SELF-DISCREPANCY THEORY AND BODY IMAGE DISTURBANCE:

DOES THE "CAN SELF" MATTER?

by

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ABSTRACT

The relevance of self-discrepancy theory for understanding body dissatisfaction, body size distortion, and negative affect was explored. Actual:ideal discrepancies are those between the attributes an individual believes he or she actually possesses and those he or she would ideally hope to possess. The pattern of self-beliefs in which a person believes that he or she can reach his or her ideal standards but is not actually doing so is known in the self-discrepancy framework as unfulfilled positive potential (UFPP). Both actual:ideal discrepancies and UFPP have been found to relate to dejection-related emotions. Whereas previous research has examined actual:ideal self-discrepancies in an effort to explain body image disturbance and eating disorder symptoms, the influence of UFPP on body image disturbance has not been clearly addressed. This study seeks to understand whether UFPP in the domain of body image is associated with greater body image disturbance than that associated with actual:ideal body-image discrepancies without the added belief that the person can meet the ideal standard. Male and female undergraduates (N = 222) completed measures of self-discrepancy, body-image discrepancy, body dissatisfaction, body size distortion, depression, and anxiety. Self-discrepancies and body-image
discrepancies predicted dissatisfaction with weight/size and overall appearance, even when controlling for body mass. Participants with UFPP in the domain of body image attributes reported higher levels of body dissatisfaction than those with actual:ideal body-image discrepancies without UFPP. Discrepancies did not predict body size distortion. The link between self-discrepancies and depression proposed by the theory and supported by previous literature was not observed. Implications for prevention and treatment of body image disturbance and eating disorders are discussed, and suggestions for future research are provided.

This abstract accurately represents the content of the candidate’s thesis. I recommend its publication.

Signed

Rick M. Gardner
DEDICATION

I dedicate this thesis to my husband, Garrett, for his support, understanding, and ability to make me laugh throughout this process and for his willingness to believe in me even when I doubt myself.
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CHAPTER 1
INTRODUCTION

Dissatisfaction with one’s body is so prevalent among women that some have even considered it to be normative. One might assume that to be a woman is to be dissatisfied with one’s body. However, it is clear that even though most women, as well as many men, experience discontent regarding appearance, there are varying degrees of disturbance. Whereas some individuals are dissatisfied only when trying on swimwear, for example, others are constantly experiencing negative thoughts and emotions about their bodies, and still others develop eating problems. Many have noted that western society places excessive importance on being thin and attractive (with thin and attractive being synonymous), yet not everyone is devoted to pursuing this thin ideal. Again, those who do pursue it may do so to varying extents. Those most devoted to pursuing physical perfection often take extreme measures to attain their weight goals, apparently believing that such perfection is, in fact, attainable. However, numerous authors have observed that the thin ideal is quite unrealistic for most people. For example, Stice and Shaw (2002) refer to the theory that “the relentless pursuit of an ultra-slender body that is virtually unattainable promotes dissatisfaction with one’s physical appearance” (p. 987). Fallon (1990) also notes the extreme measures often required to align one’s self with any given culture’s beauty requirements. Others have noted that models and actresses (who commonly
demonstrate the cultural ideal) often require a strict regimen and help from others to achieve their “look,” and this ideal may be “completely unrealistic for the ‘common’ person” (Thompson, 1990, p. 45). Do individuals who believe that this “perfect” appearance is attainable experience greater distress than those who have a more realistic view of what they can achieve? The present study will utilize self-discrepancy theory to discover whether college students who believe they possess the capability to reach their ideals but are currently not doing so are more likely to experience body image disturbance than those who are not meeting their ideals but do not subscribe to the belief that they can.

Body Image Disturbance

Research in the area of body image has proliferated in the past 50 years, and particularly in the 1990’s. With this burgeoning literature has come confusion regarding the nature and definition of body image (Pruzinsky & Cash, 2002). Some of this confusion can be attributed to the fact that researchers in various fields of study have used the same term, “body image,” to refer to different constructs. Further, as research has progressed, the number of terms used to describe the multidimensional nature of body image has increased. The tendency for authors to use interchangeably (and sometimes incorrectly) various words related to body image has added to the confusion (Thompson, Heinberg, Altabe, Tantleff-Dunn, 1999). Nonetheless, body image is commonly considered to be “the internal
representation of your own outer appearance—your own unique perception of your
body” (Thompson et al., 1999, p. 4).

The term body image disturbance is an inclusive term, which may be divided
into three components: a perceptual component, a subjective component, and a
behavioral component (Thompson, 1990). The perceptual component involves an
individual’s accuracy in estimating his or her own body size. The subjective, or
attitudinal, component includes aspects such as satisfaction with one’s body, concern
or anxiety, and cognitive evaluation of one’s body. The behavioral component of
body image refers to a person’s avoidance of situations in which he or she is likely to
feel discomfort due to physical appearance (Thompson, 1990). Research has
indicated that the perceptual component of body image disturbance is largely
independent of the subjective component (Gardner, 2002; Thompson, Penner, &
Altabe, 1990). More recently, Thompson and van den Berg (2002) have delineated
four commonly accepted components within the attitudinal dimension of body
image: 1) global subjective dissatisfaction, 2) affective distress related to appearance
(including anxiety, dysphoria, and discomfort), 3) cognitive factors (such as
investment in one’s appearance, body image schemas, and erroneous beliefs about
one’s body), and 4) behavioral avoidance of situations or objects because of body
image concerns evoked by them. Clearly, the terminology is abundant and
potentially confusing.
Thompson and his colleagues have proposed that body dissatisfaction is perhaps the most critical sub-domain of body image disturbance because it "captures the essence of one's subjective evaluation" (Thompson et al., 1999, p. 9). They further observe that much of the existing research on body image has defined disturbance as dissatisfaction. Based on definitions provided by Thompson and colleagues, the term overall appearance dissatisfaction will be used in the present study to refer to dissatisfaction with one's overall appearance, weight/size dissatisfaction will refer to dissatisfaction with one's shape/size, and body dissatisfaction will encompass both types of dissatisfaction. Body size distortion will refer to inaccuracy in estimating one's body size. Body image disturbance will be used as the umbrella term encompassing these other components.

Dissatisfaction with one's appearance has become so prevalent, particularly among females, that the term normative discontent has been used to describe this dissatisfaction that is practically a normal part of life for women (Rodin, Silberstein, & Striegel-Moore, 1985, as cited in Thompson et al., 1999). Although body image dissatisfaction is so widespread as to be considered normative, Thompson and colleagues (1999) have cautioned that normative does not imply harmlessness. Rather, body image dissatisfaction is a core feature of eating disorders, and is frequently comorbid with depressive disorders and other clinical disorders (Brodie & Slade, 1988). It is also associated with problems in general psychological functioning (Keeton, Cash, & Brown, 1990; Thompson, 1992). The presence of dissatisfaction
does not automatically predispose an individual to developing an eating disorder. However, as a precursor to eating disorders, body image disturbance must be taken seriously (Thompson et al., 1999). Others have observed that body image dissatisfaction is an important area of study, independent of its role in the development of eating disorders. For example, Thompson (1992) proposed that a new DSM diagnostic category, Body Image Disorder, be created. Many people, particularly women, experience varying degrees of body dissatisfaction, and the distress they experience is real, even if they never develop an eating disorder.

In the 1980’s, much of the body image research investigated size overestimation in eating disordered populations. Research in the late-1980’s and the 1990’s revealed that individuals without eating disorders frequently experience body dissatisfaction, as well as body size distortion (with a tendency to overestimate one’s size) (Altabe & Thompson, 1995; Thompson et al., 1990). Thus, whereas researchers had previously believed that size overestimation was evident only among emaciated females with anorexia nervosa, it has become apparent that non-clinical populations, such as college students, also evidence this body size distortion. Whereas body dissatisfaction has been found to relate to depression and general psychological functioning, it is less clear whether a relation exists between body size distortion and general psychological functioning. Strauman and Glenberg (1994) found that depressed mood was not associated with body size distortion. Other studies have found similar results (Brodie & Slade, 1988; Keeton et al., 1990). On the other hand,
some evidence suggests that such a relation may exist (Taylor & Cooper, 1986, as cited in Thompson et al., 1990). The present study will examine both body dissatisfaction and body size distortion and their relation to negative affect.

In their synthesis of research on body dissatisfaction and eating pathology, Stice and Shaw (2002) suggest that body dissatisfaction is a crucial area of study to improve prevention and treatment efforts targeting eating pathology. Thompson and colleagues (1999) concur that treatment and prevention strategies for eating problems should focus on body image disturbances. The present study seeks to enhance our understanding of body image disturbance through the use of self-discrepancy theory.

Self-Discrepancy Theory

Self-discrepancy theory was proposed by E. Tory Higgins and his colleagues (Higgins, Klein, & Strauman, 1987; Higgins, 1989, 1990) to describe the relationship between self and affect. According to the theory, emotional-motivational problems are not the result of a negative self-concept alone. Though a self-concept, or one's actual attributes, might be negative, Higgins has suggested that this self-concept alone is not sufficient to account for the emotional distress a person may experience. Further, not everyone experiences the same type of emotion in response to negative attributes in the self-concept, or actual self. Thus, Higgins has proposed that the
relationship between actual self-concept and other types of beliefs about the self is the source of differential emotional outcomes.

The Various Selves

According to self-discrepancy theory, a person's representation of the self consists of two factors: domains of the self and standpoints on the self. The three domains of the self presented in the original model of the theory are the actual self, the ideal self, and the ought self. The ideal self and the ought self are called self-guides. The actual self is the individual’s representation of the attributes that he/she or someone else believes the individual actually possesses (Higgins, 1989). The actual self, particularly one’s own beliefs about the self, corresponds to what is commonly known as the self-concept. The ideal self “is a person’s representation of the attributes that someone (self or other) would like the person, ideally, to possess, i.e., someone’s hopes, goals, or wishes for the person” (Higgins et al., 1987, p. 175). The ought self consists of “the attributes that someone (self or other) believes the person should or ought to possess, i.e., someone’s sense of the person’s duties, obligations, or responsibilities” (Higgins et al., 1987, p. 175). The standpoints on the self include own and other. These standpoints indicate the position from which the person is being evaluated. That is, an individual may be judged from his or her own standpoint and from the standpoint of a significant other. Parents, siblings, spouse,
and close friends are included in the _other_ category (Higgins et al., 1987; Higgins, 1989).

Each domain of the self may be combined with each standpoint on the self. The resulting six basic types of self-state representations are the following: actual/own, actual/other, ideal/own, ideal/other, ought/own, ought/other. Table 1.1 illustrates these categories and their designation as self-concept or self-guide.

<table>
<thead>
<tr>
<th>Self-concept</th>
<th>Self-guide</th>
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<tr>
<td>Actual/own</td>
<td>Ideal/own</td>
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<td>Actual/other</td>
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Self-discrepancy theory suggests that people are motivated to achieve congruency between the self-concept and self-guides. Chronic discrepancies between the actual self and the self-guides result in discomfort, as do momentary evaluations by self or others that confirm discrepancies or disconfirm perceived congruencies (Higgins et al., 1987).

Self-discrepancy theory is set apart from other theories of the self by its proposition that different types of self-discrepancies result in different types of discomfort (Higgins et al., 1987). The theory “proposes that different patterns of
relations among self-beliefs have different psychological significance and are associated with different kinds of physical and mental health problems” (Higgins, Vookles, & Tykocinski, 1992, p. 126). The psychological significance of a pattern of self-beliefs depends on the interrelation among the self-beliefs, rather than the self-beliefs in isolation. Actual:ideal discrepancies indicate that the person has not achieved the hopes, goals, aspirations, or desires of the self or a significant other. Thus, the psychological significance of an actual:ideal discrepancy is the non-attainment of positive outcomes. As such, actual:ideal discrepancies are associated with dejected emotions, such as sadness, dissatisfaction, and shame. Actual:ought discrepancies, on the other hand, reflect the presence of attributes in the actual self which are inconsistent with attributes the self or someone else believes the person has a duty or obligation to exhibit. Therefore, actual:ought discrepancies are likely to result in some type of sanctioning by others (e.g., parents), or the presence of negative outcomes. Actual:ought discrepancies are consequently associated with agitated emotions, such as fear, apprehension, guilt, or anxiety (Higgins et al., 1987). Through a series of studies beginning in 1985, described by Higgins (1989), researchers tested the theory and discovered that actual/own:ideal/own discrepancies and actual/own:ought/other discrepancies yielded the most significant associations with emotional discomfort. Specifically, discrepancies between one’s actual self and one’s ideal self (actual/own:ideal/own) were significantly positively correlated with dejection-related emotions, whereas discrepancies between one’s actual self and the
self others believe the person has a duty to be (actual/own:ought/other) were significantly positively correlated with agitation-related emotions. An impressive number of correlational and experimental studies involving undergraduate and clinical samples have replicated these findings. Frequently the ideal/own and ought/own categories are moderately correlated. However, the predicted associations remain even when partialling out the correlation contributed by the alternative type of self-discrepancy (Higgins, 1989; Higgins et al., 1992; Strauman, 1996).

**The Inclusion of the Can Self**

Higgins (1989) has expanded self-discrepancy theory to include two additional domains of the self. The can self is a person’s representation of the qualities that the self or someone else believes the person can possess (qualities the person is capable of possessing or has the potential to possess). The (expected) future self includes the attributes the self or someone else expects the person will obtain. Although self and others may hold such beliefs about the individual, the literature to date has focused on the own standpoint (Higgins, 1989). Again, self-discrepancy theory distinguishes itself from other theories of the self by predicting how the relationships between and among various self-state representations produce emotional-motivational problems. This newer contribution to self-discrepancy theory examines the psychological significance of patterns involving three self-beliefs, rather than pairs of self-beliefs (Higgins et al., 1992).
The can self is of particular interest in the present study. It is important to note that the can self is not another self-guide; rather, it is a “prospective self-state,” representing “a view of some actual end state to come” (Higgins, 1990, p. 251). Higgins (1989) has explained that the relation of the can self to other self-beliefs is more complex than the relations described between ideal or ought selves and the actual self. One might assume that if the can self is generally positive, a person will experience positive feelings. However, because self-discrepancy theory is interested in relationships between and among various self-beliefs, rather than self-beliefs in isolation, the can self in relation to other self-beliefs must be considered. An individual with a can:ideal congruency and an actual:can discrepancy would be a person who believes he or she is capable of matching his or her ideal self, but who is not actually meeting his or her potential. Thus, the psychological situation presented by this pattern of self-beliefs is “chronic failure to meet one’s positive potential.” This pattern of self-beliefs has been found to relate to dejection-related emotions (Higgins, 1989; Higgins et al., 1992; Higgins, 1990). Higgins (1989) has pointed out that dejection-related symptoms do not imply low motivation. Rather, the person may be highly motivated to work harder to close the gap between the actual and can selves.

This pattern is in contrast to the situation represented by a can:ideal discrepancy combined with an actual:can congruency. In this latter pattern of self-beliefs, the can:ideal discrepancy signifies that one’s ideal exceeds one’s potential;
however, the actual:can congruency indicates the person’s belief that he or she is at least fulfilling his or her potential. This psychological situation is referred to as “fulfillment of one’s limited potential” and is not related to dejection or other types of emotional distress (Higgins et al., 1992; Higgins, 1990). Because each of these situations involves a discrepancy between the actual self and the ideal self, we might have expected both situations to be associated with distress. However, the more specific predictions made by the expanded theory require consideration of the pattern, rather than only the pair, of beliefs. An early assumption of self-discrepancy theory was that greater discrepancy results in greater discomfort. Because studies involving the can self revealed that the particular pattern of discrepancy/congruency, rather than the presence of discrepancy itself, was important, this assumption has since been revised. The theory now maintains: “The greater the extent and accessibility of a particular pattern of self-beliefs possessed by an individual, the more the individual will experience the emotional-motivational states associated with the type of psychological situation represented by that pattern” (Higgins, 1989, p. 120).

Self-Discrepancy Theory and Body Image Disturbance

More recently, various researchers have examined body image disturbance through the lens of self-discrepancy theory. For example, Thompson (1990) has proposed a self-ideal discrepancy theory, which applies the basics of Higgins’ theory
to the study of body image. He has noted that comparison of one’s own body with one’s ideal body might reasonably result in body dissatisfaction. He also cited accumulating evidence that dissatisfaction with one’s body is associated with lowered self-esteem. Further, Altabe and Thompson (1990, as cited in Thompson, 1990) found that the discrepancy between ratings of ideal body size and current body size was strongly associated with measures of body satisfaction, depression, and eating disturbance. This evidence of the association between a specific type of self-discrepancy (ratings of body sizes) and depression lends support to self-discrepancy theory’s assertion that actual:ideal discrepancies are related to dejection-related emotions. Thompson (1990) noted that the correlational nature of this work prohibits conclusions about any causal relationship between discrepancies and body image disturbance. He encouraged further research in this area to aid our understanding of body image disturbance.

It is important to note that the specific application of self-discrepancy theory to the study of body image generally includes body image dissatisfaction as the outcome variable. Whereas the self-discrepancy theory proposed by Higgins predicts that self-discrepancies (involving any type of self-attributes) result in dejection-related or agitation-related emotions, Thompson’s self-ideal discrepancy theory suggests that discrepancies between the actual physical self and the ideal physical self result in body dissatisfaction, without making specific predictions in regard to affect. Most researchers who have applied self-discrepancy theory to body image
disturbance have relied on Higgins' conceptualization of the theory but have measured body image disturbance as the dependent variable. Some researchers have examined general self-discrepancies and body image disturbance, while others have limited their scope to discrepancies related to physical attributes only. Hereafter in the present study, self-discrepancies will refer to discrepancies in the realm of general self-attributes, and body-image discrepancies will refer to discrepancies in the realm of appearance-related attributes.

Discrepancies and Body Dissatisfaction

Most research in this area has focused on the association between discrepancies and body dissatisfaction. Strauman and colleagues (1991) found that the presence of accessible appearance-related constructs was associated with body dissatisfaction. Chronically-accessible appearance constructs are those appearance-related attributes listed by a participant when asked to list general ideal or ought self-attributes (referred to as ACA, accessible constructs for appearance). In other words, participants who had appearance-oriented self-guides were prone to body dissatisfaction. They also found that general actual:ideal self-discrepancies were associated with body dissatisfaction, even when controlling for the influence of appearance-related attributes (ACA). This finding is intriguing. It is fairly easy to understand how one might be dissatisfied with his or her appearance if he or she possesses physical qualities that are not consistent with the physical attributes he or
she would ideally like to possess. However, it is less expected that dissatisfaction with one’s appearance would occur in tandem with failure to be the kind of person one would ideally like to be. The role of general self-discrepancies in the context of body image disturbance warrants further study.

However, more studies have focused exclusively on body-image discrepancies and body dissatisfaction. Specifically, discrepancies between the physical attributes one actually possesses and the physical attributes one would ideally like to possess have been found to predict body dissatisfaction. Cash and Szymanski (1995) found that six out of twenty items on a measure of body image ideals incrementally predicted body image dysphoria. In other words, the presence of a larger number of actual:ideal body-image discrepancies (including non-weight-related attributes) was associated with greater distress. This primary focus on the ideal self (as opposed to the ought self) is consistent with much of the body image literature, which often speaks of internalization of the cultural beauty ideal leading to disturbance (e.g., Thompson, 1990). Moreover, research thus far has indicated that actual:ideal discrepancies (from one’s own standpoint) may be more relevant than actual:ought discrepancies (from own or other standpoint) for the study of body dissatisfaction (Jacobi and Cash, 1994). Although several studies have uncovered a relationship between actual:ideal/own body-image discrepancies and bulimic symptoms and a relationship between actual:ought/other body-image discrepancies and anorexic symptoms in non-clinical samples (Forston & Stanton, 1992; Snyder,
1997; Strauman et al., 1991), no direct association between actual:ought discrepancies and body dissatisfaction has been found. For instance, Strauman and colleagues (1991) found that actual:ought/other self-discrepancies did not predict dissatisfaction when controlling for actual:ideal/own self-discrepancies. Similarly, Snyder (1997) found that actual:ought/society body-image discrepancies were not significantly associated with body dissatisfaction when controlling for actual:ideal body-image discrepancies. Szymanski and Cash (1995) also reported that actual:ideal body-image discrepancies were most strongly associated with body dissatisfaction. In fact, Szymanski and Cash (1995) questioned the utility of the ideal-versus-ought distinction in body image research.

It must be noted that all of the studies conducted by Cash involve a scale that provides participants with a standard list of traits, which participants rate with regard to how like or unlike themselves the attributes are. This method is unlike the method utilized in self-discrepancy theory research by Higgins and others. In their studies, the Selves Questionnaire (Higgins, Bond, Klein, & Strauman, 1986), or some modification thereof, is administered; this method involves participants generating their own lists of self-attributes, in order to insure that the traits listed are those most accessible and personally significant for the individual (Higgins, 1989; Strauman et al., 1991). Nonetheless, Cash and his colleagues have reported findings similar to those using the traditional method (Snyder, 1997; Strauman et al., 1991). Again, considering the body image literature, these findings should perhaps not be surprising. The literature is filled with
references to internalization of the cultural thin ideal (Heinberg & Thompson, 1995; Stice & Shaw, 2002; Thompson et al., 1999). In other words, even if another person (or an entire culture) believes you have a duty to be slender, distress is more likely to occur only if you *internalize*, or accept, that ideal (or “ought”) and make it your own ideal. In terms of self-discrepancy theory, this internalization would be equivalent to making the ought/other self part of your ideal/own self. Continued research may further confirm that the ought self is less relevant for body dissatisfaction.

Few researchers have used the Selves Questionnaire to test self-discrepancy theory’s applicability to the study of body image. Those who have done so have found preliminary support for the theory. Strauman and colleagues (1991) found that actual:ideal self-discrepancies were associated with dissatisfaction when controlling for appearance-related discrepancies. Those with accessible appearance-related constructs (ACA) also experienced body dissatisfaction. However, they also observed an interaction effect, whereby females with substantial actual:ideal self-discrepancies and ACA were those most vulnerable to dissatisfaction. In her study of the application of Higgins’ theory to body image and eating disorders, Snyder (1997) reported that actual:ideal body-image discrepancies were associated with body dissatisfaction (as well as bulimic symptoms), but actual:ought/society body-image discrepancies were not associated with dissatisfaction after controlling for the influence of actual:ideal discrepancies. Research using the traditional listing method, then, has indicated that actual:ideal self-discrepancies and body-image discrepancies
seem to be of greater importance than actual:ought discrepancies. Clearly, more research is still needed to establish the validity of this claim.

**Focus of the Present Study**

The present study seeks to expand this literature by using a modification of the Selves Questionnaire to assess body image disturbance in a college sample. This listing method is preferable within the framework of self-discrepancy theory, which places great importance on measuring constructs that are most salient to the individual completing the questionnaire (Higgins, 1989; Higgins, 1999). Further research is warranted to confirm the greater relevance of the ideal self-guide versus the ought self-guide for body image studies. However, in light of the evidence providing greater support for the relevance of the ideal self, the current study will omit the assessment of the ought self-guide and will focus instead on the ideal and can selves. Based on the findings of extant literature, we can predict that actual:ideal discrepancies from one’s own standpoint will be associated with body dissatisfaction. As discussed heretofore, there is support for the relation of self-discrepancies and dissatisfaction, body-image discrepancies and dissatisfaction, and the interaction of self-discrepancies and ACA and dissatisfaction. Thus, the present study makes the following hypotheses:

**Hypothesis 1:** Actual:ideal/own self-discrepancies will predict body dissatisfaction.
Hypothesis 2: Actual:ideal/own body-image discrepancies will predict body dissatisfaction.

Hypothesis 3: ACA will predict body dissatisfaction.

Hypothesis 4: Participants with actual:ideal self-discrepancies and ACA will experience greater body dissatisfaction than participants with only one or the other.

Previous studies generally have not included both self-discrepancies and body-image discrepancies. The present study will include both types and will therefore explore whether an interaction effect exists, whereby participants having both types of discrepancy experience greater dissatisfaction than those having only one type of discrepancy.

Exploratory Question: Do participants with self-discrepancies and body-image discrepancies experience greater body dissatisfaction than those with either type alone?

Of primary interest in the present study is the can self, which has remained relatively unexplored in the body-image field. Two studies have examined the influence of the can self on eating problems. Strauman and his colleagues (1991) examined the role of a specific type of discrepancy involving the can self, known as unfulfilled positive potential (UFPP). When the actual self is discrepant from both the ideal self and the can self, the pattern of self-beliefs is referred to as unfulfilled positive potential. This terminology is synonymous with the “chronic failure to reach
one’s potential” pattern \([A < C(=I)]\) described by Higgins and colleagues (1992).

Strauman and colleagues (1991) reasoned that dejection-related emotions are commonly associated with bulimic symptoms; specifically, this dejection includes feeling like a failure, feeling loss of control, and feeling helpless. Because these symptoms are similar to the conceptualization of UFPP (Higgins, 1990), these researchers predicted that UFPP would be associated with bulimic-like eating problems and that the association would be even stronger than that between “plain” actual:ideal discrepancy and bulimic problems. In a sample of college men and women, the study found support for this hypothesis. UFPP was associated with binge-eating behavior, even when excluding appearance-related attributes. Body dissatisfaction was not assessed in the study, however. It is interesting to note that participants were asked to list general self-attributes, rather than body-image attributes. Thus, a general sense of failure to reach one’s potential was found to relate to bulimic symptoms. The study did not attempt to measure unfulfilled potential in the realm of body shape, size, appearance, or features.

Higgins and colleagues (1992) examined how patterns of self-beliefs relate to various types of emotional and physical problems, including eating problems. They found that chronic failure to reach one’s potential \([A < C(=I)]\)—which is the same as UFPP—predicted bulimia-related symptoms. However, as in the previous study, body dissatisfaction and can-self attributes in the domain of body image were not assessed.
The present study, then, is among the first to include the can self in the application of self-discrepancy theory to body image disturbance. Despite the exploratory nature of the study, we can nevertheless make predictions based on the theory. Consider the pattern of beliefs associated with UFPP. This pattern involves an actual:can discrepancy combined with a can:ideal congruency. Applied to body image concerns, this pattern would indicate that the individual believes that he or she has the capability to meet his or her ideal body size, shape, or appearance. However, this individual is not actually meeting this ideal, and therefore is not living up to his or her perceived potential. For example, a woman may believe that being a size 4 would be ideal. However, she is currently a size 12; she believes that if she just works harder at it, though, she can reach that size 4. Thus, her actual self is discrepant from her can and ideal selves. Based on self-discrepancy theory, we would expect this individual to experience dejection or depressive emotions. Because body image disturbance (particularly dissatisfaction) is frequently associated with depression (Stice & Shaw, 2002; Thompson et al., 1990), it will be helpful to understand whether UFPP is part of the mechanism whereby this association occurs.

In contrast to the UFPP pattern, consider the situation represented by the “fulfillment of one’s limited potential” pattern of beliefs (A = C < I). In this pattern, the individual possesses a can:ideal discrepancy along with an actual:can congruency. Applied to body image concerns, this pattern would indicate that the individual believes that his or her ideal body image is out of reach, that he or she is
not capable of attaining his or her ideal size, shape, or appearance. Nonetheless, the individual is at least fulfilling his or her potential. For example, a woman who is currently a size 12 recognizes that although she would ideally like to be a size 4, she is not capable of reaching this ideal. She may base this belief on facts; her family history and genetic makeup may be such that her body is physically not capable of naturally being a size 4. For any number of reasons, the woman might believe that being smaller is simply not a realistic goal. In any case, we would not expect this woman to experience a high level of distress. Although she is actually not meeting her ideal, she is at least maintaining the size she believes she can be. Numerous authors have observed that the cultural ideal for beauty is quite unrealistic (e.g., Fallon, 1990; Thompson, 1990). It is logical to suppose, then, that those individuals who accept that they cannot reach these unrealistic standards would be less distressed than those who believe they can in fact attain the ideal. Based on this reasoning, the present study predicts that individuals with UFPP in the domain of body-image will experience greater body dissatisfaction than those with body-image discrepancies but no UFPP. The present study will also explore whether those with UFPP in the realm of self-discrepancies experience greater body dissatisfaction than those with self-discrepancies alone (without UFPP).

**Hypothesis 5:** Participants with UFPP in the body-image domain will experience greater body dissatisfaction than those with body-image discrepancies but no UFPP.
Exploratory Question: Do participants with UFPP in the general self experience greater body dissatisfaction than those with self-discrepancies but no UFPP?

Self-Discrepancy Theory and Body Size Distortion

Minimal attention has been given to the association of self-discrepancies and body size distortion (the perceptual component of body image disturbance). Strauman and Glenberg (1994) found that actual:ideal/own self-discrepancies, rather than body-image discrepancies, were the better predictor of size estimation bias (overestimation), even after controlling for body-image discrepancies. Interestingly, there was no significant association between body-image discrepancies and overestimation. Clearly, this area requires further study. Based on these limited findings, we might expect to obtain similar results.

Hypothesis 6: Actual:ideal self-discrepancies will be a better predictor of size distortion than body-image discrepancies will be. Specifically, those with greater self-discrepancies will demonstrate greater size overestimation.

Exploratory Question: Do participants with UFPP (in the realm of self-discrepancies or body-image discrepancies) demonstrate greater body size distortion than those with discrepancies alone?
Self-Discrepancy Theory and Affect in Body Image

Several studies have examined affective variables in addition to body image variables. As mentioned earlier, a large body of studies has found that ideal discrepancies are associated with dejection and ought discrepancies are associated with agitation, thus supporting Higgins’ theory. In the present study, we are interested primarily in body image studies, though. Specifically, do body-image discrepancies relate to depression, anxiety, or both?

Cash and Szymanski (1995) reported that ideal body-image discrepancies were associated with depression and social-evaluative anxiety. Again, these authors used a method different from that of Higgins, and they were not seeking to find support for the theory’s assertion that ideal and ought discrepancies produce differential emotions. In fact, these authors did not measure ought discrepancies in their study. According to the theory, we would expect to find this association between ideal discrepancies and depression, but we would not expect to find an association between ideal discrepancies and social-evaluative anxiety, which seems more akin to agitation than to dejection. One possible explanation for this unexpected finding is the frequently observed correlation between ideal/own and ought/other selves. Most studies find a moderate correlation, generally around .50 (e.g., Snyder, 1997; Strauman et al., 1991). In one study, Strauman and Glenberg (1994) found a high correlation ($r = .80$) between ideal/own and ought/own body-image attributes. This finding is particularly interesting because it suggests that the
correlation between one's own ideal and ought selves in the body-image domain is stronger than the correlation between one's own ideal and the ought self from the other standpoint. One needs only to think of an individual with body image disturbance to recognize how this could be true. If one has internalized the thin ideal demanded by others, he or she generally does not think of this ideal goal as simply a nice thing to attain. Rather, the person who wants to be smaller, prettier, etc., often believes this goal is a must. Thus, because the ideal and ought selves are so intertwined, particularly in the body-image realm, it is to be expected that ideal discrepancies may relate to both dejection and agitation. If the ought self had been measured, perhaps those discrepancies would have related to both emotions as well. Thus, it seems necessary to calculate partial correlations in these situations to control for this strong intercorrelation.

In a related study, Szymanski and Cash (1995) did measure both ideal and ought body-image discrepancies. Again, ideal discrepancies were associated with both dejection and agitation, and the authors did not find support for the unique relations of the self-guides to the specific emotions, even when using partial correlations. It is interesting to note that the authors calculated partial correlations by controlling for the alternate self-guide from the same standpoint. However, given the usual intercorrelation between ideal/own and ought/other self-guides, it would seem most prudent to control for all alternate self-guides and standpoints when calculating partial correlations. Method differences must also be considered. As stated
previously, these studies involve an author-generated scale of physical attributes, rather than a participant-generated list. Also, in this particular study, affect was operationalized as frequency of experiencing each emotion about one's appearance (e.g., anxiety about one's appearance, rather than general anxiety as usually measured in such studies).

The best support to date for the affect hypotheses in body image research is actually an indirect type of support. In an experimental study by Heinberg and Thompson (1995), participants viewed either an Appearance collection of commercials, which emphasized thinness and attractiveness, or a Non-Appearance video. Participants also completed a measure of awareness of and internalization of sociocultural attitudes toward thinness and attractiveness, as well as measures of cognitive distortions about physical appearance and pre-post affect. Results indicated that those with high cognitive distortion scores increased in depression and body dissatisfaction after viewing the Appearance video. Those high in sociocultural awareness/internalization increased in depression and anger after viewing the video. Those participants who scored high on awareness/internalization and high on cognitive body-image distortions were most affected by viewing the Appearance video. These participants experienced increased depression. Although this study was not conducted as a test of self-discrepancy theory, the theory might help us understand the findings. The authors suggested that the video procedure might have primed appearance-related schemas in participants. Self-discrepancy theory might
similarly suggest that viewing images of the cultural beauty ideal may activate pre-existing self-discrepancies in the individual, and thus elicit negative affect. Thus, although the study was not a self-discrepancy study per se, it lends some indirect support for the theory.

No existing studies have examined the can self in relation to body image and associated affect. The present study will seek to determine whether discrepancies with the can self, specifically the UFPP pattern, relate to dejection. Taking the preceding evidence into account, one is left with a fairly muddled picture of the association between body-image discrepancies and negative affect. The present study will focus primarily on ideal discrepancies and associated affect, as well as UFPP and associated affect. Clearly, there is the potential for any associations to be confounded by the existence of ought discrepancies (which will not be measured). Nonetheless, there is clearly a need to explore the can self and determine whether it deserves to be included in future body image studies. Based on available research, we may state the following hypothesis:

**Hypothesis 7:** Actual:ideal body-image discrepancies will be associated with depression and anxiety.

Based on the rationale of self-discrepancy theory, we may make the following hypothesis regarding the can self:

**Hypothesis 8:** UFPP will be associated with depression.
The study will explore whether this hypothesis is true for UFPP in the realms of self-discrepancies and body-image discrepancies.
CHAPTER 2

METHOD

Participants

Participants were 292 students in undergraduate psychology courses at the University of Colorado at Denver. Minors and those who were pregnant were asked not to participate. Data were considered unusable if portions of the questionnaires were incomplete or included invalid responses (e.g., a rating of “5” on a scale ranging from 1 to 4), or if a response was not measurable by the particular scale (see below for more detail). Data from 70 participants were excluded based on these criteria. Thus, the final sample included 91 men and 131 women ages 18 to 60 ($M=23.06$, $SD=6.70$). The sample’s racial/ethnic makeup was 73.9% White, 10.8% Latino, 8.1% Asian, 0.9% African American, 0.5% Native American, and 5.9% other racial/ethnic origins. Average Body Mass Index (BMI) was 22.41 ($SD=3.25$). The sample included those who were single/not dating (26.1%), dating without serious commitment (18%), dating with serious commitment (32.9%), engaged (6.8%), married (13.1%), legally separated (0.5%), divorced (1.4%), and divorced/dating (1.4%). Fifteen participants (6.8%) reported a history of treatment for body image or eating problems.
Measures

Selves Questionnaire

The Selves Questionnaire is a free-response questionnaire in which respondents list up to 10 attributes for each self-state category. Traditionally, respondents complete two parts of the questionnaire, first responding from one’s own standpoint, and then responding from the standpoint of significant others (such as parents). Definitions of each self-state are provided. Each page of the questionnaire contains one self-state. For example, the first page states, “Please list the attributes of the type of person you think you actually are.” Respondents are then asked to rate the extent of each attribute on a scale ranging from slightly (1) to extremely (4). This free-response format is used, rather than a checklist-type method, in an effort to ensure that respondents list those attributes most accessible and important to them (Higgins, 1989; Higgins, 1999). The Selves Questionnaire must be administered first in any battery of questionnaires. This method prevents any other questionnaire from interfering with “measuring the more accessible self-discrepancies by priming different attributes” (Higgins, 1999, p. 1315).

A modification of the original Selves Questionnaire was used in the present study. Specifically, the ought self was omitted, along with the “other” standpoint. To assess self-discrepancies among general self-attributes, the actual, ideal, and can self-states were included. All were assessed from the respondent’s own standpoint only.
Instructions were the same as those originally used by Higgins (see example above). To assess body-image discrepancies, the actual, ideal, and can self-states for physical attributes were included. Respondents were asked, for example, “Please list the physical attributes or traits that you would ideally like your body to have.”

The questionnaire was scored by comparing the attributes in the ideal/own self-state with those in the actual/own self-state. A match occurred when an attribute in one self-state was synonymous with an attribute in another self-state and differed in extent rating by no more than 1 (e.g., “slightly funny” versus “moderately funny”). A mismatch of extent occurred when attributes were synonymous but differed in extent rating by more than 1 (e.g., “slightly smart” versus “extremely smart”). A mismatch occurred when the attributes were antonyms (e.g., “ugly” versus “beautiful”). A nonmatch occurred when the attributes were neither synonyms nor antonyms. Nonmatches were not included in discrepancy scores. A thesaurus was used to compare attributes. Next, the magnitude of discrepancy was calculated by assigning weights to categories. Matches were given a weight of -1, mismatches of extent were given a weight of 1, and true mismatches were given a weight of 2. Then discrepancy scores were calculated by summing the weights for all matches and mismatches for a particular pair of self-states (e.g., actual/own and ideal/own in the realm of self-discrepancies). These calculations were performed by SPSS for self-discrepancies and for body-image discrepancies. UFPP was scored by determining whether any attributes listed in the can self related to actual:ideal discrepancies. For
example, if a participant listed "ugly" as an actual trait and "beautiful" as an ideal trait, this actual:ideal discrepancy had been scored as described above. If "beautiful" was also listed as a can-self attribute, it was scored as UFPP.

Higgins, Bond, Klein, and Strauman (1986) reported that interrater reliability was tested in a prior study, with a correlation of .89 being found when two raters independently scored 80 actual/own:ideal/own discrepancies. Similarly, Strauman (1996) reported that the interrater reliability (intraclass correlation) in his study was .86 when two raters independently scored overall actual:ideal and actual:ought discrepancy scores (using the scoring method described above). Strauman (1996) found that after three years, participants' self-descriptions (self-attributes listed) varied, while the magnitude and type of self-discrepancy remained stable. This finding provides support for the reliability of the self-discrepancy construct, but also for the Selves Questionnaire. Even though the questionnaire is a free-response measure, Strauman's findings indicate that a reliable, stable framework of self-beliefs is being measured.

2-Figure Analogue Scale

This scale was developed by Gardner and colleagues (Gardner, Stark, Jackson, & Friedman, 1999) to measure body-size perception. The scale consists of a horizontal line, anchored at each end with a contour drawing that has been distorted to -30% or +30% the width of the median American male or female (age 19). There
is one scale for each sex. A vertical intersection in the center of the line represents the median male or female size. On the respective scales, the center line represents the U.S. median weight of 169.6 pounds for men and 137.8 pounds for women. The respondents were instructed to "Place a vertical mark at the point on the scale that most closely represents your body size." The scale allows the respondent's mark to be converted to a weight value and to a percentage of distortion of body size (over- or under-estimation). This conversion is accomplished through the following equation: 

\[
\frac{\text{Perceived weight} - \text{Actual weight}}{\text{Actual weight}} \times 100 = \% \text{Body size distortion.}
\]

The 2-figure scale has demonstrated good psychometric properties (Gardner et al., 1999). Gardner and colleagues (1999) demonstrated the concurrent validity of the scale by the correspondence between respondents' reported weight and estimated weight derived from the scale. Average estimated weight was within a few pounds of average actual weight. The correlation with Body Mass Index (BMI; \( r = .63 \) and .74) was higher than the correlation with weight (\( r = .47 \) and .68), but both correlations were statistically significant. Gardner and colleagues (1999) found evidence for test-retest reliability over 3 weeks (\( r = .89 \)). This scale also has the benefit of presenting only contours of the human body, without specific facial characteristics or other features. Thus, the scale is useful with various ethnic groups. Further, the scale offers the ability to measure respondents' marks to the nearest millimeter, eliminating scale
coarseness that is present when respondents must choose from a discrete number of figures.

Because the scale extends only to ±30%, it was possible that some participants would not have a valid place on the scale corresponding to their weight. For example, a woman with a reported weight of 200 pounds would fall outside of the range of weights measured by the scale, since the upper end of the female scale does not exceed 178 pounds (30% above the median). Therefore, data from individuals with reported weights exceeding the weights measured by the scale were excluded from analysis. Because there was no place on the scale to accurately depict their weight, it was impossible to tell whether these participants were distorting their size; no matter where they marked, the result would have indicated size distortion.

**Visual Analog Scales (VAS)**

These scales were developed by Heinberg and Thompson for use in their 1995 study to “measure immediate state changes in body satisfaction and mood subsequent to the viewing of commercials” (p. 329). Respondents are asked to rate how they feel on each of five dimensions by making a mark on a 100 mm horizontal line. The five VAS measures include Anxiety, Depression, Anger, Weight Dissatisfaction, and Overall Appearance Dissatisfaction. Responses are scored to the nearest millimeter, resulting in a 100-point scale.
The scales have demonstrated adequate psychometric qualities when compared with longer measures of mood and body image disturbance (Heinberg & Thompson, 1995). The VAS-Depression scale was significantly correlated with the Profile of Mood States (POMS)-Depression/Dejection subscale ($r = .68$). VAS-Anxiety correlated significantly with the POMS-Tension/Anxiety subscale ($r = .60$). Both VAS-Weight Dissatisfaction and VAS-Overall Appearance Dissatisfaction correlated significantly with the Body Dissatisfaction Subscale of the Eating Disorders Inventory ($r = .66$ and $r = .76$, respectively). The Weight Dissatisfaction and Overall Appearance Dissatisfaction scales shared 65% common variance and were thus combined in the Heinberg and Thompson (1995) study to measure body satisfaction. The mood measures, on the other hand, evidenced overlap yet did not share more than 41% of common variance; thus, these measures were kept separate by Heinberg and Thompson. The VAS-Anger measure is not relevant for the present study.

**Demographic Information**

Participants were asked to provide the following demographic information: age, height and weight (used in calculating BMI), gender, race/ethnic background, and relationship status. They were also asked whether they have ever received professional treatment for body image or eating problems. Although demographic variables are not the focus of the present study, it was necessary to conduct
preliminary analyses to check for the presence of group differences based on any of these variables and to obtain an overall idea of the composition of the sample.

**Procedure**

The investigator requested participation from students in undergraduate psychology courses for a study “about college students’ perceptions of themselves.” They were asked to voluntarily participate by completing a battery of questionnaires during approximately 15 minutes of class time. They were instructed to work through the questionnaires in the order they were presented, rather than skipping around. This request was made in an effort to ensure that the Selves Questionnaire was completed first. The decision to provide extra credit for participation was left to the instructor of each course.
CHAPTER 3
RESULTS

Characteristics of the Sample

Eighty of the 222 participants (36.03%) evidenced some degree of self-discrepancy, 82 (36.94%) listed at least one ACA (accessible construct for appearance), and 31 (13.96%) evidenced some degree of UFPP. In the area of body-image, participants manifested greater discrepancy, with 153 (68.92%) having some degree of body-image discrepancy and 38 (17.12%) having some degree of UFPP.

Table 3.1 contains descriptive statistics for all variables in the study. On average, participants were at least somewhat dissatisfied with their weight/size, as well as their overall appearance. They also reported some degree of depression and anxiety.

On average, participants were quite accurate at predicting their body size, overestimating their size by less than 1%, although there was considerable variability across participants. No gender differences in weight/size dissatisfaction, overall appearance dissatisfaction, size distortion, or depression were found. However, women evidenced greater anxiety ($M = 43.99$) than did men ($M = 34.30$), $t(220) = -2.51, p = .013$. 

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Table 3.1

Descriptive Statistics for All Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-discrepancy</td>
<td>.25</td>
<td>2.43</td>
<td>-10 – 8</td>
</tr>
<tr>
<td>Body-image discrepancy</td>
<td>1.30</td>
<td>2.52</td>
<td>-8 – 12</td>
</tr>
<tr>
<td>ACA</td>
<td>.49</td>
<td>.74</td>
<td>0 – 4</td>
</tr>
<tr>
<td>UFPP (self)</td>
<td>.18</td>
<td>.50</td>
<td>0 – 3</td>
</tr>
<tr>
<td>UFPP (body-image)</td>
<td>.22</td>
<td>.54</td>
<td>0 – 3</td>
</tr>
<tr>
<td>Weight/size dissatisfaction</td>
<td>38.20</td>
<td>28.10</td>
<td>0 – 100</td>
</tr>
<tr>
<td>Overall appearance dissatisfaction</td>
<td>33.99</td>
<td>25.62</td>
<td>0 – 94</td>
</tr>
<tr>
<td>Body size distortion</td>
<td>.13%</td>
<td>12.01</td>
<td>-29.1% - 46.1%</td>
</tr>
<tr>
<td>Depression</td>
<td>31.66</td>
<td>27.04</td>
<td>0 – 95</td>
</tr>
<tr>
<td>Anxiety</td>
<td>40.02</td>
<td>28.58</td>
<td>0 – 100</td>
</tr>
<tr>
<td>BMI</td>
<td>22.41</td>
<td>3.25</td>
<td>15.6 – 32.5</td>
</tr>
</tbody>
</table>

Note. $n = 222$ for all variables. ACA = accessible constructs for appearance; UFPP (self) = unfulfilled positive potential in the self; UFPP (body) = unfulfilled positive potential in appearance-related attributes; BMI = body mass index. Weight/size dissatisfaction, overall appearance dissatisfaction, depression, and anxiety represent self-reported levels of the variables rated on the analog scales; scores may range from 0 to 100.
Predictors of Body Dissatisfaction

The data for ACA (chronically accessible constructs for appearance) and for UFPP (unfulfilled positive potential, in both self- and body-image attributes) were positively skewed and consequently were converted to dichotomous variables to make them more appropriate for regression analyses. Simultaneous multiple regression was performed to test the hypotheses that self-discrepencies and body-image discrepancies, as well as ACA and UFPP, predict body dissatisfaction. BMI was included as a predictor variable as well. It was necessary to control for BMI because of its significant association with weight/size dissatisfaction ($r = .33, p < .01$). Zero-order and partial correlations between the variables, squared semi-partial correlations ($sr^2$) indicating the unique contribution of each variable to $R^2$, and unstandardized ($B$) and standardized ($\beta$) regression coefficients are shown in Table 3.2. The combined variables significantly predicted weight/size dissatisfaction, $F(6, 215) = 16.43, p < .001$, and accounted for 31% of the variance in weight/size dissatisfaction. Partial correlations were used to control for the other predictor variables’ influence on a given predictor and on weight/size dissatisfaction, indicating each variable’s unique contribution to weight/size dissatisfaction. As seen in Table 3.2, self-discrepencies, body-image discrepancies, and BMI remained significant predictors of weight/size dissatisfaction when controlling for the other variables, thus supporting Hypotheses 1 and 2.
Table 3.2

Simultaneous Regression Analysis for Variables Predicting Weight/Size Dissatisfaction

<table>
<thead>
<tr>
<th>Variables</th>
<th>Zero-Order $r$</th>
<th>B</th>
<th>β</th>
<th>$pr^2$</th>
<th>$sr^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1. Self-discrepancy</td>
<td></td>
<td>-</td>
<td>.27***</td>
<td>04</td>
<td>.47***</td>
</tr>
<tr>
<td>2. Body-image discrepancy</td>
<td></td>
<td>-</td>
<td>.19**</td>
<td>.03</td>
<td>.43***</td>
</tr>
<tr>
<td>3. ACA&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>-</td>
<td>-04</td>
<td>.05</td>
<td>.08</td>
</tr>
<tr>
<td>4. UFPP (self)&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>-</td>
<td>.02</td>
<td>-01</td>
<td>.04</td>
</tr>
<tr>
<td>5. UFPP (body)&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>-</td>
<td>.04</td>
<td>.28***</td>
<td>8.03</td>
</tr>
<tr>
<td>6. BMI</td>
<td></td>
<td>-</td>
<td>.33***</td>
<td>2.67</td>
<td>.31***</td>
</tr>
<tr>
<td>7. Weight/Size Dissatisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R^2 = .31$

$R = .56***$
Specifically, dissatisfaction increased with respective increases in self-discrepancy, body-image discrepancy, and BMI. ACA was not a significant predictor, failing to support Hypothesis 3. UFPP (self) and UFPP (body-image) were not significant predictors. However, UFPP, by definition, involves an actual:ideal self-discrepancy; thus, the appropriateness of using a partial correlation (which controls for the influence of self-discrepancy) to test whether UFPP makes a unique contribution to weight/size dissatisfaction seemed questionable. Because UFPP had been converted to a dichotomous variable, an independent samples $t$-test was performed to determine whether participants with UFPP in self-attributes had higher weight/size dissatisfaction scores than participants with actual:ideal self-discrepancy only, without UFPP. This test revealed no significant difference in mean weight/size dissatisfaction between those with UFPP and those with self-discrepancies alone. An independent samples $t$-test was also performed for UFPP in body-image attributes. There was a significant difference in weight/size dissatisfaction based on the presence of UFPP (body-image), $t(151) = -3.32, p = .001$. Participants with body-image UFPP reported greater weight/size dissatisfaction ($M = 56.63$) than did those with actual:ideal body-image discrepancy only ($M = 39.24$). This finding provides support for Hypothesis 5.

Simultaneous multiple regression was performed using the same set of variables to predict overall appearance dissatisfaction. Table 3.3 provides zero-order, partial, and squared semi-partial correlations, as well as regression coefficients.
Table 3.3

Simultaneous Regression Analysis for Variables Predicting Overall Appearance Dissatisfaction

<table>
<thead>
<tr>
<th>Variables</th>
<th>Zero-Order $r$</th>
<th>B</th>
<th>$\beta$</th>
<th>$pr^2$</th>
<th>$sr^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1. Self-discrepancy</td>
<td></td>
<td>-.27***</td>
<td>.04</td>
<td>.47***</td>
<td>19**</td>
</tr>
<tr>
<td>2. Body-image discrepancy</td>
<td></td>
<td></td>
<td>.19**</td>
<td>.03</td>
<td>.43***</td>
</tr>
<tr>
<td>3. ACA$^b$</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-.04</td>
</tr>
<tr>
<td>4. UFPP (self)$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>02</td>
</tr>
<tr>
<td>5. UFPP (body)$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. BMI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Appearance Dissatisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Intercept = -11.468

$R^2 = .27$

$R = .52***$
The set of variables significantly predicted appearance dissatisfaction, $F(6, 215) = 13.26, p < .001$, and accounted for 27% of the variance in appearance dissatisfaction.

Partial correlations indicated that self-discrepancies, body-image discrepancies, and BMI again remained significant when controlling for the alternate predictor variables, but ACA and UFPP (self and body-image) did not. ACA approached significance ($p = .082$). Again an independent samples $t$-test was performed to determine whether participants with UFPP (self) were more dissatisfied with their overall appearance than those with actual:ideal discrepancies but no UFPP. No significant difference in overall appearance dissatisfaction was found between these 2 groups. An independent samples $t$-test was also used to test for differences based on the presence of UFPP (body-image). There was a significant difference between groups, $t(151) = -2.78, p = .006$. Those with UFPP (body-image) reported more overall appearance dissatisfaction ($M = 49.42$) than did those with body-image discrepancies but no UFPP ($M = 36.17$). These results provide additional support for Hypotheses 1, 2, and 5, but again fail to support Hypothesis 3.

**Predictors of Body Size Distortion**

Simultaneous multiple regression was performed with degree of body size distortion regressed on self-discrepancy and body-image discrepancy. It was predicted that self-discrepancy would be the better predictor of size distortion and that body-image discrepancy would not be a significant predictor of distortion.
However, neither of these variables significantly predicted body size distortion, thus failing to support Hypothesis 6. Independent samples $t$-tests were performed to test for differences in body size distortion based on the presence of UFPP (self) and UFPP (body-image). No significant difference in body size distortion was found between those with either type of UFPP and those with the corresponding type of actual:ideal discrepancy only.

Examination of a correlation matrix of variables in the study revealed that only two variables were associated with body size distortion: BMI ($r = -.14, p < .05$) and overall appearance dissatisfaction ($r = .20, p < .01$). These associations were unexpected since previous research on body size distortion has generally not found significant correlations with these variables.

**Predictors of Depression and Anxiety**

Based on self-discrepancy theory, it was expected that actual:ideal self-discrepancies would be associated with depression. It was hypothesized that body-image discrepancies also would be associated with depression (Hypothesis 7). Simultaneous multiple regression was performed to test these predictions. Anxiety was also included as a control variable because it was highly correlated with depression ($r = .64, p < .01$). These 3 combined variables significantly predicted depression, $F(3, 218) = 55.80, p < .001, R^2 = .43$. However, neither self-discrepancy nor body-image discrepancy remained a significant predictor when partial correlation
controlled for the influence of anxiety. Self-discrepancy approached significance \( (p = .057) \). These results failed to support Hypothesis 7, as well as a basic assertion of self-discrepancy theory.

It was hypothesized that body-image discrepancies would predict anxiety (Hypothesis 7). Based on self-discrepancy theory, however, we would not expect self-discrepancies to predict anxiety when controlling for depression. Using simultaneous multiple regression, anxiety was regressed on self-discrepancy, body-image discrepancy, and depression. The set of variables significantly predicted anxiety, \( F(3, 218) = 52.22, p < .001, R^2 = .42 \). Partial correlations revealed that self-discrepancy and body-image discrepancy did not remain significant predictors of anxiety when controlling for the influence of depression. Again, these results failed to provide support for Hypothesis 7.

It was also hypothesized that UFPP would influence depression ratings (Hypothesis 8). An independent samples t-test was used to check for differences in depression between those with UFPP (self) and those with self-discrepancies but no UFPP. There was no significant difference in mean depression scores between these two groups. A t-test was also used for UFPP (body-image). No significant difference was found in mean depression scores between those with UFPP (body-image) and those with body-image discrepancies only. Therefore, Hypothesis 8 was not supported.
Tests for Interactions

To address the question of whether those with both self-discrepancies and body-image discrepancies experience greater body dissatisfaction than those with only one or the other, these variables were converted to dichotomous variables (with scores reflecting either the presence or the absence of discrepancy). A 2 (self-discrepancies) x 2 (body-image discrepancies) analysis of variance (ANOVA) was performed to check for mean differences in weight/size dissatisfaction between those with both types of discrepancy and those with only one type. No interaction effect was found, suggesting that those with both types of discrepancy did not experience greater weight/size dissatisfaction than those with only one type. An additional 2 (self-discrepancies) x 2 (body-image discrepancies) ANOVA was performed to determine whether differences in overall appearance dissatisfaction exist between these two groups. Again, no interaction was found.

In order to explore whether participants with self-discrepancies and ACA report greater body dissatisfaction than those with only one or the other (Hypothesis 4), the dichotomous versions of these two variables were used. A 2 (self-discrepancies) x 2 (ACA) ANOVA was used to check for mean differences in weight/size dissatisfaction among these groups. Significant main effects were found for self-discrepancy, \( F(1, 214) = 10.31, p = .002 \), and body-image discrepancy, \( F(1, 214) = 9.94, p = .002 \). These findings are consistent with the regression results. ACA approached significance, \( p = .079 \). An interaction effect was found for ACA and self-
discrepancy, \( F(1, 214) = 5.73, p = .017 \). Those with self-discrepancies and ACA \( (M = 47.64) \) were more dissatisfied with their weight/size than those with self-discrepancies only \( (M = 33.23) \) and those with ACA only \( (M = 20.65) \). This finding supports Hypothesis 4. No interaction effect was found for ACA and body-image discrepancy.

Analysis of variance was also performed to determine whether an interaction effect exists in overall appearance dissatisfaction. Significant main effects were found for self-discrepancy, \( F(1, 214) = 4.50, p = .035 \), and body-image discrepancy, \( F(1, 214) = 16.52, p < .001 \). These results are consistent with those produced by the regression analysis. Again ACA approached significance, \( p = .061 \). A significant interaction effect was found for self-discrepancy and ACA, \( F(1, 214) = 5.33, p = .022 \). Those with self-discrepancies and ACA reported more overall appearance dissatisfaction \( (M = 33.36) \) than those with only self-discrepancies \( (M = 26.67) \) and those with only ACA \( (M = 18.65) \). This result again supports Hypothesis 4.
Overall, results support the application of Higgins' self-discrepancy theory to body dissatisfaction; however, results failed to support its application to body size distortion. Interestingly, the results did not replicate the well-established association between self-discrepancies and depression. Of particular importance is the finding that UFPP in the body-image domain is associated with greater body dissatisfaction than that associated with body-image discrepancy alone.

It was hypothesized that actual:ideal self-discrepancies from one's own standpoint would predict body dissatisfaction. It was also hypothesized that body-image discrepancies (actual:ideal from one's own standpoint) would predict body dissatisfaction. These hypotheses were supported. As self-discrepancy increased, weight/size dissatisfaction and overall appearance dissatisfaction increased.

Similarly, greater body-image discrepancy predicted greater weight/size dissatisfaction and overall appearance dissatisfaction. Self-discrepancy and body-image discrepancy remained significant predictors of dissatisfaction even when controlling for other variables, including BMI, which was also a significant predictor of dissatisfaction.

On the other hand, ACA alone was not a significant predictor of weight/size dissatisfaction but was marginally associated with overall appearance dissatisfaction.
This result fails to replicate the finding of Strauman and colleagues (1991) that ACA made a significant contribution to scores on a measure of body dissatisfaction. It is possible that the transformation of ACA into a dichotomous variable and the resultant loss of information might have affected the results of the current study. It is also possible that differences in scoring between the previous study and the present study could have yielded different results. Specifically, if there were differences in determining which words relate to physical appearance or body concerns, such differences might be responsible for the different findings. It is possible that only certain types of appearance-related constructs relate to dissatisfaction, such as those describing thinness or beauty as opposed to being “in shape” or generally healthy and active. In future studies, it might be useful to examine whether the type of physical attribute contained in an individual’s general self-guides differentiates those who are dissatisfied from those who are not. For instance, if a person’s self-guide contains an appearance-related attribute such as “short,” “tall,” or “athletic,” is this person as likely to be dissatisfied as a person whose self-guide contains an attribute such as “skinny,” “pretty,” or “hot”? It seems logical that the former group of words, in particular, might be more likely to relate to overall appearance dissatisfaction but perhaps less likely to relate to weight/size dissatisfaction.

It was also predicted that those with combined self-discrepancy and ACA would experience greater body dissatisfaction than those with only one or the other. Results support this hypothesis and are consistent with previous research (Strauman...
et al., 1991). This finding also lends support to Strauman and colleagues’ assertion that body dissatisfaction may be rooted in specific appearance-related standards as well as more general discrepancies in the self.

In answer to the exploratory question of whether those with both self-discrepancies and body-image discrepancies experience greater body dissatisfaction than those with only one or the other, the current study found that individuals with both types did not report greater dissatisfaction than those with either type alone. Thus, whereas greater discrepancy in either domain predicts greater dissatisfaction with one’s weight and overall appearance, it appears that there is no incremental effect of having discrepancy in both domains.

Based on previous research, it was expected that self-discrepancies would be a better predictor of body size distortion than body-image discrepancies would be. However, results indicate that neither self-discrepancies nor body-image discrepancies predicted size distortion. Method variations might explain the disparate findings between the present study and the previous study addressing this question. Strauman and Glenberg (1994) used a more elaborate procedure for assessing body size distortion than the 2-figure method used in the present study. In their study, an interviewer asked participants to respond to a series of cards depicting silhouettes of various sizes by stating whether the figure was larger or smaller than the participant’s actual size. The greater number of trials and other details of the method might have yielded a more reliable estimate of participants’ size perception. It is also
interesting to note that, on average, participants in the present study did not distort their body size very much. It is possible, then, that in a clinical sample (e.g., a sample of patients with eating disorders) one might find self-discrepancies predicting body size distortion. Further research is needed to elucidate the nature of the relationship between self-discrepancy and size distortion observed by Strauman and Glenberg (1994).

The fundamental premise of self-discrepancy theory is that particular types of discrepancies are associated with differential emotional outcomes. Actual:ideal/own self-discrepancies are purported to be associated with dejection-related emotions, and actual:ought/other self-discrepancies are associated with agitation-related emotions. A great deal of support has been found for these assertions. Consistent with the theory, actual:ideal self-discrepancies were not associated with anxiety, which is considered an agitation-related emotion. However, the findings of the present study indicate that, when controlling for the influence of anxiety on depression, actual:ideal self-discrepancies did not predict depression, which is generally considered a dejection-related emotion. It is interesting to note, however, that self-discrepancy came very close to being a significant predictor of depression. One explanation for this unexpected result is the nature of the dejection-related emotion. In the current study, depression was used as the measure of dejection. However, Higgins' studies often involve an adjective checklist containing a number of words related to dejection, rather than a single word. Thus, the type of dejection
represented by the collection of words used in previous studies might be qualitatively
different than the type of depression evoked in the minds of participants by the single
word used in the present study. Dejection conceivably is more inclusive than
depression. It is also possible that the association between self-discrepancies and
depression would be stronger in a sample with a higher level of depression than that
found in the present study.

In an extension of the theory's application to body image disturbance, it was
hypothesized that body-image discrepancies would be associated with depression.
Based on prior body-image research in which actual:ideal body-image discrepancies
were associated with both depression and anxiety (contrary to the theory's usual
predictions), it was hypothesized that body-image discrepancies would also be
associated with anxiety. The present study did not find support for these predicted
relationships. When controlling for the influence of anxiety on depression, body­
image discrepancies did not make a significant contribution to depression. Similarly,
body-image discrepancies did not predict anxiety when controlling for the
relationship between depression and anxiety. It seems, therefore, that body-image
discrepancy is associated with negative affect in general, but it is difficult to tease
apart the overlap between depression and anxiety (at least as they were measured in
the present study). In studies that have measured both actual:ideal and
actual:ought/other discrepancies, the two have been strongly intercorrelated (e.g.,
Snyder, 1997; Strauman et al., 1991; Strauman & Glenberg, 1994). Theoretically,
these two self-state representations are discriminantly associated with depression and anxiety. However, to the extent that the self-state representations overlap and depression and anxiety overlap, it might be difficult to separate these intertwined constructs, particularly in the context of body image, where societal standards become one’s own standards and feelings about one’s body often oscillate.

The most important findings in the current study, and those of primary interest, pertain to the role of UFPP in body image disturbance. In particular, participants with UFPP in the domain of body image reported significantly more weight/size dissatisfaction and overall appearance dissatisfaction than did participants with body-image discrepancies only (without UFPP). On the other hand, those with UFPP in the domain of self-attributes did not exhibit greater dissatisfaction than those having self-discrepancies without UFPP. These findings suggest that those who are falling short of their ideal standards, which they believe they could be reaching, are not more prone to body dissatisfaction if these standards are in the domain of general self-attributes. For example, consider a person who believes he is actually selfish but would ideally like to be unselfish and believes he can be unselfish. This pattern of self-beliefs represents unfulfilled positive potential (UFPP). The findings of this study suggest that a person with this type of belief pattern in the domain of general attributes would not be more prone to body dissatisfaction than his friend who believes he is actually shy and ideally would like to be outgoing (but does not hold to a belief that he can be outgoing). In contrast,
consider a person who possesses UFPP in the domain of body-image. For example, imagine a woman who believes she is actually overweight but would ideally like to be skinny and believes she can be skinny. Results of this study suggest that this individual is more likely to experience body dissatisfaction than her friend who believes she is ugly and would ideally like to be pretty but does not subscribe to the belief that she can be pretty. This interpretation is not to suggest, of course, that this latter individual would be overjoyed with her alleged ugliness. However, she would presumably not experience the level of dissatisfaction experienced by her friend with UFPP. Stice and Shaw (2002) referred to “the relentless pursuit of an ultra-slender body that is virtually unattainable” (p. 987) promoting appearance dissatisfaction. Perhaps those who are most prone to engaging in this relentless pursuit – and therefore most prone to dissatisfaction – are those with the belief that the “virtually unattainable” body is, in fact, attainable. It seems that body-image UFPP does not play the same role in body size distortion, though, as no difference in body size distortion was found between those with discrepancies alone and those with UFPP.

It was also expected that those with UFPP would be more depressed than those with actual:ideal discrepancies alone. Results did not support this hypothesis. In other words, those with UFPP (self or body-image) did not report greater depression than those with only actual:ideal discrepancies in the respective domain. Again, it is possible that the study’s use of depression to represent dejection might have contributed to this finding, which is divergent from that of Higgins (1990).
his study, Higgins (1990) found UFPP to be associated with a common depression inventory but also with “dejection-related symptoms” (p. 252), including feeling like a failure, being unsatisfied with one’s self and accomplishments, having to push one’s self to do anything, lacking drive and alertness, being listless, being unenergetic, feeling helpless and without self-control, and believing there is something wrong with one’s self that prevents one from fulfilling his or her potential. Clearly, such a list exceeds the scope of the single word depression. Thus, although participants in the present study might have endorsed such feelings if given the opportunity, they might not have associated such feelings with the anchor word depression at the end of a horizontal line on a scale. While Higgins found UFPP to be associated with these other symptoms, he also found it to relate to a common measure of depression. Such a scale, although measuring only depression, still contains a greater number of items than the single item employed in the current study.

What are the implications of these results for the prevention and treatment of body image disturbance? First, it might be beneficial for treatment programs that deal with body image issues (such as those for eating disorders) to address a broader range of actual:ideal self-discrepancies than those limited to body image attributes. Because self-discrepancies and body-image discrepancies each contribute to body dissatisfaction, it is possible that a person whose treatment addresses the body-image discrepancies but neglects the more general self-discrepancies might be more
susceptible to ongoing dissatisfaction than if the treatment had addressed both domains of discrepancy. Addressing discrepancies might involve helping the individual discern whether his or her ideal standards are reasonable or unrealistic, particularly in the area of body image. As many have observed (e.g., Fallon, 1990; Thompson, 1990), cultural standards for beauty are often highly unrealistic or impossible for most people. Thus, the individual who internalizes these beauty standards is likely setting his or her self up for a discrepancy situation. Addressing the unrealistic nature of such standards and helping the individual focus on who he or she is as a whole person rather than on physical traits alone might prove helpful. In the case of broader self-discrepancies, dealing with unrealistic standards if they exist and determining what steps can be taken to achieve those ideals which are reasonable might aid in reduction of body dissatisfaction.

Second, if the role of body-image UFPP in body dissatisfaction is supported in future research, prevention and treatment programs might do well to incorporate psychoeducational components to deal with UFPP. For instance, many women—and men—are not aware of the elaborate airbrushing techniques and composite models frequently used in magazines, advertising, and other media. Consequently, some do not realize that the images in the pictures are not real; that is, the person in the picture does not look like the picture! Perhaps the individual has internalized the cultural ideal and believes that he or she can, with more exercise and less food, look like the pictures. It is no wonder that such an exercise in futility leaves a person
vulnerable to the dejection of body dissatisfaction. Helping the person to understand why his or her goal is so elusive and to formulate more practical beliefs about which goals can be reached may be found to aid in reducing dissatisfaction. Research is needed to determine whether such recommendations may be useful in alleviating dissatisfaction.

Limitations of the present study must be considered. One limitation already discussed is the use of depression to represent dejection. It is likely that more accurate data would be obtained by using a more inclusive definition of dejection and measuring a syndrome of dejection-related emotions rather than only one. A related issue is the use of one-item measures to assess weight/size dissatisfaction, overall appearance dissatisfaction, depression, and anxiety. Time restrictions for data collection necessitated the use of very brief measures. However, more accurate data would presumably be obtained by using more specific measures of these variables. Next, the sample consisted of college students with ages ranging widely (18 to 60). Although people of all ages are susceptible to body dissatisfaction, the most dissatisfied population is usually slightly younger than the current sample. It is unclear, then, how generalizable the current findings are to those in younger age brackets, such as high school and younger college students. Nonetheless, body dissatisfaction was in fact present, and results from this sample suggest that future research is warranted to examine the role of UFPP in those most prone to dissatisfaction. Another consideration is that the average level of self-discrepancy
was fairly low. It is possible that results would be more robust in a sample with
greater discrepancy. Future research in clinical populations, such as those with eating
disorders or body dysmorphic disorder, would be most valuable. Further, the present
study was conducted with a primarily white sample. Future research with a more
diverse sample is needed to determine whether self-discrepancies, body-image
discrepancies, ACA, and UFPP operate in the same way in individuals of various
races and ethnicities. Finally, the correlational nature of the research precludes
assumptions of causality. Nonetheless, results support self-discrepancy theory as a
useful framework for understanding body image disturbance and as a viable variable
for future studies.
REFERENCES


