

BODY IMAGE DISSATISFACTION AND SELF-ESTEEM: A CONSUMER-CENTRIC EXPLORATION AND A PROPOSED RESEARCH AGENDA

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ABSTRACT

This article addresses the obesity epidemic, arguably one of the biggest health issues presently facing our society, by taking a critical look at the body image dissatisfaction and self-esteem literatures. The authors delve into three key areas, namely, the constructs themselves, the media effects on these constructs, and finally the relation of these constructs with a key solution, exercise. To address these three areas, three tables are presented to accompany descriptions of each construct which provide a vast and overarching review of the cross-disciplinary literature on the topics. The authors conclude by suggesting several potential research ideas, including a transformative positive psychology intervention which combines cognitive attitude-based framing (to increase body image satisfaction and self-esteem) with applied behavior analysis (to increase exercise frequency).

INTRODUCTION

The virtually unattainable thin body ideal which perpetuates low self-esteem (Martin and Gentry 1997; Grabe, Ward, and Hyde 2008) also brings about the incidence of body image dissatisfaction in girls as young as 5 years old (DeLeel et al. 2009). Magnifying the problem even further, low self-esteem and low body image satisfaction increase the rate of people who report eating and other behavioral disturbances (Furnham and Calnan 1998; Leeper Piquero et al. 2010). Thus, body image satisfaction and self-esteem

continue to be the subject of research in several main disciplines, such as psychology and marketing, and ample sub-disciplines, such as clinical psychology, consumer behavior, women's issues, and abnormal behavior. Consequently, as with many topics which are of interest to various disciplines, a full understanding of the interactions and relationships requires a review of the body of research, an important pursuit.

The true importance of reviewing the non-proprietary literature on self-esteem, body image dissatisfaction, and exercise stems mainly from the interdisciplinary nature of these constructs. For example, the medical and health implications of low body image, in particular for adolescents, can become life threatening and lead to dangerous disorders such as bulimia. Hence, literature in the health and medical journals often addresses their correlations by collecting survey data. Psychology research attempts to further understand the causes of low levels of these constructs, and identify underlying theory for such. Marketing literature delves into the important relationship which media and advertising have with the development and formation of self-image, self-esteem, and so on. However, a broad overview of the existing research concerning the relationship between these three constructs and encompassing multiple disciplines of research does not exist. Accordingly, the authors seek to provide a panoramic view of research based on self-esteem, body image dissatisfaction, and exercise, one which can show the gaps and avenues for a proposed research agenda. Future research in each of these areas will benefit from this overview

and the attempt to fill the research gaps. Marketers can also benefit from the literature review by: (1) developing a broader view of the published research and (2) augmenting the literature stream to include solutions-oriented research.

Over two-thirds of American adults are presently considered either overweight or obese, more than a 36% increase over the last 30 years (Martin, Veer, and Pervan 2007), and more than half of all women are dissatisfied with their overall body image and weight (Grabe and Hyde 2006). Although research shows that a large population of men are also dissatisfied with their body image, they tend to be more concerned with shape and muscular build than with weight (Furnham, Badmin, and Sneade 2002; Carleson-Jones and Crawford 2005). Furthermore, research continues to link low self-esteem with higher levels of body image dissatisfaction and vice versa (Venkat and Ogden 2002; Davison and McCabe 2006). Despite the often inconclusive findings from literature examining the relationship between body image dissatisfaction and self-esteem, some research has suggested that they are negatively correlated, in that a higher level of body image dissatisfaction is negatively related to level of self-esteem (Kostanski and Gullone 1998). Additionally Kostanski and Gullone (1998) find that self-esteem is a significant predictor of perceived body image dissatisfaction. Furthermore, Furnham, Badmin, and Sneade (2002) suggest that health and exercise are associated with higher self-esteem, and that self-esteem is correlated with exercising for the purpose of physical fitness and tone. Therefore, an exercise intervention program which is intended to increase body image satisfaction through the promotion of exercise and healthy eating habits can potentially indirectly improve self-esteem as well. Despite these findings, researchers have yet to provide a conclusive explanation of the causal relationship between body image (dis)satisfaction and self-esteem, which is a particularly fruitful area of research. A complete understanding of this

relationship would provide valuable information for the design of an exercise intervention program targeting the obesity epidemic.

Indeed, the literature investigating the effects of exercise on self-esteem has also demonstrated inconclusive results; however, Frost and McKelvie (2005) argue that self-esteem is generally greater for high exercisers than low exercisers. These researchers are not suggesting a causal relationship here; they are simply suggesting that those who have higher self-esteem may have a higher motivation to exercise than those with lower self-esteem. It seems apparent that body image (dis)satisfaction, self-esteem, and exercise are related, but the relationship is not particularly causal, thus suggesting that exercise can theoretically influence body image (dis)satisfaction, which can in turn influence positive self-esteem, and higher self-esteem can influence healthy exercise practices. This is also an appropriate area for future research, as it appears to produce a circular flow model demonstrating the relationship between body image (dis)satisfaction, self-esteem, and exercise.

The struggle with self-esteem and body image dissatisfaction often begins during childhood, continues throughout adolescence, and frequently escalates into dangerous behavioral disturbances such as eating disorders, depression, and high anxiety (Kostanski and Gullone 1998; DeLeel et al. 2009). Adding to this problem, inactivity-related weight gain among college students is of increasing concern, especially with schoolwork, video games, and computers consuming much of their time. The greatest increase in obesity was found in the 18-29 year old population, between the years of 1991 and 1997. During those years, Americans with a college education in particular rose from 10.6% to 17.8% (Mokdad et al. 1999; 2001). This trend has continued into 2001, with the percentage rising from 14% to 21% among the 18-29 year old Americans with some college education (Mokdad et al. 2003). Given the rising rate of

college educated people and the fact that body image dissatisfaction is already prevalent among this population, the need for campuses to emphasize health conscious programs that encourage a healthy diet and regular exercise habits is clear (Forrest and Stuhldreher 2007). In addition to the obesity epidemic, a thirty year-spanning study (1966-1996) on body image of both males and females finds that over time, body image dissatisfaction among females is continuing to increase (Sondhaus, Kurtz, and Strube 2001).

The remainder of this article is organized as follows. First we provide a review of the literature with regards to body image dissatisfaction, self-esteem, and exercise. The review segments the extant literature into three key streams: (1) the self-esteem and body image dissatisfaction measures; (2) advertising impact in relation to self-esteem and body image dissatisfaction; and (3) body image dissatisfaction, self-esteem and exercise. We wrap up by providing proposed consumer-based research for furthering our understanding of the key constructs and their interactions.

LITERATURE REVIEW

The search for literature concerning self-esteem, body image dissatisfaction, and exercise began by exploring multiple disciplines to gain a holistic view. Both authors of this article independently reviewed existing research and then discussed key content areas and themes which emerged, following a qualitative grounded theory methodology (Goulding 2005). The emergent concepts seemed to fit into an antecedents-consequences framework, i.e. (1) how should research deal with the measurement of these variables? (2) how do advertising imagery and stereotypes affect them? and finally (3) how can marketers attempt to tie together problems with solutions? Hence we identify three subdomains of important research to address these three questions, as follows: (1) self-esteem and body image dissatisfaction measures; (2) advertising impact in relation to

self-esteem and body image dissatisfaction, and (3) the relationship between body image dissatisfaction, self-esteem and exercise. The exploration of body image dissatisfaction, self-esteem, and exercise begins by providing a cross-disciplinary review of the non-proprietary literature in Tables 1, 2 and 3.

We will now present a more detailed review of the pertinent literature with respect to these three key areas of body image satisfaction and self-esteem research, namely the actual measures of them, the way advertising impacts them, and how they relate to the performance of exercise.

Self-esteem and body image Dissatisfaction measures

A perusal of the self-esteem construct reveals the all-encompassing nature of this measure. From literature overviews to empirical work, self-esteem and body image dissatisfaction is found at the root of thousands of studies. Recently, *Psychological Bulletin* (2004, Vol. 130, No. 3) published an entire series of articles which focused on the importance, or danger, of the pursuit of self-esteem. There are many issues with regard to self-report measurement in empirical work related to self-esteem, as Baumeister et al. (2003) explain in a very thorough literature review, "...self-esteem scores are somewhat contaminated by people's efforts to make themselves look good" (p. 5). While self-esteem and body image satisfaction are often positively correlated, extensive research in these areas suggests that the two must be measured independently. Even more importantly, there are multiple scales which can be used to measure levels of body image dissatisfaction and self-esteem. To address the literature and provide possible sources of additional information for future research, we present an overview of cross-disciplinary research in Table 1.

The Rosenberg self-esteem scale (RES) has been used in thousands of studies as a trait measure of self-esteem (Rosenberg 1965; 1979). Addressing the fundamentally

shifting nature of self-esteem that they argue for, Heatherton and Polivy (1991) introduced a new scale to measure self-esteem as a *state* instead of a trait. The difficulty with their

formulation may be the overlap between a state self-esteem measure and the concept and measurement of mood. In their

Table 1

| <i>Body Image Dissatisfaction and Self-esteem Measures</i> | | |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Topic</i> | <i>Exemplary Studies</i> | <i>Relevant Findings</i> |
| <i>Self-esteem</i> | Crocker and Park (2004); Baumeister (2003); Rosenberg (1965,1975); Heatherton and Polivy (1991) | Self-esteem is often measured using Rosenberg's self-esteem (RSE) scale. This scale is a trait measurement of self-esteem defining self-esteem as a stable measure of self worth. Heatherton and Polivy's State Self-esteem Scale (SSES) implies that self-esteem temporarily fluctuates with situational factors. These factors can include performance, personal relationships, and appearance. This measure is not intended as a replacement of the RSE scale, but as a tool to measure clinical change of manipulation. |
| <i>BID</i> | Kurtz and Hirt (1970); Franzoi and Herzog (1986); Venkat and Ogden (2002); Cooper et. al. (1987); Cash (1990); Secord and Jourard (1953); Rosa, Garbarino, and Malter (2006); Cash, Winstead, and Janda (1986); Rosen, Srebnik, Saltzberg, and Wendt (1991); Thompson and Altabe (1991) | There are multiple scales that measure the multidimensional aspects of body image and body esteem. While body image is the judgment one has towards his/her physical self, body esteem is the attitude measure of satisfaction or dissatisfaction towards his/her physical appearance. Body esteem measures ask participants to rate their feeling or satisfaction regarding various body parts. Other measures display figures with low and high BMI and ask the participant questions regarding him/her and others. |

Introduction and subsequent research using this scale (over 400 cited references to this article to date), one can see it is both pervasive and statistically sound. The authors point out that a scale measuring self-esteem does not replace the existing trait self-esteem measure (Rosenberg 1979), but instead can be used as a tool where the researcher sees fit. They point out that studies which "...attempted to use actual [trait] self-esteem scales to measure experimentally induced changes in self-evaluation..." had mixed results (Heatherton and Polivy 1991, p. 896). Heatherton and Polivy (1991) propose three

dimensions with which to measure self-esteem, namely performance, social relations, and appearance.

Both academics and practitioners continue to propose ways to measure the multi-dimensional aspects of body image, with scales such as the body attitude scale (Kurtz and Hirt 1970), body esteem scale (Franzoi and Herzog 1986), body image satisfaction scale in terms of fitness and attractiveness dimensions (Venkat and Ogden 2002), and body shape questionnaire (BSQ) particularly for eating disordered individuals (Cooper, Taylor, Cooper, and Fairburn 1987).

Whereas body image is defined as a judgment or frame of one's physical self (Cash 1990), body esteem is defined as an attitude measure of liking or disliking one's physical body. In terms of measurement, body esteem is similar to the appearance component of self-esteem but actually asks consumers to rate their feelings (positive or negative) about multiple aspects of their bodies (Secord and Jourard 1953; Rosa, Garbarino, and Malter 2006). Still further measures include the body part satisfaction scale, which provides images of body parts (face, upper torso, mid torso, lower torso, muscle tone, height, weight, and overall appearance) and asks individuals to rate their satisfaction with those parts (Cash, Winstead, and Janda 1986). A body image avoidance scale deals with the intersection of social avoidance behavior and body image dissatisfaction with the dimensions of clothing, eating, and social activity (Rosen, Srebnik, Saltzberg, and Wendt 1991). Finally, a figure rating scale (Thompson and Altabe 1991) provides subjects with a set of figures from very low BMI to very high BMI and has them answer several questions regarding themselves and others with respect to those figures.

Advertising impact in relation to self-esteem and body image dissatisfaction

Regardless of gender, ample research shows that advertising has a significant impact on body image dissatisfaction and levels of self-esteem universally. Mass media establishes how an ideal image should appear and as a result, many consumers internalize this image as the acceptable standard. In addition, friends and family, otherwise known as a reference group, often reinforce this virtually unattainable image and encourage pursuit of it. The adoption of such an unrealistic norm often leads to destructive thoughts and behaviors, including low self-esteem, depression, and eating disorders. Since the literature covering this area of research abounds, only key articles are summarized in Table 2.

Research in the area of gender differences with regards to body image dissatisfaction and self-esteem also abounds. Most researchers agree that women overall tend to have lower self-esteem, higher body image dissatisfaction, more likelihood to diet, higher incidence of weighing themselves, and greater propensity of describing themselves as fat than men (Furnham and Calnan 1998). These behaviors are very likely the result of societal attitudes towards the physical appearance of men and women. The male body image is often judged based on performance, while the female body image is often judged based on appearance (Thøgersen-Ntoumani, et al. 2007). Interestingly, as Furnham, Badmin, and Sneade (2002) point out, the direction of dissatisfaction is not identical between the genders; women almost always want to lose weight whereas men may either want to lose or gain weight. [Although not to the same degree as for women, the media does impact men's body image satisfaction. For example, subsequent to being exposed to ideal images, males were found to be more depressed and reported higher muscle dissatisfaction (Agliata and Tantleff-Dunn 2004).] The ideal image that has perplexed women for many years is now becoming more prevalent and increasingly unattainable for men as well. This discrepancy between the ideal image and "real" image leads to lower self-esteem and depression in men (Agliata and Tantleff-Dunn 2004). Despite male body image dissatisfaction being less documented, a pervasive trend has been revealed regarding height and weight. For example, research shows that being short and under or overweight affects self-esteem and being short and overweight affects males' self-esteem much more (Furnham and Greaves 1994). Despite the male/female discrepancy in direction of body image dissatisfaction, some studies indicate that higher levels of body satisfaction are positively related to self-esteem in both men and women (e.g., Furnham and Greaves 1994).

Table 2

| <i>Advertising's Impact on Body Image Dissatisfaction and Self-esteem</i> | | |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Topic</i> | <i>Exemplary Studies</i> | <i>Relevant Findings</i> |
| <i>Gender</i> | Furnham and Calnan (1998); høgersen-Ntoumani, et al. (2007); Furnham, Badmin, and Sneade (2002); Agliata and Tantleff-Dunn (2004); Furnham and Greaves (1994); | Several studies confer that women tend to have lower body satisfaction and self-esteem than men. Whereas women's bodies are more often judged by appearance, men's bodies tend to be judged by performance. Although studies have found men to be increasingly dissatisfied with their body image, they are more likely to seek increased muscles, strength, and body mass. Women tend to seek slimmer body image by losing weight and enhancing shape. |
| <i>Ideal Body Image</i> | Furnham and Greaves, 1994); Agliata and Tantleff-Dunn (2004); Dooley, Deshpande, and Adair (2010); Dooley et al. (2010); O'Dea (2004) | Mass media can be blamed for unintentionally selling an unrealistic ideal image which often leads to body image dissatisfaction and low self-esteem. People often internalize these ideals as a representation of reality and push themselves to great, and often unhealthy behaviors in an unlikely attempt to achieve those standards. |
| <i>Social Factors</i> | Festinger (1954); Venkat and Ogden (2002); Want (2009); Garner and Garfinkel (1980); Gulas and McKeage (2000); Petina, Taylor, and Voelker (2009); Shroff and Thompson (2006); Thompson et. al. (2006); Trampe, Stapel, and Siero (2007) | Many consumers value the opinions of others and engage in approval seeking behaviors which are potential risk factors for body image dissatisfaction, eating disorders, and low self-esteem. Body image dissatisfaction and low self-esteem tend to increase the likelihood of body image comparison to peers and models, which becomes a vicious cycle that is difficult to intercede. In addition, media influences are often reinforced by family and peers, and one of the primary indicators of eating pathology is peer perception of weight and eating behavior. |
| <i>Gender Identity Congruity</i> | Orth and Holancova 2004); Feiereisen, Broderick, and Douglas (2009); Peck and Loken (2004); Algars, Santtila, and Sandnabba (2010) | Individuals who are more satisfied with their bodies have a greater likelihood of a positive response to media images they can identify with, while those with body image dissatisfaction are less likely to respond to such images. This theory relates to the effectiveness of placing actual images in the media versus the ideal image. |

Body image is also considered a message strategy type which normally consists of the desire for or portrayal of "...thin people, or the ideal body-image, as popular and successful while also containing anti-obesity messages" (Dooley, Deshpande, and Adair 2010, p. 155). Public service

announcements (PSAs) often make use of body-image messages in the hopes of motivating obese or inactive people to change their eating or exercising habits. However, some research shows that such messages may result in lower body image satisfaction and lower self-esteem levels while not necessarily stimulating higher activity levels or positive behaviors (O'Dea 2004). Mass media has primarily been to blame for unintentionally shaping unrealistic body image ideals for both men and women and significantly contributing to body image dissatisfaction and low self-esteem among individuals. Exposure to the thin ideal body is significantly related to body image dissatisfaction in women as they internalize the image as the socially acceptable standard (Grabe, Ward, and Hyde 2008). In addition, Shroff and Thompson (2006) reported that media influences are often reinforced by peers, and one of the main risk factors for eating disorders and body image dissatisfaction in adolescents was peer perception of weight and eating behavior.

Social comparison theory (Festinger 1954) stipulates that individuals are motivated to compare themselves to others, either upwardly or downwardly. Upward comparison leads to lower satisfaction whereas downward comparison leads to a feeling of superiority. In an experimental setting, Venkat and Ogden (2002) find that females are more likely to engage in social comparison when presented with same-sex advertisements, especially with regards to the attractiveness satisfaction versus fitness satisfaction dimensions. As a further extension of this research, Want (2009) delineates the social comparison effect into a two-stage process. He suggests that most

females engage in a social comparison process when presented with media portrayals as a first stage process but that many have a correction or undo process which happens in a second stage. In sum, Want (2009) comments that the real question lies in why many females do not actually undergo the secondary negation process to correct their post-viewing appearance dissatisfaction.

Gender identity congruity is defined by the underlying principle that increased identification with a gender portrayal in an advertisement in terms of the viewer's self-concept, beliefs, and schema, can lead to higher cognitive consistency and therefore better attitudes towards the promotion (Orth and Holancova 2004). Through this lens, Feiereisen, Broderick, and Douglas (2009) study the advertising effectiveness of the placement of "realistic" as opposed to "idealized" female images. Their findings are consistent with the notion that a woman's self-concept and body image dissatisfaction impacts the degree to which gender identity congruity improves advertising effectiveness. Namely, women with low body image dissatisfaction tend to have a greater need for and a more positive experience derived from gender identity congruity, whereas women with high body image dissatisfaction tend to be less responsive to congruent images. Peck and Loken (2004) studied the impact of larger-sized models on advertising effectiveness for both men and women with particular interest in the personality characteristic of need for cognition and the situational cue of informational frame. Focusing on positive versus negative self-referencing thoughts which are generated post-exposure to ads, these scholars found that for female viewers, whereas thin models in ads tend to produce more negative self-referencing after exposure, larger-sized models do not have this impact. This effect was not found for male viewers.

Body image dissatisfaction, self-esteem and exercise

Few can argue with the importance of physical activity and the dangers of a sedentary lifestyle. Yet, the 2010 National College Health Assessment found that only 24% of male and 28% of female college students reported that they performed moderate exercise on any of the previous 7 days. This is especially risky, as explained by the US Department of Health and Human Services (DHHS): Healthy People 2010, since physical adult behaviors are established mainly during late adolescence and early adulthood. In a recent study of elementary, high school, and university students, those who reported exercising for 15-60 minutes at least 3 days per week, also reported higher levels of self-esteem than those who did not (Frost and McKelvie 2005). Overall, exercise relates positively to self-esteem, and although findings are mixed regarding a positive link between exercise and body image; the physical effects of exercise could likely lead to a decrease in body image

dissatisfaction (Frost and McKelvie 2005). Unfortunately, the media influenced ideal body image is often unachievable with healthy diet and exercise (Furnham, Badmin, and Sneade 2002). Exercising for body image related reasons such as weight, tone, and to some degree, attractiveness, is often positively correlated to eating disorders and body image dissatisfaction. On the other hand, fitness and health related motivations for exercise are normally negatively correlated to eating and behavioral disturbances (Furnham, Badmin, and Sneade 2002; Furnham and Calnan 1998). Due to conflicting motivations and their effects on body image and self-esteem, an intervention involving an increase in physical activity should be strategically approached. In addition to the discussion given in this section, a review of some pertinent literature is also provided in Table 3.

Table 3

| <i>The Relationship of Body Image Dissatisfaction and Self-esteem to the Performance of Exercise</i> | | |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Topic</i> | <i>Exemplary Studies</i> | <i>Relevant Findings</i> |
| <i>Motivation</i> | Deci and Ryan (1985); Thøgersen-Ntoumani, et al. (2007); Markland and Hardy (1993); Furnham, Badmin, and Sneade (2002); Crocker and Park (2004) | Exercise motivations vary from person to person. The two main types of motivation are self determined and controlling. Self determined motivation refers to positive and healthy reasons for exercising, while controlling motivation refers to exercising for material reasons. Individuals with greater self-esteem and internal locus of control are more likely to engage in healthier exercise than those with lower self-esteem. Motivations for exercise vary by gender and frequency of exercise. |
| <i>Body image / self-esteem Intervention with exercise</i> | Sonstroem and Morgan (1989); Fox and Corbin (1989); Frost and McKelvie (2005); Weigand and Geller (2005); Flay and Allred (2003); DuBois and Flay (2004); McGannon and | Body image dissatisfaction interventions are of extreme importance since body image dissatisfaction is so prevalent among a large percent of the population. In addition, it often leads to destructive behaviors, mood disorders, and low self-esteem. Research reveals that although exercise has the highest impact on physical acceptance, it has the lowest impact on global self-esteem. Therefore, it is important to approach a body image intervention carefully and methodologically. |

Spence (2002)

Researchers and practitioners often frame anti-obesity promotional materials around positive framing solutions such as exercise. In fact, the relationships between body image dissatisfaction, self-esteem, and exercise continue to be studied in the fields of health psychology and sports medicine. From a motivational perspective, Thøgersen-Ntoumani, et. al. (2007) apply self-determination theory (Deci and Ryan 1985) as a framework to uncover female-specific predictors of exercise. Utilizing the exercise motivation inventory-2 (Markland and Hardy 1993), Thøgersen-Ntoumani and colleagues study the impact of various predictors of exercise, namely self-determined motives versus controlling ones. The self-determined exercise motives include: (1) stress management, (2) revitalization, (3) enjoyment, (4) challenge, (5) affiliation, (6) health avoidance, (7) positive health, (8) strength and endurance, and (9) nimbleness; the controlling motives include: (1) social recognition, (2) competition, (3) health pressures, and (4) weight management. Their findings suggest that women who exercise moderately or regularly have higher levels of controlling motives than women who do not. These results are consistent with other research on gender differences in exercising motivations. For example, Furnham, Badmin, and Sneade (2002) indicate that whereas men's motivations to exercise are normally fitness-based, women's motivations tend to be based on appearance, mood, and weight.

The EXSEM (exercise and self-esteem model) was developed by Sonstroem and Morgan (1989) to measure the impact of an intervention on several components of self-esteem. This model consists of three

constructs (physical self-efficacy, physical competence, and physical acceptance) which then lead to higher global self-esteem (using the RSE scale). Sonstroem and Morgan emphasize the importance of: 1) using aerobic-type exercise as the most effective means of enhancing self-esteem; and 2) measuring aerobic endurance through some sort of physical measure. The physical self-perception profile (PSPP, Fox and Corbin 1989) and other physical self-concept scales are used in many studies to demonstrate the importance of not only the subjective view of the self as measured in self-esteem scales (holistic self-concept) but also the view of the self at a physical level (PSPP in Huang, et al. 2003; social physique anxiety and body satisfaction in Russell and Cox 2003; self-rated health in Misra, et al. 1996). Data from 119 studies were analyzed with regard to the predictability that increased exercise would lead to higher self-esteem levels (McGannon and Spence 2002). The analysis revealed that exercise had the highest impact on physical acceptance, followed by physical competence, physical self-worth, and finally global self-esteem. With regards to studies which showed fitness improvements, those revealed significantly higher changes in self-esteem.

In very recent research, LePage and Crowther (2010) study the impact of exercise on body satisfaction and affect by differentiating between females with high versus low body satisfaction and their exercise habits. They find that no matter what level of body dissatisfaction women have, they all experience positive affect and lower state body dissatisfaction after exercise. To split their sample into these categories, they utilize the appearance subscale of the

Heatherton and Polivy (1991) self-esteem scale.

PROPOSED RESEARCH AGENDA

Based on the review of the literature, we now provide a short list of future research areas which can bridge cross-disciplinary research on self-esteem, body image, and exercise, and how they relate to each other. The overview of the extant research indicates that without stepping back and taking a broader view of the issues at question, researchers risk myopic solutions which might not address both the motivations and the consequences involved in these constructs.

Body image dissatisfaction and self-esteem intervention research

Intervention research such as seen in Positive Action, Inc. (Flay and Allred 2003) (<http://www.positiveaction.net/index.asp>) shows that self-esteem motivation theory can be used as a measure of a successful research paradigm. They use a thoughts-actions-feelings circle, which they explain as "...our thoughts lead to actions, and those actions lead to feelings about ourselves, which lead to more thoughts." The circle can therefore be productive or destructive.

This research shows a combination of both cognitive and behavioral aspects incorporated into a comprehensive applied psychology program (DuBois and Flay 2004). The empirical results of this study showed that schools which continued for four or more years to use Positive Action had positive effects in terms of both scholastic test scores and disciplinary referrals. Positive Action, Inc. was designed to use self-esteem enhancing techniques to create more favorable academic and disciplinary behaviors, and appear to have been successful (Flay and Allred 2003).

We suggest that future research in this area extend the positive psychology approach in Flay and Allred (2003) from a marketing perspective to create social marketing

campaigns to increase self-esteem and decrease body image dissatisfaction.

The relationship of self-efficacy with body image dissatisfaction and self-esteem

It is pertinent to study the differing roles of self-esteem vs. self-efficacy, especially with regard to measurement issues. General self-efficacy (GSE) has been defined as a "...relatively stable, trait-like generalized competence belief," whereas self-efficacy is "...a relatively malleable, task-specific belief" (Chen, Gully, and Eden 2004, p. 376). Chen and colleagues empirically tested the relationship between general self-efficacy and global self-esteem in the framework of motivational traits, affective traits, motivational states, and affective states. They demonstrated that "...GSE is more closely related to motivational variables whereas self-esteem is more closely related to affective variables (except work self-esteem)" (p. 389). These findings suggest that "...how individuals judge their capabilities (i.e., GSE) arouses certain consequences, whereas how they feel about themselves (i.e., self-esteem) leads to somewhat different consequences" (Chen, Gully, and Eden 2004, p. 389). Judge et al. (2002) studied the possibility that self-esteem, neuroticism, locus of control, and generalized self-efficacy could all be indicators of a common core construct. Their meta-analytic results indicate a strong relationship between these measures, although, as they mention, "...while there may be value in studying these traits separately and as dependent variables, we do believe that researchers need to recognize the similarities among these traits and give their common core consideration" (Judge et al. 2002, p. 708). The key word used here is trait, since the present research advocates the use of both self-esteem and self-efficacy as specific states.

Future research should therefore connect self-efficacy with state self-esteem to further ascertain their motivational versus

affective components and delineate subtleties of their measurement.

Conceptualizing body image dissatisfaction and self-esteem motivations

Crocker and Park (2004) discuss the costs involved in the pursuit of self-esteem, but still maintain that this pursuit (specifically in North America) is extremely pervasive. One of the most relevant aspects of their

discussion deals with approach/avoidance goals among high versus low self-esteem people. They argue that people with high self-esteem have more approach or self-promotional goals, whereas people with low self-esteem have more avoidance-of-failure or failure-prevention goals.

Figure 1

Conceptual Framework for Proposed Research Idea

| | | Amount of self-esteem | |
|------------------------------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Too Little | Too Much |
| Motivation to improve self-esteem | Too Little | <u>Negative description:</u> depression and hopelessness <u>Intervention danger:</u> inability to sustain | <u>Negative description:</u> overconfident and inactive <u>Intervention danger:</u> resistance to improvement |
| | Too Much | <u>Negative description:</u> limitless pursuit (anorexia, bulimia) <u>Intervention danger:</u> Over anxiousness regarding effectiveness of intervention | <u>Negative description:</u> narcissistic and overly motivated (proselytizing) <u>Intervention danger:</u> distraction away from self to “bugging” others |

Figure 1 depicts a possible conception of how self-esteem literature reflects a very relevant issue – that of *extremes*. Research on self-esteem focuses on both the *motivational* (or antecedent) aspect (striving for self-esteem) and the *outcome* (or consequence) aspect (low versus high state self-esteem). Essentially, much of this research addresses extremes, arguing that too much or too little self-esteem can be counterproductive. Thus, “healthy” (accurate) pursuit of self-esteem does not exist on the extremes, rather, it is found in the middle ground (Baumeister, et al. 2003; Crocker and Park 2004; DuBois and Flay 2004). First of all, we suggest that the framework itself be verified in future research, and secondly, that marketing researchers explore the antecedents and consequences of normal levels of self-esteem.

DISCUSSION AND CONCLUSION

This article contributes to the large body of research on self-esteem and body image satisfaction by providing an overarching framework with which we explore and suggest cross-disciplinary research agendas to increase the understanding of these immensely important domains. Body image dissatisfaction and self-esteem are widely recognized as key measures which are discussed in studies including those on mental health (Leeper Piquero et al. 2010; Davison and McCabe 2006), eating habits (Garner and Garfinkel 1980; Sundgot-Borgen 1993), exercise-related behaviors (LePage and Crowther 2010; Greenleaf 2002; Bobbio 2009), advertising and media effects (Venkat and Ogden 2002; Want 2009; Peck and Loken 2004), and gender schema and congruity (Feiereisen, Broderick and Douglas 2009; Sondhaus, Kurtz, and Strube 2001). Even more disturbing and important are the number of studies which suggest that whereas student samples show interesting relationships and

provide exploratory results, the real need for research lies in the adolescent population since they have the highest risk of developing early eating disorders (Dooley, Deshpande, and Adair 2010; Carleson Jones and Crawford 2005). Studies which are particularly focused on adolescents show similar effects in cross cultural settings (Furnham, Badmin, and Sneade 2002). In order to provide frameworks for research with adolescents and other at-risk groups, we must first explore the existing research with a lens for furthering proposed interventions and managerial implications.

In essence, even though exercise and eating relate to self-esteem in different ways for males and females, both would stand to benefit from increases in body image satisfaction and self-esteem. This means that a positive psychology framework could be used to create an intervention which combines cognitive attitude-based framing (to increase self-esteem) and applied behavior analysis (to increase exercise). Body image dissatisfaction and self-esteem, as suggested in this article, are very important and fundamental constructs both in developing and empirically validating cognitive theory and in implementing behavior-based interventions.

Tables 1, 2, and 3 support a psychology based intervention strategy and provide a summary of important literature across multiple disciplines. To begin, Table 1 summarizes research pertaining to self-esteem and body image dissatisfaction measures. A fundamental stage in planning an intervention is to first understand the extent to which a population suffers from body image dissatisfaction and low self-esteem through the use research with valid constructs. Such measures quantify constructs in greater detail rather than, for example, simply dichotomizing self-esteem into high and low categories. Instead, through the use of these in-depth measures, participants can indicate their level of agreement with statements

referring to themselves using battery and response systems. Other measurement inventories ask participants to rate their level of agreement with statements concerning their similarity or dissimilarity with another person. Body image dissatisfaction is normally measured separately by asking participants to rate their actual body in relation to their ideal body, and measuring the discrepancy. Once individual levels of body image dissatisfaction and self-esteem are established, researchers can begin to examine the root of the discrepancy to uncover theory, conduct more studies, and identify possible interventions.

Table 2 summarizes literature pertaining to how media is often an underlying influencer of body image dissatisfaction and low self-esteem. In almost every form of media, including print, online, and TV advertising, models are depicted with almost impossible to achieve body ideals and many members of the public accept these ideals as an achievable norm. To speak to this point, plastic surgery is abounding throughout the world, to augment, reduce, and constantly tamper with the natural look of both genders. Additionally, research shows that skin whitening has also become a massive issue throughout the world, as females, in particular, purchase lightening products of multiple brands and endure pain and societal pressure to whiten their skin, regardless of the consequences (Krishen, LaTour, and Alishah *forthcoming*). Society's emphasis on thinness creates a popular perception that a heavier build is unattractive and unacceptable. The problem arises in the pursuit of the thin ideal when people resort to unhealthy eating behaviors, dangerously excessive exercise, and destructive thought patterns. Therefore, we want to emphasize the importance of interrupting these negative behaviors and thoughts with an appropriate and strategic intervention procedure.

Finally, Table 3 details the primary motivations for exercise and provides information regarding safe and effective interventions. Research in the area of

exercise, self-esteem, and body image suggests that there are various motivations for exercising, some of which can also be unhealthy. The goal of a body image and self-esteem exercise intervention is to promote healthy self-determined exercise, or exercise which is motivated by health, fitness, and stress management related goals.

The next step would be to create an empirical intervention using the self-esteem scale described in this research in combination with tried and tested applied behavior analysis techniques. This transformative social marketing intervention could utilize activators such as those given in Geller (2001), which include an educational campaign, constant reminders all over campus, and commitment pledges while measuring state or implicit self-esteem to monitor progress.

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