessing BID in men and women requires different wording or concepts, and that the real or perceived pressure men experience to minimize the importance of body image concerns continues to be a challenge to accurately assessing BID in men (Grogan & Richards, 2002; Adams, Turner, & Bucks, 2005). It is possible that use of a BID scale that reflects the language of body image concerns for male individuals may better reproduce McCabe and Ricciardelli's (2004) findings that although men score lower on measures of BID then women, they do experience a pattern and consistency of BID similar to women.

Limitations

There were several limitations to this study. The majority of participants were Caucasian, female, straight, and age 29-31. This limits the generalizability of findings to other ethnic/racial groups, genders, sexual orientations, and age groups. Of the 235 respondents to this study, only 86 ultimately met the requirements for inclusion. This suggests that efforts to collect an even greater number of respondents would be recommended for future studies as the target group represents a small sub-section of the population. Gathering a larger or more diverse sample size might lead to different outcomes in significance between former weight status, weight-based teasing experiences, and BID. To determine participant weight history and history of teasing experiences, retrospective surveys were used. This method is useful in obtaining

historical data in a quick and efficient way, but because of the reliance on individual memory, the data obtained can be biased due to poor recall, the amount of time elapsed contributing to a change in perception of events, or even the subjective nature of asking for personal experience.

Potential Implications

Results of this study aim to contribute to the growing body of literature in the field of body image. The purpose of this study was to determine the impact of previous overweight status and weight-based teasing experiences on BID in currently average-weight adults. This study suggests that having been overweight in childhood can contribute to higher BID even if the individual is currently of "average" weight. Also, the frequency that an individual experiences weight-based teasing can also impact BID after weight loss. The psychological community may find this information helpful as resources shift to begin to address the physical and psychological complications that are present for the growing population of overweight and obese children and adults in the U.S. Potential therapeutic benefits of these findings include supporting the assertion that an individual's BID cannot be determined by assessing their current weight status. In addition, weight history and teasing or environmental reinforcements for body weight and shape must be taken into consideration when determining body image satisfaction or BID.

Future Research

Future research investigating the impact on body image of former weight status would be advised to recruit more participants. After requirements for this study were met the participant sample size was small, especially the formerly overweight group and the

male participants for both never-overweight and formerly overweight groups. Gathering an even larger pool of potential participants might also increase the diversity of selected participants. More research is needed exploring the effects of both former overweight or current overweight status and BID in gay, lesbian, and transgender communities, across different ethnicity and cultures, across generational cohorts, throughout the lifespan, and for adults over 50. A greater number and diversity of participants would be the most immediate benefit to replications of this study.

Other suggestions for future research include development of more precise measures to identify the subjective experiences one has had in the past pertaining to their weight status, or more longitudinal studies including analysis of weight-status, BID, and other weight-related psychological correlates.

The lasting impact of childhood weight status on current body image is one small piece of the relationship individuals have with their self-concept. For some, this piece carries a greater impact than for others. How we have viewed ourselves in the past, partially shaped by environmental reinforcements around us, continues to contribute to current behaviors and ways of seeing ourselves.

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APPENDIX A

Recruitment Letter

Dear potential research participant,

I am inviting you to participate in a study investigating the relationship between gender, body weight in youth, teasing experiences in youth, and body image. I am a psychology graduate student at Humboldt State University in Arcata, CA. I am looking for participants 18 years or older.

If you are interested, click the link below and you will be directed to a set of questions about body weight and body image. Completion of the surveys is anticipated to take 10 to 15 minutes, but you will have as much time as you need.

Your participation in this study is furthering the body of knowledge around body image issues. Information collected here is used for research purposes only.

All information that you provide will remain *confidential*. No personal information will be associated with your responses. Only the researcher, research assistants, and faculty supervisor will view your responses.

If you chose to participate, you are free to discontinue participation at any time without penalty.

If you have any questions about this study at this time or at a later date, please feel free to contact me.

Investigator: Shawnee Thayer

Master of Arts in Psychology, Counseling Candidate

Humboldt State University

sot2@humboldt.edu

If you have concerns with any part of this study, please contact the IRB Chair, Dr. Ethan Gahtan, at eg15@humboldt.edu or (707) 826-4545.

If you have questions about your right as a participant, please report them to the IRB Institutional Officaial at Humbot State University, Dr. Rhea Williamson, at Rhea.Williamson@humboldt.edu, or (707) 826-5169.

LINK TO PARTICIPATION IN RESEARCH STUDY:

_____

APPENDIX B

INFORMED CONSENT TO ACT AS A RESEARCH PARTICIPANT

I agree to have Shawnee Thayer carry out the following procedures for experimental purposes:

I acknowledge that clicking on the hyperlink below will direct me to an informed consent document. If I give consent and wish to continue on with the study, I will complete 5 other surveys. Completion of all surveys will take approximately 15 minutes but I will have as much time as needed to complete them. Once I have completed the surveys I will be directed to a resource page where mental health resources will be listed.

The purpose of this study is to explore the relationship between childhood weight status, teasing experiences, and body image dissatisfaction.

The site SurveyMonkey® that I will be using to participate in this study protects my identity by allowing me to create a password-protected, anonymous user name to complete the surveys. Identifying information will NOT be associated with my responses to these surveys or data collection phase of this study. For more information I can do to SurveyMonkey®'s Privacy Policy link at the bottom of their webpage. User identification is not required to review the Privacy Policy.

Minimal risks to participants are anticipated. A potential risk is the recall of distressing memories from youth. Resources will be made available at the end of the surveys should this occur and is needed. Although participation in this study is not anticipated to significantly benefit me, my participation is contributing to a growing body of knowledge about correlates of body image that may have therapeutic implications in the future.

If I have questions about the survey or my participation, or would like additional resources I can contact Shawnee Thayer at sot2@humboldt.edu, or Professor Emily Sommerman, Psy. D, at es47@humboldt.edu. If I have questions regarding my rights as a participant, or any concerns regarding this study, I can report them to the IRB Institutional Official at Humboldt State University, Dr. Rhea Williamson, at Rhea.Williamson@humboldt.edu or (707) 825-5169.

I understand that my participation in this study is entirely voluntary and I may decline to enter this study or may withdraw from it at any time without penalty. I understand that the investigator may terminate my participation in the study at any time.

List of online resources:

helpguide.org

getselfhelp.co.uk

goodtherapy.org

Please print this informed consent form to retain for your future reference. Thank you for

your participation.

By checking the appropriate box below, I can either consent or decline participation in this research study:

Yes, I am at least 18 years of age and I do consent to participate in the current research study

No, I do not consent to participate

APPENDIX C

DEMOGRAPHIC QUESTIONNARIE

Please carefully select ONE response that most accurately applies to you:

1. Gender:

Male

Female

Transgender

2. Age:

18-21	29-31	41-45	56-60
22-24	32-35	46-50	61-65
25-28	36-40	50-55	66+

3. Please select the ethnicity you most identify with:

African/African American	American Indian or Alaskan Native
Asian	Caucasian
Latino	Middle Eastern
Native Hawaiian or Pacific Islander	Other
More than one ethnicity	No response at this time

Thank you for completing the demographic questionnaire!

APPENDIX D

SELF-REPORT BODY MASS INDEX

Accurate information is important to research. Please be as accurate as possible. Thank you for your participation!

Height: ____ (feet) ____ (inches)

Current Weight: _____ (pounds)

APPENDIX E

WEIGHT STATUS IN YOUTH

Accurate information is important to research. Please be as accurate as possible. Thank you for your participation!

During your childhood or adolescence (before age 18), did you think **at that time** that you were overweight?

___ Yes ___ No

If you marked Yes, was your overweight the result of a pregnancy?

___ Yes ___ No

APPENDIX F

PERCEPTION OF TEASING SCALE (POTS)

We are interested in whether you have been teased and how this affected you.

First, for each question rate how often you think you were teased (using the scale provided, "never" (1) to "always" (5).

Never		Sometimes		Always
1	2	3	4	5

Second, unless you responded "never" to the question, rate how upset you were by the teasing "not upset" (1) to "very upset" (5).

Not upset		Somewhat upset		Very upset
1	2	3	4	5

1. People made fun of you because you were heavy.	1	2	3	4	5
How upset were you?	1	2	3	4	5
2. People made jokes about you being heavy.	1	2	3	4	5
How upset were you?	1	2	3	4	5

3. People laughed at you for trying out for sports

because you were heavy. 1 2 3 4 5

How upset were you? 1 2 3 4 5

4. People called you names like "fatso." 1 2 3 4 5

How upset were you? 1 2 3 4 5

5. People pointed at you because you were overweight. 1 2 3 4 5

How upset were you? 1 2 3 4 5

6. People snickered about your heaviness when you walked into a room alone. 1 2 3 4 5

How upset were you? 1 2 3 4 5

7. People made fun of you by repeating something you said because they thought it was dumb. 1 2 3 4 5

How upset were you? 1 2 3 4 5

8. People made fun of you because you were afraid to do something. 1 2 3 4 5

How upset were you? 1 2 3 4 5

9. People said you acted dumb.	1	2	3	4	5
How upset were you?	1	2	3	4	5
10. People laughed at you because you didn't understand something.	1	2	3	4	5
How upset were you?	1	2	3	4	5
11. People teased you because you didn't get a joke.	1	2	3	4	5
How upset were you?	1	2	3	4	5

APPENDIX G

BODY SHAPE QUESTIONNAIRE (BSQ-8C**)**

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

OVER THE PAST <u>FOUR WEEKS:</u>

1. Have you been afraid that you might become fat (or fatter)?

Never | Rarely | Sometimes | Often | Very often | Always

1 2 3 4 5 6

2. Has feeling full (e.g. after eating a large meal) made you feel fat?

Never | Rarely | Sometimes | Often | Very often | Always

1 2 3 4 5 6

3. Has thinking about your shape interfered with your ability to concentrate (e.g. while watching television, reading, listening to conversations)?

Never | Rarely | Sometimes | Often | Very often | Always

1 2 3 4 5 6

4. Have you imagined cutting off fleshy areas of your body?

Never | Rarely | Sometimes | Often | Very often | Always

1 2 3 4 5 6

5. Have you felt excessively large and rounded?

Never | Rarely | Sometimes | Often | Very often | Always

1 2 3 4 5 6

6. Have you thought that you are in the shape you are because you lack self-control?

Never | Rarely | Sometimes | Often | Very often | Always

1 2 3 4 5 6

7. Has seeing your reflection (e.g. in a mirror or shop window) made you feel bad about your shape?

Never | Rarely | Sometimes | Often | Very often | Always

1 2 3 4 5 6

8. Have you been particularly self-conscious about your shape when in the company of other people?

Never | Rarely | Sometimes | Often | Very often | Always

1 2 3 4 5 6

APPENDIX H

Thank you for participating !

The scales you just completed included measures of body image dissatisfaction, perceptions of teasing in childhood, an estimation of current BMI and a request to recall if overweight status was expereinced before age 18. Your participation is contributing to a growing body of research about the impact of overweight experience on body image development that may have therapeutic benefits to others in the future.

If you feel anxious or distressed as a result of this study, please call United Way Crisis Helpline at 1-800-233-4357.