

EATING DISORDERS AMONG LATINAS:
EXAMINING THE APPLICABILITY OF OBJECTIFICATION THEORY

By

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2005

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This document is dedicated to my two mamis, Hilaria and Wilma Garcia, who could not witness this accomplishment personally, though they surely witnessed it in spirit.

ACKNOWLEDGMENTS

I would like to take this opportunity to thank my family, friends, and colleagues for all their support and encouragement. I am very grateful to several friends that helped me to collect data by allowing me access to their resources and contacts. I especially want to thank Maricela Alvarado, who helped me collect the bulk of the data for this project. I would also like to acknowledge my dissertation committee, a group of very strong and accomplished academic women that are an inspiration. I am particularly grateful to my dissertation committee chair, Bonnie Moradi, Ph.D., who was very helpful by providing me positive and constructive feedback throughout this process.

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December 2005

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Major Department: Psychology

This study evaluated a model of objectification theory and other sociocultural variables as they apply to understanding eating disorder symptoms among Latina women. Objectification theory proposes that because women are embedded within sexually objectifying cultural contexts, they learn to self-objectify, or view themselves from an outsider's perspective as objects. Self-objectification then purportedly leads to increased body shame and vulnerability to eating disorder symptomatology as well as other mental health concerns in women. Prior research on eating disorder symptoms among Latinas indicates that acculturation, acculturative stress, and internalization of cultural standards of beauty that promote thinness in women may be additional important variables in understanding eating disorder symptomatology among Latinas. This study examined potential direct and indirect links among acculturation, acculturative stress, internalization of cultural beauty standards, self-objectification, body shame, and eating disorder symptoms in a sample of 112 Latinas.

Path analyses revealed that internalization of cultural beauty standards, self-objectification, acculturative stress, and body shame all were related uniquely and significantly to eating disorder symptoms. In addition, self-objectification and body shame both partially mediated the relation between internalization of cultural beauty standards and eating disorder symptoms. Body shame also partially mediated the link between self-objectification and eating disorder symptoms. Although no relationship was found between acculturation and any of the other variables of interest, acculturative stress was related significantly and uniquely to both body shame and eating disorder symptoms. The link from acculturative stress to eating disorder symptoms was also partially mediated by body shame. The results indicated that objectification theory, along with the relevant variables of internalization of cultural beauty standards and acculturative stress, may be applied to understand eating disorder symptoms among Latinas. Implications of findings and directions for future research are discussed.

CHAPTER 1 INTRODUCTION

Eating disorders are significantly more prevalent among women than men, as well as among Western and industrialized nations than less developed nations (American Psychiatric Association [APA], 2000; Pate, Pumariega, Hester, & Garner, 1992), though they have recently been on the rise in non-Western, newly industrialized nations (Gordon, 2001). There is evidence that these gender and societal differences may be due to cultural factors, such as Western cultural standards that promote thinness as ideal beauty in women (Crandall & Martinez 1996; Stice, 1994; Vandereycken & Hoek, 1992). In a review of the literature on the etiology of eating disorders, Striegel-Moore and Cachelin (2001) described sociocultural contexts, including the thin beauty ideal and gender roles, as major risk factors for developing eating disorders. Additionally, an extensive body of research indicates that the media may represent the most notable socializing agent for this cultural beauty ideal (Groesz, Levine, & Murnen, 2002; Harrison & Cantor, 1997). Research also suggests that body dissatisfaction, a diagnostic criterion for both anorexia and bulimia (APA), is an integral part of women's socialization (Henderson-King & Henderson-King, 1997; Stice). More specifically, this socialization results in a "normative discontent" among women about their bodies (Rodin, Silberstein, & Striegel-Moore, 1984).

Objectification theory, a sociocultural model developed by Fredrickson and Roberts (1997), provides a useful framework for understanding how sociocultural factors and gender socialization are linked to eating disorder symptomatology. The model can be

summarized as follows. Sexual objectification, which permeates the sociocultural contexts in which women live, leads to “self-objectification,” or viewing oneself from an outsider’s perspective. Self-objectification in turn leads to increases in appearance anxiety, anxiety about safety, and body shame over not meeting cultural beauty standards. These psychological and emotional consequences of self-objectification result in increased depressive and anxiety disorders, sexual dysfunction, and eating disorders. Self-objectification is described as both a trait (i.e., experienced more chronically by some women than others) and a state (i.e., more likely to occur in certain situations than in others).

Empirical support has accumulated for objectification theory as it explains eating disorders in samples of primarily White/European American women. For example, in a study of the emotional consequences of self-objectification, Miner-Rubino, Twenge, and Fredrickson (2002) found that self-objectification predicted body shame and depression incrementally, beyond what was predicted by body dissatisfaction and other personality variables. In another study, Fredrickson, Roberts, Noll, Quinn, and Twenge (1998) found individual differences in self-objectification, lending support to the concept of trait self-objectification. They also found that certain situations (e.g., trying on a swimsuit versus a sweater) are more likely to trigger self-objectification, supporting the existence of state self-objectification. Furthermore, they found that women in their sample were significantly more likely than men to self-objectify and to experience greater body shame when state self-objectification was triggered experimentally (i.e., trying on a swimsuit in front of a full length mirror). Body shame, resulting from the experimental condition of

induced state self-objectification, in turn was predictive of restrained eating for women in the study.

Several other studies found support for a link between self-objectification and eating disorder symptoms, both directly and indirectly through the mediating role of body shame (Greenleaf, 2005; Noll & Fredrickson, 1998; Tiggeman & Lynch, 2001; Tiggeman & Slater, 2001). For example, Tiggeman and Slater found that former ballet dancers scored higher on trait self-objectification, self-surveillance, and eating disorder symptoms than did non-dancers. Assuming that the ballet culture is one in which women are more likely to be objectified and scrutinized, these results supported the notion that women exposed to an intensely objectifying cultural context (i.e., ballet culture) are more likely to self-objectify than those not exposed to such a context. Similarly, in a study of the relationship of media exposure to eating behaviors, Morry and Staska (2001) found that, among the women in their sample, increased exposure to beauty magazines, a manifestation of an objectifying cultural context, was significantly positively associated with self-objectification and eating disorder behaviors. However, these relationships were fully mediated by level of internalization of cultural beauty standards of thinness as ideal. Their results therefore suggested that exposure to beauty magazines is translated into self-objectification and eating problems through internalization of these cultural beauty standards.

Another recent study conducted by Moradi, Dirks, and Matteson (2005) also highlighted the important additional role of internalization of cultural beauty standards for mediating the relationship between sexually objectifying cultural experiences and self-objectification. Their path analytic results showed significant positive links among

reported experiences of sexual objectification, internalization of cultural beauty standards, self-objectification as indicated by body surveillance, body shame, and eating disorder symptoms. Moradi et al. also found several mediator effects. Internalization of cultural beauty standards mediated the link of reported experiences of sexual objectification to self-objectification, body shame, and eating disorder symptoms. In addition, self-objectification also mediated the link of reported sexual objectification experiences to body shame. Similar to other studies, the link between self-objectification and eating disorder symptomatology was also partially mediated by body shame.

Overall, data suggest that objectification theory is useful in explaining the high prevalence rates of body shame and eating disorders among women of White/European American background. Fredrickson and Roberts (1997) recognized, however, that their theory was based on research conducted primarily on White/European American women. They pointed out that this was mainly due to the very limited number of cross-cultural studies on mental health issues in women.

The lack of research on eating disorders among women of color may be due in part to the fact that eating disorders have historically been considered primarily a problem among young, middle-class, White/European American women (Thompson, 1992). This impression has begun to change, however, with increased reports of eating disorders among women of color. For example, one recent study comparing Asian American, African American, Latina, and White/European American women found all groups of women were equally likely to exhibit symptoms of bulimia, anorexia, or binge eating disorder (Cachelin, Veisel, Barzegarnazari, & Striegel-Moore, 2000). Additionally, eating disorder prevalence rates have been on the rise since the early 1990's in non-Western

societies, such as Asia, Africa, and Latin America, which have not historically had significant eating disorder rates (Gordon, 2001).

Consistent with the increasing prevalence of eating disorders, Fredrickson and Roberts (1997) surmised that all women experience self-objectification because all women are presumably socialized within a sexually objectifying cultural context. No extant study, however, has attempted to examine the applicability of objectification theory for explaining eating disorders in women of ethnic or racial backgrounds other than White/European American. As a step toward addressing this gap in the literature, the present study will focus on examining the propositions of objectification theory among Latinas. Clearly such a study must attend also to the unique experiences of Latinas and incorporate in the examination of objectification theory additional constructs that have been linked with eating disorder related variables for Latinas.

Crago, Shisslak, and Estes (1996) reviewed the literature on eating disorders among women of color and noted a paucity of studies specifically examining eating disorders among Latinas. Their review of the few extant studies on Latinas suggested that Latinas are as likely as White/European American women to develop eating disorders. Further, some studies have found that Latinas have greater body dissatisfaction in comparison to other women of color (Altabe, 1998; Fitzgibbon et al., 1998). According to the review by Crago et al. (1996), one of the greatest risk factors among women of color for developing eating disorders is identifying with White, middle-class cultural values. Indeed, several studies found a relationship between acculturation and eating disorders. For example, Cachelin et al. (2000) found that increased acculturation to U.S. culture was associated with increased eating problems. They also found that, among those who met criteria for

eating disorders, women who were less acculturated were less likely to have received treatment. In another study, Pumariega (1986) compared the eating attitudes of Latina and White/European American adolescent girls. Although Latina girls' attitudes about eating were generally comparable to those of White/European American girls, there was a significant positive correlation between greater acculturation and eating disorder symptoms. Similarly, Franko and Herrera (1997) found Guatemalan American women to be significantly less likely to report body image and eating problems than White/European American women in their sample. However, among the Guatemalan American women, those with increased acculturation levels were significantly more likely to report body dissatisfaction than those who were less acculturated.

Whereas the aforementioned studies focused on general acculturation, Lester and Petrie (1995) examined the more specific variable of endorsement of U.S. sociocultural values about attractiveness along with general acculturation. They found that subscribing to U.S. sociocultural values about attractiveness was related to bulimic symptoms, although general acculturation was not. Their results suggested that Latinas' vulnerabilities to eating disorders are linked with internalization of U.S. cultural beauty standards, a more specific aspect of the general process of acculturation. The acculturation process has been described as one that is complex and multidimensional (Berry, 2003). Therefore, assessing acculturation only as a general dimension may not fully capture its relationship to eating disturbance. It may be that general acculturation is linked with eating disorder related variables through its link with internalization of the dominant cultural beauty standards.

Another important variable that may be linked to eating disorders among Latinas is acculturative stress. Acculturative stress has been described as a psychological outcome that occurs during the acculturation process when cultural norms from the host culture are in conflict with the norms of the culture of origin (Berry, 2003). If the acculturating individual interprets this conflict as particularly difficult to surmount and problematic to his or her self-concept, acculturative stress may be experienced. This stress reaction often makes acculturation, or adjustment to the host culture, a difficult and lengthy process. According to one review of the literature on acculturation, acculturative stress has been associated with a person's internal coping resources, available support resources, and the types of stressors experienced (Roysircar-Sodowsky & Virgil Maestas, 2000). Furthermore, it is not considered an inevitable aspect of acculturation and supportive extended family networks can serve a protective role against it (Berry; Balls Organista, Organista, & Kurasaki, 2003). Whether or not one experiences acculturative stress may be dependent on several factors. Increased acculturative stress has been associated with earlier generation level in the U.S. (Padilla, Wagatsuma, & Lindholm, 1985), immigrating to the U.S. after about age 14 (Padilla, Alvarez, & Lindholm, 1986), low self-esteem (Padilla et al., 1985), lower career self-efficacy (Miranda & Umhoefer, 1998), and depression and anxiety (Hovey & Magana, 2000).

A study conducted by Chamorro and Flores-Ortiz (2000) provided indirect support for a link between acculturative stress and eating disturbances. These authors examined the relationship between general acculturation to U.S. culture and eating attitudes among five generations of Mexican American women. Their findings indicated not only that increased acculturation was significantly related to increased eating

disturbance, but also that this association was strongest among the second-generation women, who were born in the U.S. to parents who had immigrated from a Hispanic country. One interpretation of this may be that the second-generation Latinas were particularly susceptible to experiencing acculturative stress due to their recent contact with some American sociocultural norms, such as cultural beauty standards. Attempting to incorporate these norms while simultaneously trying to retain the norms associated with their culture of origin may produce conflict in the form of acculturative stress among some first and second generation Latinas in their quest to adapt to a host culture.

Only one study has evaluated directly the relationship between acculturative stress and eating disorder symptoms among Latinas and other women of ethnically diverse backgrounds. Perez, Voelz, Pettit, and Joiner (2002) found that increased body dissatisfaction, acculturative stress, and the interaction between the two were significant predictors of increased bulimic symptoms. Among those scoring high on acculturative stress, higher levels of body dissatisfaction were related to higher levels of bulimic symptoms. Among those scoring low on acculturative stress, the relationship between body dissatisfaction and bulimic symptoms was weak and did not reach significance. Therefore, acculturative stress appears to influence the relationship between body dissatisfaction and bulimic symptoms among Latinas and other women of color. Although there is little research on the impact of acculturative stress on eating disorder symptoms, these results and other research linking acculturative stress to mental health problems (Hovey & Magaña, 2000; Miranda & Umhoefer, 1998; Padilla et al., 1985), suggest that the relationship between acculturative stress and eating disorders in Latinas should be further explored.

In summary, several interrelated variables seem to be associated with eating disorders among Latinas. These include acculturative stress, internalization of cultural beauty standards, and acculturation through its relationship to this internalization. Objectification theory offers a practical sociocultural model for understanding the development of eating disorders that, with the addition of these culturally relevant variables, may be applicable to Latinas. Thus, the present study integrates the empirically supported propositions of objectification theory with extant research on eating disorders among Latinas to examine a culturally appropriate version of objectification theory for Latinas. More specifically, this study will examine empirically a model that assesses direct and indirect (i.e., mediated) links of acculturation, internalization of cultural standards of beauty, self-objectification, and body shame to eating disorder symptomatology. In addition, the role of acculturative stress in the model will be explored. Given the limited research on the role of acculturative stress in eating disorder symptomatology among Latinas, however, examination of the role of acculturative stress in the model will be strictly exploratory. The following chapter will include a thorough description of the overall model for Latinas, including a description of objectification theory, the research supporting it, and the variables that may be added for applying the theory to Latinas. The following chapter will also provide a description of the purpose and hypotheses for the current study.

CHAPTER 2 REVIEW OF THE LITERATURE

It is well documented that women are significantly more likely than men to be diagnosed with eating disorders (APA, 2000). Extant literature suggests that the prevalence and development of eating disorders are in part rooted in sociocultural contexts, such as Western cultural standards, that promote thinness as ideal beauty in women (Striegel-Moore & Cachelin, 2001; Vandereycken & Hoek, 1992). For example, in a comprehensive review of the literature on bulimia, Stice (1994) cited extensive research evidence suggesting that sociocultural pressures may affect the development and maintenance of bulimia. He described several trends that may promote thin ideal images for women, including increasingly thinner women in the media over the past few decades, increasing numbers of dieting articles in women's magazines, and steadily increasing rates of eating disorders among women from the 1960's through the 1990's. A sociocultural model is also supported by evidence that eating disorders remain much more prevalent among Western and industrialized nations, although incidence rates have increased all over the world in recent decades (Gordon, 2001; Pate et al., 1992).

According to Gordon (2001), the steadily increasing eating disorder rates among women in U.S. and Western European societies from the 1960's through the 1990's coincided with shifts in female gender roles related to increasing participation in employment and higher education. He noted that while the rates have leveled off in the U.S., they have been steadily increasing since the 1990's in newly emerging industrialized societies, such as Japan, China, Mexico, and Argentina. Gordon described

the rise of eating disorders as a “modern epidemic” that coincides with increasing consumerism within societies that emphasize personal achievement and satisfaction. He proposed that eating disorder rates reflect societal role conflicts for women. These struggles between traditional female roles focusing on submissiveness and newly emerging roles focusing on achievement may be associated with the development of eating disorders and the larger social problem of body dissatisfaction.

Rodin et al. (1984) developed the concept of “normative discontent” to describe the pervasive dissatisfaction with one’s body that exists among women in U.S. society. According to these scholars, American cultural standards promote an unrealistic ideal of thinness for women. This unattainable ideal results in body dissatisfaction, which inevitably leads to low self-esteem, lack of confidence, and depression in women. Indeed, while body dissatisfaction has been established as a diagnostic criterion for both anorexia and bulimia nervosa (APA, 2000), several studies found body image concerns among women without diagnosed eating disorders (Cash & Henry, 1995; Demarest & Allen, 2000; Irving, 1990; Thompson & Psaltis, 1988). The normative nature of body dissatisfaction is consistent with the notion that body dissatisfaction is an aspect of gender socialization.

The research literature on media exposure to thin models further supports a sociocultural perspective of eating disorders. Groesz et al. (2002) conducted a meta-analysis of 25 studies on the effects of experimental manipulations of the thin beauty ideal, through media exposure, on women’s body images. They calculated 43 effect sizes and examined the main effects of mass media images of the thin ideal as well as the moderating effects of premorbid body image problems, age, number of stimulus

presentations, and type of research design. Results indicated that body satisfaction was significantly more negatively affected by viewing thin media images than by viewing other types of media, including average size models, overweight models, or inanimate objects. This supports the notion that cultural context, in the form of mass media portrayals of thin ideals, affects body dissatisfaction. Thus, a substantial body of literature points to sociocultural roots of eating disorders. Objectification theory (Fredrickson & Roberts, 1997) provides a framework for understanding how this sociocultural context results in eating disorders.

Objectification Theory: A Sociocultural Explanation for Eating Disorders

Objectification theory, proposed by Fredrickson and Roberts (1997), has made an important contribution to the psychological literature on the link between women's experiences and mental health. Fredrickson and Roberts grounded their tenets on available empirical literature and argued that women's bodies are defined by and viewed through a sociocultural lens. More specifically, they argued that women's experiences and mental health risks are shaped by a culture in which they are constantly being observed and evaluated based on how they look. Women are treated as objects for the pleasure of others rather than as complete human beings. Fredrickson and Roberts described frequent male "gaze," or visual inspection of the body, as one obvious example of the ways women are sexually scrutinized and objectified. They cited evidence of the abundance of such gaze from empirical research on interpersonal relations and media representations of women's bodies and body parts. For example, extant data indicate that women are more likely than men to be gazed upon and to feel gazed upon in interpersonal situations (Argyle & Williams, 1969; Hall, 1984). Men are more likely than women to engage in nonreciprocated gaze and make accompanying sexually evaluative

commentary (Cary, 1978; Henley, 1977). Visual media often depict men looking directly at women, whereas media portrayals of women often emphasize body parts as representations of the whole woman (Goffman, 1979; Sommers-Flanigan, Sommers-Flanigan, & Davis, 1993; van Zoonen, 1994). Such evidence provides support for the notion that women and their bodies are often objectified.

According to objectification theory, because women in American society are socialized within a sexually objectifying cultural context, they learn early in life to view themselves through a similar lens. Fredrickson and Roberts (1997) described this “self-objectification” as internalization of an outsider’s perspective on one’s body. Some women may be more chronically preoccupied with their appearance than others (i.e., trait self-objectification). In addition, certain situations, most likely ones that are public, in which men are present, and that have increased potential for visual scrutiny by others, may trigger or magnify a state of self-objectification (i.e., state self-objectification). According to objectification theory, all women experience self-objectification irrespective of their level of body image satisfaction because self-objectification exists as part of women’s cultural socialization.

Fredrickson and Roberts (1997) suggested that self-objectification is manifested in women’s tendency to constantly monitor their own bodies and compare themselves with impossible to reach cultural standards of beauty. This leads to a self-definition that is based on what one looks like to the outside observer. Therefore, the consequences of self-objectification are often feelings of shame for not living up to the cultural beauty ideal (i.e., body shame). Additionally, women experience appearance anxiety based on constantly being judged by their appearance, as well as anxiety related to their personal

safety due to the increased potential for violence against them. Their chronic self-inspection, whether based on appearance anxiety or on an awareness of being objectified by others, leads self-objectifying women to experience interruptions in concentration that keep them from reaching “peak motivational states” when mental activities are most productive. Finally, internalizing an observer’s perspective leads women to be less attentive to, or less aware of, their own internal bodily cues (e.g., increased heart-rate) and to focus more on external cues for determining how to feel in certain situations. Thus, self-objectification leads to increased shame and anxiety, decreased concentration and mental activity, and decreased attention to internal bodily cues. These psychological and emotional consequences of self-objectification in turn lead to eating disorders and other mental health problems that have higher prevalence rates among women (e.g., depression, anxiety, sexual dysfunction).

Empirical Research on Objectification Theory

Although objectification theory was published fairly recently, evidence for its utility in understanding eating disorder symptomatology has been accumulating. Several authors have examined empirically the extent to which aspects of objectification theory explain eating disorders for samples of primarily White/European American women. Much of this research has focused on and supported links among self-objectification, body shame, and eating disorder symptomatology. For example, Noll and Fredrickson (1998) developed a measure of trait self-objectification and examined the mediating role of body shame in the link between self-objectification and eating disorder symptoms. They proposed that self-objectification would lead to increased body shame in women, which would then lead to dieting. Dieting would lead to greater awareness of body shame and body dissatisfaction, eventually spiraling into eating disorder behaviors. They also

hypothesized that the threat of body shame and fear of future weight gain would be enough to lead some women to engage in disordered eating even if they were currently satisfied with their bodies (i.e., did not experience body shame). Thus, self-objectification would have a direct link to eating disorder behaviors as well as an indirect link, through body shame, to these behaviors.

In order to test these hypotheses, Noll and Fredrickson (1998) developed and administered two measures to two separate samples of undergraduate university women. The Self-Objectification Questionnaire (SOQ) assessed concern with appearance manifested through self-monitoring. In completing the SOQ, respondents are asked to rank-order a list of 10 items consisting of 5 appearance based (e.g., physical attractiveness) and 5 competence based (e.g., physical fitness) body attributes. Noll and Fredrickson reported that the SOQ was shown to demonstrate good construct validity based on correlations with other related measures. These authors also developed the Body Shame Questionnaire (BSQ) to measure how likely one is to feel ashamed about one's body. Composite scores are obtained by rating the frequency and intensity with which one would like to change a list of 28 body attributes. As evidence of predictive validity, the authors reported that BSQ scores accounted for unique variance in eating disorder symptoms beyond that accounted for by other measures of general shame and neuroticism.

Noll and Fredrickson (1998) also administered several measures of eating disorder symptoms, including the Eating Attitudes Test (EAT; Garner & Garfinkel, 1979), a general measure of eating disorder behaviors and body dissatisfaction, the Revised Bulimia Test (BULIT-R; Thelen, Farmer, Wonderlich, & Smith, 1991), a measure of

bulimic symptoms, and the Revised Restraint Scale (Polivy, Herman, & Howard, 1988), a measure of anorexia symptomatology (e.g., weight fluctuations, degree of chronic dieting, attitudes toward weight and eating). Evidence of validity and reliability across samples exists for each of these instruments. All measures were first administered to a sample of 93 young adult women, most of whom were White/European American (3% Latinas). The second sample consisted of 111 mostly White/European American young adult women (6% Latina). The second study was a replication of the first and data for the combined samples were analyzed using multiple regression techniques.

Results indicated that body shame partially mediated the relationship between self-objectification and eating disorders on the general measure of eating disorder behaviors. Similar patterns were found for each of the measures of bulimia and anorexia. More specifically, consistent with their hypotheses, Noll and Fredrickson (1998) found that self-objectification was linked directly and indirectly, through body shame, to disordered eating.

Fredrickson et al. (1998) expanded this research by conducting experimental manipulations of the model. They examined the relationship between self-objectification and disordered eating as mediated by body shame. They also examined the emotional and behavioral consequences of self-objectification for women versus men. In the first experiment, they randomly assigned a sample of 72 undergraduate university women to either an induced self-objectification condition (i.e., trying on a swimsuit) or a control condition (i.e., trying on a crewneck sweater). The participants were mostly White/European American undergraduate women (7% Latinas). Self-objectification and body shame were measured using the aforementioned SOQ and the BSQ, respectively.

Fredrickson et al. also measured restrained eating behavior by recording the number of cookies eaten (presented as part of a taste test).

Using hierarchical multiple regression analyses, Fredrickson et al. (1998) found that beyond body mass index (BMI), both state and trait self-objectification predicted body shame among the women in their sample. They also found that the interaction of trait and state self-objectification predicted body shame, such that women in the swimsuit condition who scored relatively high on trait self-objectification exhibited the highest levels of body shame. Next, to determine whether body shame predicted restrained eating, participants were classified into one of three restrained eating groups: true restraint (if they ate less than half of one cookie), symbolic restraint (if they ate more than half but less than one whole cookie), and no restraint (if they ate one whole or more cookies). Using logistic regression analysis, Fredrickson et al. found that as body shame increased, participants were significantly more likely to be in either the true restraint or symbolic restraint groups than in the no restraint group. Additionally, participants with very high levels of body shame were those most likely to engage in symbolic restraint, a psychological refraining from the idea of eating a whole cookie. Thus, the findings of their study support the notion that self-objectification is related to body shame, which in turn is related to eating behavior.

In a second experiment, Fredrickson et al. (1998) selected 40 men and 42 women from a group of undergraduate university students who had prescreening scores within the highest and lowest quartiles of the SOQ. The same procedures and instruments were used as in the first experiment. This experiment also included a manipulation check to determine whether trying on a swimsuit actually induced a state of self-objectification.

This was assessed using a modification of the Twenty Statements Test (TST; Bugental & Zelen, 1950) in which respondents wrote 20 statements regarding how they felt about themselves while wearing the clothing item. Two independent coders classified responses into categories reflecting feelings about body shape and size, physical appearance, physical competence, traits or abilities, states or emotions, and uncodable responses. Interrater agreement was high (84.5% for body shape and size statements and 83.8% overall).

Fredrickson et al. (1998) conducted an ANCOVA, using BMI as a covariate, to examine the effects of experimental condition, trait self-objectification, and gender on likelihood of making body shape and size statements. Results revealed a significant effect only for experimental condition. On average, participants in the swimsuit condition wrote significantly more body shape and size responses on the modified TST than those in the sweater condition. Thus, it was concluded that the swimsuit condition did in fact induce state self-objectification while the sweater condition did not.

In this experiment, Fredrickson et al. (1998) also expected that self-objectification would lead to body shame for women but not for men. This prediction was based on the premise that only women should be vulnerable to self-objectification because women are the targets of sexual objectification in society. Because only persons with high or low trait self-objectification were selected for this experiment, an ANCOVA was conducted instead of regression to analyze the data. The results indicated that, when the relationship of BMI to body shame was controlled for, women in this sample were significantly more likely to feel body shame while trying on a swimsuit than were men. The only significant predictor of body shame for the men was trait self-objectification. Restrained eating was

examined in this experiment with two Twix bars and this time the participants were clustered into two groups: restraint group (ate approximately half of one bar) or no restraint group (ate at least one whole bar). None of the participants engaged in symbolic restraint. Logistic regression analysis revealed that membership in the restraint group was significantly associated with being a woman, having increased body shame, and higher levels of trait self-objectification, though not experimentally induced state self-objectification. The findings of this study provided support for several aspects of objectification theory, that women are more likely to self-objectify than men, and that self-objectification leads to body shame and restrained eating.

Another study incorporated objectification theory into a cross-sectional investigation of body image in women across the lifespan (Tiggeman & Lynch, 2001). Tiggeman and Lynch examined the link between self-objectification and eating disorder symptoms. Furthermore, they examined body shame, habitual body monitoring, and appearance anxiety as potential mediators of this relationship. However, in the original formulation of objection theory by Fredrickson and Roberts (1997), habitual body monitoring was considered a behavior associated with taking on an observer's perspective of one's body and therefore an aspect of self-objectification, rather than a consequence of it. Hence, Tiggeman and Lynch's examination of habitual body monitoring may be considered an additional assessment of self-objectification or of one aspect of it.

Tiggeman and Lynch's (2001) study was the first to test the objectification theory model in a non-university sample, with 322 women participants recruited from a large geographic area in Victoria, Australia. The women ranged in age from 20 to 84 ($M =$

45.02, $SD = 16.62$). Unfortunately, no ethnicity data was reported for this sample, yet as is often true of most studies that do not specifically examine ethnic variables, it is likely that most of the women in the sample were of White/Caucasian background. In addition to the SOQ (Noll & Fredrickson, 1998), the habitual body monitoring inherent in self-objectification was measured using the Body Surveillance subscale of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996). The Body Surveillance Scale of the OBCS is designed to measure the extent to which one frequently watches one's appearance and thinks of one's body in terms of how it looks. This was considered by the authors to be conceptually equivalent to the habitual body monitoring inherent in self-objectification. They measured body shame with the Body Shame Scale of the OBCS, which assesses how likely one is to feel badly about not fulfilling cultural expectations for one's body. Appearance anxiety was assessed with the Appearance Anxiety Scale (Dion, Dion, & Keelan, 1990), which is a measure of apprehension regarding one's physical appearance and how others evaluate it. They measured eating disorder symptomatology using the Drive for Thinness, Bulimia, and Body Dissatisfaction subscales of the Eating Disorder Inventory (EDI; Garner, Olmsted, & Polivy, 1983).

Using regression analyses to conduct a path analysis, Tiggeman and Lynch (2001) found a strong positive link between self-objectification and body monitoring. Body monitoring in turn was linked to both increased body shame and increased appearance anxiety. Consequently, appearance anxiety and body shame both accounted for unique variance in eating disorder symptoms. Their study further supports objectification

theory's explanation of eating disorders as resulting from self-objectification and body shame.

Another study that supports the link between self-objectification and eating disorder symptoms and the mediating role of body shame in this link was conducted by Tiggeman and Slater (2001). These researchers compared a sample of 50 former dancers, who had studied ballet for an average of seven years, to 51 non-dancer undergraduate students. All the participants were women and more than 95% described as "Caucasian." Based on the premise that the ballet culture places extreme pressure on dancers to be thin, the authors predicted that former dancers would score significantly higher than non-dancers on measures of body shame, appearance anxiety, and eating disorder symptoms. The authors hypothesized that self-objectification would explain the differences in scores.

The measures used by Tiggeman and Slater (2001) included the SOQ (Noll & Fredrickson, 1998), the Body Surveillance and Body Shame subscales of the OBCS (McKinley & Hyde, 1996), and the short form of the Appearance Anxiety Scale (Dion et al., 1990). Eating disorder symptomatology was assessed with the 26-item version of the Eating Attitudes Test (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982), which is derived from the original 40-item EAT (Garner & Garfinkel, 1979) and is similarly considered a highly stable and valid measure of eating disorder symptoms and body dissatisfaction (Kashubeck-West, Mintz, & Saunders 2001).

A MANOVA revealed no significant differences between former dancers and non-dancers on body shame or appearance anxiety. However, the group of former dancers was found to score significantly higher than the non-dancers on disordered eating, self-objectification, and body surveillance. A path analysis using regression techniques

revealed that, for both groups, increased self-objectification was linked to increased self-surveillance, which then was linked to increased eating disorder behaviors through increased body shame. For the former dancers, increased self-surveillance was also directly related to increased eating disorder behaviors.

The research conducted by Tiggeman and Slater (2001) and by Tiggeman and Lynch (2001) raised a question about whether body surveillance/monitoring is equivalent to or distinct from self-objectification. Objectification theory clearly posits that body surveillance is integral to self-objectification. Consistent with this perspective, Miner-Rubino et al. (2002) noted the conceptual similarities between the SOQ and the Body Surveillance Scale of the OBCS, observing that the Body Surveillance Scale also taps the tendency to adopt an observer's perspective on one's body. Indeed, in a sample of 98 mostly White/European American (73%) women, they found that these two measures were highly correlated ($r = .63, p < .001$), suggesting that they both tap the same construct. Thus, the authors combined scores on the SOQ and Body Surveillance Scale to form a single self-objectification composite, which yielded a Cronbach's alpha of .85. As expected, this self-objectification composite was found to correlate significantly with increased body shame, depression, and Neuroticism. Self-objectification did not correlate with body dissatisfaction, demonstrating that these are different constructs. Using regression techniques, they also found self-objectification to significantly predict negative affect, including body shame and depression, beyond that predicted by body dissatisfaction and other personality variables. This study was meaningful not only in finding that self-objectification has a direct link to negative emotional consequences, but

also in providing evidence of convergent and discriminant validity for the concept of self-objectification and two extant operationalizations.

The research reviewed thus far provides consistent support for the notion that self-objectification is related directly and indirectly, through body shame, to eating disorder symptomatology. A study conducted by Morry and Staska (2001) suggests that internalization of cultural beauty standards is an important precursor to these links. More specifically, they examined the role of internalization of cultural beauty standards in the link from media exposure, a sexually objectifying social context, to self-objectification and eating behaviors among a sample of 61 men and 89 women, all young adult university students. Although no ethnicity data was reported for the sample, as stated above, it is reasonable to assume that most participants were of White/European American background given that the study did not specifically assess ethnicity. Only the results reported for women participants will be discussed here as they are the most relevant to the present study. The instruments administered included the EAT (Garner & Garfinkel, 1979), the SOQ (Noll & Fredrickson, 1998), and the Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987).

Additionally, Morry and Staska (2001) developed a Magazine Exposure Scale (MES) for their study in order to assess exposure to ideal body images presented in the media. The MES asks respondents to indicate how many out of a total of 5 fitness magazines, 7 beauty magazines, and 10 “filler” magazines they have looked at in the past month. Total scores are obtained by summing the total of fitness and beauty magazines endorsed. The authors examined the relationship of magazine exposure to internalization of cultural beauty standards using the Sociocultural Attitudes Toward Appearance

Questionnaire (SATAQ; Heinberg, Thompson, & Stormer, 1995), a 14-item measure of women's awareness and internalization of Western sociocultural standards of thinness as ideal beauty.

Morry and Staska's (2001) regression analyses revealed that exposure to beauty magazines was significantly related to self-objectification and eating problems, although both of these relationships were fully mediated by internalization of cultural beauty standards of thinness as ideal. Thus, for the women in this study, reading beauty magazines (a sexually objectifying social context) was related to internalization of cultural beauty standards for women, and through that internalization, to self-objectification and greater eating disturbance.

Moradi et al. (2005) also examined the role of internalization of cultural beauty standards in mediating the relationship of reported sexual objectification to self-objectification as well as to body shame and eating disorder symptoms. They surveyed a sample of 221 mostly White/European American (64%) undergraduate university women. Similar to other authors (Miner-Rubino et al., 2002; Tiggeman & Lynch, 2001), they reasoned that the Body Surveillance Scale of the OBCS (McKinley & Hyde, 1996) is an accurate measure of self-objectification. They measured reported sexual objectification experiences using the Sexual Objectification subscale of the Daily Sexist Events scale (Swim, Cohen & Hyers, 1998). The other instruments used were the Body Shame Scale of the OBCS (McKinley & Hyde) to measure body shame and the EAT-26 (Garner et al., 1982) to measure eating disorder symptoms, in addition to body mass index.

Moradi et al. (2005) conducted path analyses to examine a model of the direct and indirect links among reported sexual objectification experiences, internalization of cultural beauty standards, self-objectification as body surveillance, body shame, and eating disorder symptoms. Significant positive correlations were found among all the variables and the overall path model accounted for a substantial proportion (50%) of the variance in eating disorder symptomatology. Several indirect links were also found. Internalization of cultural beauty standards partially mediated the link from reported sexual objectification experiences to body surveillance (e.g., self-objectification) and fully mediated the link from reported sexual objectification experiences to body shame and eating disorder symptoms. Body shame was also found to partially mediate the relation from body surveillance to eating disorder symptoms. Thus, not only were all the basic tenets of objectification theory supported, but internalization of cultural beauty standards was also found to play a significant role in the links among reported sexual objectification, self-objectification, body shame, and eating disorder symptomatology.

In summary, extant research has provided accumulating support for objectification theory, particularly in terms of how it explains the presence of eating disorders. The evidence generally provides strong support for the notion that self-objectification is associated with eating disorder symptoms, and this link is mediated partially by body shame (Fredrickson et al., 1998; Noll & Fredrickson, 1998; Miner-Rubino et al., 2002; Tiggeman & Lynch, 2001; Tiggeman & Slater, 2001). Furthermore, the recent research by Morry and Staska (2001) and by Moradi et al. (2005) indicates that internalization of cultural beauty standards is an important predictor of self-objectification.

Applying Objectification Theory to Latinas

One aspect of objectification theory that has yet to be examined is its applicability to women across different ethnic or racial groups. The studies reviewed above all were based on samples of primarily White/European American women. Fredrickson and Roberts (1997) proposed that self-objectification is experienced by all women, regardless of ethnic/racial background, due to their shared experiences of being objectified in society. However, they acknowledged that the literature they used to formulate the theory included studies conducted mainly on White/European American women and did not adequately address ethnic diversity. The assumption that all women experience objectification in the same ways, and that all women encounter the same cultural pressures to be thin, ignores the variety of sociocultural contexts in which women from different ethnic or racial groups find themselves.

As a step toward addressing this gap, the present study will examine the applicability of objectification theory to understanding eating disorders among Latina women. There has been a paucity of research specifically examining eating disturbances among Latinas (Crago et al., 1996), although some research has begun to illuminate several other factors that may play a role in addition to self-objectification, including acculturation (Chamorro & Flores-Ortiz, 2000; Franko & Herrera, 1997; Pumariega, 1986), internalization of cultural beauty standards (Lester & Petrie, 1995), and the impact of acculturative stress (Perez et al., 2002).

According to some findings, Latinas may be more likely to exhibit certain body image and eating problems than other women of color. For example, Fitzgibbon et al. (1998) examined of the prevalence of binge eating disorder symptoms among 55 White/European American, 179 African American, and 117 Latina women. Body image

was assessed using the Figure Rating Scale (Stunkard, Sorensen, & Schulsinger, 1983). Depression was assessed using the Beck Depression Inventory (BDI; Beck, Ward, Mendelsohn, Mock, & Erbaugh, 1961). The Binge Scale (Hawkins & Clement, 1980), and the Questionnaire on Eating and Weight Patterns – Revised (QEWP-R; Spitzer et al., 1993) were administered as measures of binge eating behavior. BMI was calculated using Garrow & Webster's (1985) weight and height formula.

An ANCOVA revealed significant ethnic group differences in binge eating severity after controlling for BMI, age, depression, and ideal body image. Latinas were significantly more likely to report binge eating symptoms than either White/European Americans or African Americans. Hierarchical regression analyses also indicated that being Latina significantly predicted unique variance in binge eating severity after accounting for BMI, depression, and ideal body image. The results of this study suggest that eating disorder symptoms, in the form of binge eating, may be a serious problem among Latinas in comparison to other ethnic groups (Fitzgibbon et al., 1998).

In another ethnic group comparison study, Altabe (1998) compared body image concerns among African Americans, Asian Americans, Latino/as, and White/European Americans. The sample consisted of 150 men and 185 women, all undergraduate university students. The percentages of participants in each ethnic group were not reported. Participants completed questionnaires consisting of the following measures: the Body Dissatisfaction subscale of the EDI (Garner et al., 1983), the Figure Rating Scale (Stunkard et al., 1983), and other body image measures. Altabe conducted an ANOVA to determine whether body image scores differed significantly by ethnicity or gender. In addition to the expected gender differences, results indicated that White/European

Americans exhibited the highest levels of body dissatisfaction and had significantly greater body dissatisfaction than Asian Americans. Among racial/ethnic minority persons, Latino/as and were found to have significantly greater levels of body dissatisfaction than both Asian Americans and African Americans. Although these results suggest that Latinos/as may have greater difficulties with body dissatisfaction, this study did not attend to the impact of acculturation on ethnic group differences in eating disorders.

Acculturation and Internalization of Cultural Beauty Standards Among Latinas

Indeed, the limited emerging literature in the area of eating disorders among Latinas suggests that body satisfaction may be associated with acculturation and/or internalization of U.S. cultural beauty standards for women. In one of the first such studies, Pumariega (1986) assessed the effects of acculturation on the relationship between ethnicity and attitudes about eating for Latina and White/European American adolescents. Latina participants were 138 adolescent girls. All Latinas were either born outside of the U.S. or were the first generation in their family born in the U.S. Their responses were compared to a sample of 365 White/European American adolescent girls.

Eating disorder symptoms were assessed using the EAT (Garner & Garfinkel, 1979). Acculturation to American culture was assessed using the Acculturation Questionnaire, a rationally derived instrument developed by Pumariega (1986) that included questions about food, music, clothing and language preferences, in addition to number of years living in the U.S., cultural background of close relations, and ethnic/cultural self-identification. According to descriptive statistics, both groups had similar mean EAT scores, yet correlational results revealed that acculturation was significantly positively related to increased eating disorder symptoms for Latina

participants. Thus, higher levels of acculturation (defined by increased preference for the English language, as well as conventional U.S. food and music) were related to higher levels of eating disorder symptoms among Latina participants. The results of this study provided preliminary evidence of a relationship between acculturation and eating disorders.

In a more recent study, Franko and Herrera (1997) examined body image satisfaction in a sample of 28 Guatemalan American women and 29 White/European American women. All participants were undergraduate university students and the Guatemalan American women were all second-generation, defined as born in the U.S. with parents who had immigrated from Guatemala. Body image satisfaction was assessed using the Drive for Thinness and Body Dissatisfaction subscales of the EDI (Garner et al., 1983), the Fear of Fat Scale (Goldfarb, Dykens, & Gerrard, 1985), which is a measure of attitudes toward obesity and fears of becoming overweight, and the Multidimensional Body-Self Relations Questionnaire (MBSRQ; Brown, Cash, & Mikulka, 1990), which measures attitudes about one's body. The Acculturation Questionnaire (Pumariega, 1986) was used to assess level of acculturation, defined as reflecting "greater endorsement of the attitudes and values of the majority American culture" (p. 122). It was chosen by the authors because it was developed specifically "for a study of disturbed eating patterns in Hispanic adolescents" (p. 122).

Franko and Herrera (1997) conducted a one-way MANOVA using all body image measures in addition to several ANOVAs using each body image measure separately. The results revealed that, compared to White/European American women, Guatemalan American women in their sample were significantly less likely to report body

dissatisfaction, were not as driven toward thinness, and exhibited less fear of becoming fat. Additionally, Guatemalan American women were significantly less likely to be acculturated than White/European American women. Level of acculturation was also significantly correlated with body image attitudes. Guatemalan American women who were more acculturated showed significantly greater body disparagement and fat phobia than those who were less acculturated. Thus, the results of this study indicate that increased acculturation may be related to increased body dissatisfaction for Latinas.

Another recent study examined eating disorder symptoms, acculturation, and treatment-seeking behaviors in an ethnically diverse community sample (Cachelin et al., 2000). After initial interviews, the sample was divided into two groups, one group of women who were currently experiencing an eating disorder and one control group of women with no history of eating disorders. Participants were matched based on ethnicity and educational level and each group included 49 Latinas, 25 White/European Americans, 23 African Americans, and 21 Asian Americans. Participants completed a structured phone interview using a screening tool originally designed for the New England Women's Health Care Project (Striegel-Moore, Wilfley, Pike, Dohm, & Fairburn, 1999) that assessed weight-related behaviors, psychiatric symptoms, and healthcare usage. Questions were added to assess for acculturation based on those variables that the authors described as most widely considered to be basic components of acculturation. Thus, increased acculturation was defined as increased endorsement of the following items: preference for the English language as primary; being born in the U.S.; having parents who were born in the U.S. African American women were not included in

analyses conducted on acculturation because mostly all were born in the U.S. and had parents who were born in the U.S.

According to a Chi-square analysis conducted by Cachelin et al. (2000), the women in each of the different ethnic groups were equally likely to report symptoms of several types of eating disorders, including binge eating disorder, bulimia, anorexia, and eating disorder not otherwise specified. Initial ANOVA results revealed significant ethnic group differences on BMI, thus BMI was entered as a covariate in subsequent analyses. An ANCOVA indicated that the eating disorder group was significantly more likely to report eating disorder symptoms than the control group and that there were no significant ethnicity effects for the eating disorder group. Women in the eating disorder group were found to be significantly more likely to be acculturated than women in the control group. Additionally, among the women in the eating disorder group, those who were less acculturated were significantly less likely to have received treatment in the past year. The results of this study indicate that, although ethnicity itself may not be related to the likelihood of experiencing eating disorders, level of acculturation to American society may play a role both in the presentation of eating disorders and a woman's likelihood to receive treatment.

Providing further support for the relationship of acculturation to eating disorders, Chamorro and Flores-Ortiz (2000) examined the relationship between acculturation and eating attitudes among five generations of Mexican American women, ranging from first generation women who were born in Mexico to fifth generation women whose grandparents were born in the U.S. Participants included 139 women, with an average age of 29.1. Participants were recruited from various community organizations and

undergraduate courses throughout a large metropolitan area in California. Most of the women were first generation (36%) or second generation (37.4%) and almost half (46.8%) were college students. Participants completed the EAT-26 (Garner et al., 1982) and the Acculturation Rating Scale for Mexican Americans (ARSMA; Cuellar, Harris, & Jasso, 1980). Correlational results indicated a significant positive relationship between acculturation and eating disturbance. The group for which this relationship was the strongest was the second-generation women.

Thus, extant research suggests that a relationship exists between acculturation and eating disorders for Latinas. Due to the multidimensional nature of acculturation, however, this relationship may be more complex than the aforementioned studies suggest. Indeed, Lester and Petrie (1995) examined the more specific variable of endorsement of U.S. sociocultural values about attractiveness, in addition to general acculturation. This construct of sociocultural values about attractiveness is parallel to the internalization of cultural beauty standards that was found by Morry and Staska (2001) and Moradi et al. (2005) to contribute to self-objectification. Lester and Petrie also assessed BMI and body satisfaction in their sample of 142 Mexican American undergraduate university women.

Acculturation was defined in Lester and Petrie's (1995) study as "a dynamic adaptation of the values, developmental sequences, roles, and personality factors of the dominant group" (p. 199), in this case, U.S. culture. It was measured using the ARSMA (Cuellar et al., 1980). This is the most commonly used and well-validated measure of acculturation among Mexican Americans and has also been validated for use with other Latino groups (Zane & Mak, 2003). The Beliefs About Attractiveness Questionnaire

(BAQ; Mintz & Betz, 1988) was used to assess level of endorsement of U.S. sociocultural values about attractiveness. Bulimia was measured with the BULIT-R (Thelen et al., 1991) and body satisfaction was measured with the Body Parts Satisfaction Scale (BPSS; Borhrnstedt, 1977), which is a self-report measure of satisfaction with 24 body parts.

Lester and Petrie (1995) conducted a hierarchical regression analysis and found that, among the women in their sample, BMI and sociocultural beliefs about attractiveness each accounted for significant equal portions of the variance in bulimic symptoms. However, neither acculturation level nor level of body satisfaction predicted unique variance in bulimia symptoms. One possible explanation for the lack of significant results for body satisfaction, which may fit well with objectification theory, is that perhaps self-objectification and not necessarily body dissatisfaction may be the important predictor of eating disorders for Latinas. Although self-objectification was not assessed in this study, such an explanation is supported by research on self-objectification that has found it to predict negative affect and body shame beyond what was predicted by body dissatisfaction (Miner-Rubino et al., 2002) as well as by research indicating that self-objectification has a direct link to eating disorder symptoms (Noll & Fredrickson, 1998; Tiggeman & Lynch, 2001; Tiggeman & Slater, 2001). This explanation is also supported by research suggesting that body dissatisfaction and fear of fat may not be as common among women with eating disorders who come from cultures that have not traditionally valued thinness (Gordon, 2001). Lester and Petrie also proposed that their lack of finding a significant link between general acculturation and eating disorder

symptoms may be due to the fact that they focused on bulimia whereas other studies have examined eating disorders in general, including anorexia.

As with body satisfaction, Lester and Petrie (1995) did not find a link between general acculturation and bulimia symptoms. This was the only study among those reviewed here, however, to differentiate between general acculturation and more specific internalization of U.S. cultural beauty standards. Indeed, Lester and Petrie found the latter was related significantly and positively to bulimia symptoms. These findings suggest that internalization of cultural beauty standards may be an important predictor of eating disorders among Latinas. More specifically, the link between acculturation and eating disorder symptomatology may be mediated, fully or partially, by internalization of U.S. cultural beauty standards.

In addition to the potential roles of general acculturation and internalization of cultural beauty standards, acculturative stress may be an important correlate of eating disorder symptoms among Latinas. Acculturative stress has been described as “a stress reaction to challenging life events that are rooted in the experience of acculturation” (Berry, 2003, p.31). Acculturation, by contrast, is defined as a process in which the acculturating culture or individual has continuous and first-hand interaction with a host culture. This interaction results in cultural and/or psychological change among the people in contact from each of the groups, although greater change is most commonly found for the acculturating group or individual. Acculturation is a multidimensional, continuous, and fluid process that involves developing certain strategies for adaptation that vary across individuals and across different types of societies. A psychologically healthy process of acculturation (producing less acculturative stress) includes integrating aspects

of the new culture into one's cultural and individual identity while maintaining positive identification with the culture of origin (Berry; Berry, Trimble, & Olmedo, 1986).

Berry (1980; 2003) conceptualized acculturative stress as similar to a general stress-coping appraisal process in that the stress reaction occurs when perceived adaptive resources are judged as inadequate to deal with perceived societal demands. However, what is unique about acculturative stress versus general stress is that it is experienced in relation to the acculturation process specifically. Berry posited that healthy acculturation includes balancing aspects of both cultures into one's cultural self-identity. When excessive difficulties are encountered in this balancing process, acculturative stress may occur. This conceptualization of acculturative stress is similar to the struggle described by Harris and Kuba (1997) and other authors (see Gilbert, 2000), who have suggested that eating disorders in women of color may be a coping strategy for dealing with conflicting messages about beauty from their culture of origin and the host culture to which they are acculturating. Acculturative stress has been associated with greater vulnerability to psychological distress (Balls Organista et al., 2003), however, for this review only one study was found that measured the impact of acculturative stress on the development of eating disorders among women of color.

Perez et al. (2002) examined acculturative stress and body dissatisfaction in predicting bulimia symptoms among a diverse sample of 118 undergraduate university women. The sample consisted of 51% White/European Americans, 30% African Americans, and 19% Latinas. Among the total number of Latinas in the sample, over 90% were born in the U.S. and 70% of those had parents who had moved to the U.S. from a Latin American country. Participants completed the 24-item short version of the

Social, Attitudinal, Familial, and Environmental Acculturative Stress Scale (SAFE; Mena, Padilla, & Maldonado, 1987), which was derived from the original 60-item version developed by Padilla et al. (1985) and assesses experiences of acculturative stress within several different contexts as well as perceived discrimination toward immigrant populations. The authors also administered the EDI (Garner et al., 1983) to measure eating disorder behaviors and the Figure Rating Scale (Stunkard et al., 1983) to measure body satisfaction.

Initial correlational analyses revealed significant relationships between increased body dissatisfaction and increased bulimic symptoms reported on the EDI Bulimia Scale. A significant correlation was also found between acculturative stress and bulimic symptoms. A MANOVA and subsequent univariate and post-hoc analyses indicated that Latina and White/European American participants were significantly more likely to report body dissatisfaction and bulimia symptoms than African American participants. On the other hand, Latina participants were the group most likely to report acculturative stress, followed by African Americans and then White/European Americans.

Perez et al. (2002) then conducted multiple regression analyses using only the results for the women of color in the sample ($N = 58$). The results indicated that body dissatisfaction and acculturative stress each were related positively and uniquely to bulimia scores. Further, the interaction of body dissatisfaction and acculturative stress also accounted for unique variance in bulimia scores. They divided participants into high and low acculturative stress groups and found that among those scoring high on acculturative stress, higher body dissatisfaction was related to more bulimia symptoms. Among those scoring low on acculturative stress, the relationship between body

dissatisfaction and bulimia symptoms was weak and did not reach significance. The results of this study indicated that acculturative stress may have important mental health consequences for women of color in the form of increased body dissatisfaction and increased vulnerability to bulimia. Although this study suggested that acculturative stress may be related to body dissatisfaction and bulimia among Latinas, this was the only study found for this review that specifically examined this relationship. Thus, further exploratory research is needed on the relationship of acculturative stress to eating disorder symptoms and their precursors.

In summary, the literature presented in this chapter suggests that there are several factors that can add substantively to the framework of objectification theory in explaining eating disorders among Latinas. Overall, the research suggests that acculturation and internalization of cultural beauty standards may be associated with eating disorders among Latinas. Furthermore, internalization of cultural beauty standards may mediate the link of acculturation to eating disorders (Lester & Petrie, 1995) and self-objectification (Moradi et al., 2005; Morry & Staska, 2001). Therefore, a theoretical model for understanding eating disorders among Latinas should incorporate these constructs along with the roles played by self-objectification and body shame that have been described in the research on objectification theory. Interestingly, though Moradi et al. (2005) did not specifically investigate racial/ethnic differences, they did report that an initial MANCOVA and follow-up ANOVAs revealed that non-White participants in their sample ($N = 78$) scored significantly lower on internalization of cultural beauty standards, body surveillance, and eating disorder symptoms than White participants ($N = 142$). In their discussion of potential future research, they recommended that objectification

theory and eating disorder related variables be specifically examined among ethnic minority samples.

Purpose of the Present Study

Grounded on the literature reviewed in this chapter, the present study aims to examine, in a sample of Latina participants, the applicability of the aspects of objectification theory that are most relevant to understanding eating disorders.

Specifically, as proposed by objectification theory and extant literature on this theory, the current study will examine a model that includes links among self-objectification, body shame, and eating disorders. In light of research on Latinas, the current study will also examine the role of acculturation and internalization of cultural beauty standards within this model. Exploratory analysis of links between acculturative stress and eating disorder-related variables included in the model will also be conducted. The model tested in the current study is presented in Figure 2-1 and examines the following hypotheses:

1. Acculturation is expected to relate positively and directly to internalization of cultural beauty standards and indirectly to self-objectification, body shame, and eating disorders.
2. Internalization of cultural beauty standards will be related directly and positively to self-objectification and to body shame. In addition, there will be a positive and direct link between internalization of cultural beauty standards and eating disorder symptomatology. This link will also be mediated partially by self-objectification and body shame.
3. Self-objectification will be related positively and directly to eating disorders symptoms and this link will be mediated partially by body shame.
4. Finally, the link between acculturative stress and all other variables in the model will be explored. Given the paucity of research on this relationship, however, no specific hypotheses are made regarding the relationship of acculturative stress to the variables in the model.

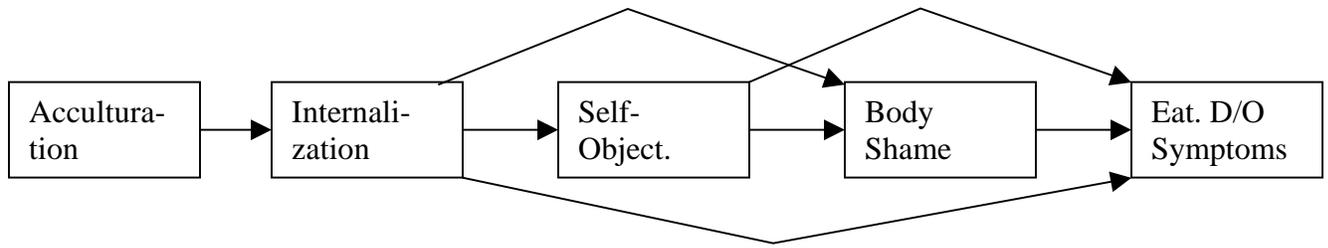


Figure 2-1. Hypothesized model of objectification theory and acculturation links to eating disorder symptom in Latinas.

CHAPTER 3 METHOD

Participants

A total of 120 participants responded to the survey. Of these, 8 participants were excluded due to substantial missing data. Independent samples *t*-tests revealed no significant differences between the excluded participants and all other participants on several demographic variables, including age, ethnic/racial self-identification, socioeconomic status, sexual orientation identification, birthplace, parents' birthplace, and generation level. The final sample used in the analyses consisted of 112 participants, all of whom self-described as women and as Latina.

In order to identify potential ethnic/racial differences among the Latinas in the sample, participants who self-described as Latina were asked to differentiate between “Latina/Hispanic White” and “Latina/Hispanic Black” and also to differentiate between how they self-describe and how they think others would describe them (see items 5 and 6 in the Appendix). The majority of participants self-described as “Latina/Hispanic White” (81.3%) and also reported that others would describe them as “Latina/Hispanic White” (79.5%). Some participants either circled both “Latina/Hispanic White” and “Latina/Hispanic Black” or entered in “Other” as “Latina brown” or “just Latina” for both their self-description (8%) and how others would describe them (7.1%). This may suggest that had there been another category, such as “Latina/Hispanic Multiracial,” perhaps more respondents would have opted to self-describe in that manner. The

remaining participants self-described as “Latina/Hispanic Black” (1.8%) or as both “Latina/Hispanic White” and “European-American/White” (8%).

Participants ranged in age from 18 to 78, with a median age of 23 and a mean age of 26.59 ($SD = 9.32$). The majority of participants were first-generation, born in the U.S. (42%) or were immigrant generation, born outside of the U.S. (42%). Another 8.9% were second-generation, 2.7% were third-generation, and 4.5% were from families that had been living in the U.S. for more than three generations. Of those born outside of the U.S., 24.1% were born in Mexico, Central, or South America, and 20.5% were born in the Latin Caribbean (Cuba, Dominican Republic, or Puerto Rico). The median age at which participants not born in the U.S. first moved to the U.S. was 7 and the mean age was 10.97 ($SD = 9.46$).

Socioeconomic status was measured using average annual household income. Based on this, 52.7% of participants were middle class, 26.8% were working class, 10.7% were upper middle class, 4.5% were lower middle class, and 5.4% were upper class. The majority of participants self-described as heterosexual (94.6%), while 2.7% reported being gay or lesbian, 1.8% reported being bisexual, and .9% reported being transgender or other.

In order to ensure that language barriers did not interfere with study results, two questions were asked regarding level of English reading comprehension and ability to understand the questions in the survey (see items 13 and 14 in the Appendix). All participants reported that they understood English either well or very well and all reported that they were able to understand the questions in the survey and provide accurate responses.

Procedure

Survey packets were distributed through personal contacts and by mail. In addition to the battery of instruments and demographic items described above, the packets contained a stamped, self-addressed, return envelope and a consent form that explained the purpose of the study, described rights of participants, and also included the researchers' contact information for participants who had questions or comments about the study. The majority of participants who responded to the survey were recruited from a mailing list of Latino/Hispanic students obtained from the diversity office at a large southeastern university. All students on the mailing list that were women were mailed a survey. Those participants that received the survey by mail were sent a reminder letter along with another copy of the survey after four weeks if they had not returned the survey. As participation in the study was confidential, mail-out surveys were marked with an identification number to determine who should receive reminder letters.

A total of 295 surveys were mailed out; however, 21 of those were returned due to incorrect or insufficient addresses. Therefore, a total of 274 surveys were mailed and actually received by potential participants. After the first mail-out, 62 surveys were returned, yielding a 23% initial return rate. After reminder letters were sent, another 20 participants responded. Therefore, a total of 82 participants responded to the survey from this mail-out, yielding a 30% total return rate. Four of these participants were among those excluded from analyses due to substantial missing data. Thus, a total of 78 participants included in the final sample were female Latina university students.

As this is a circumscribed and difficult to reach population, participants were also recruited from personal contacts and snow ball sampling methods in three major urban areas in the southeastern, northeastern, and midwestern U.S. Reminder letters could not

be sent to participants recruited in this manner as surveys were distributed personally and no mailing addresses were obtained. A total of 65 surveys were distributed through personal contacts and snow ball sampling. Thirty eight participants responded, yielding a return rate of 58% for this method. Of these, 4 were among those excluded from analyses due to substantial missing data. Therefore, 34 of the participants in the study were from these three primarily community-based subsamples.

ANOVA results revealed no significant differences among the 4 sampling locations for most of the variables of interest, including self-objectification, body shame, internalization of cultural beauty standards, eating disorder symptomatology, and acculturative stress. Significant differences were found among the four sampling locations for acculturation, $F(3, 108) = 5.54, p = .001$. However, significant differences in age were also found among sample locations, $F(3, 108) = 7.57, p < .001$. Given that age was also found to correlate significantly and negatively with acculturation, $r = -.31, p = .001$, it was controlled for in an ANCOVA with sampling location as the independent variable and acculturation level as the dependent variable. After adjusting for age as a covariate, no significant differences were found in acculturation among the different sampling locations. It was therefore determined that differences in sampling procedure did not significantly affect analyses.

Measures

With the exception of those instruments designed to measure cultural/ethnic variables, psychometric data have not been reported on most of the study's instruments with samples of women of color in the U.S. The present study will therefore provide needed validity and reliability information for the use of these measures among Latinas.

Self-Objectification

Trait self-objectification was measured using both the Self-Objectification Questionnaire (SOQ; Noll & Fredrickson, 1998) and the Body Surveillance subscale of the Objectified Body Consciousness Scales (OBCS; McKinley & Hyde, 1996). The Body Surveillance Scale of the OBCS was developed based on feminist theoretical concepts, similar to objectification theory, about the social construction of the female body. The Body Surveillance Scale contains 8 items scored on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) and is designed to measure the extent to which one frequently watches one's appearance and thinks of one's body in terms of how it looks. Item ratings are summed and a score of 0 is assigned to each "NA" response. The sums are then divided by the total number of responses, not including "NA" or missing responses. Scale scores can range from 1 to 7. Higher scores reflect greater body surveillance. Two reverse coded items are "I think it is more important that my clothes are comfortable than whether they look good on me" and "I think more about how my body feels than how my body looks." The full instrument can be found in McKinley and Hyde.

According to the interpretation guidelines provided by McKinley along with the instrument, a person scoring high on the Body Surveillance Scale tends to self-inspect frequently and thinks of her body in terms of its appearance. Scores on this subscale have been used as a measure of self-objectification (Miner-Rubino et al., 2002) and habitual body monitoring (Tiggeman & Lynch, 2001; Tiggeman & Slater, 2001). Fredrickson and Roberts (1997) described the latter as an inherent aspect of self-objectification as it is a form of taking on an outsider's perspective of one's body. Furthermore, due to the high correlation between the SOQ and Body Surveillance Scales, Miner-Rubino et al.

formulated a composite score of self-objectification from these two scales. Therefore, the use of the Body Surveillance Scale as a measure of self-objectification is supported by previous research.

In the initial development sample of 502 young adult women and 151 middle-aged women, most of whom were White/European American, scores on the Body Surveillance Scale showed good construct validity based on a significant negative correlation with body esteem (McKinley & Hyde, 1996). McKinley (1998) examined the usefulness of the OBCS for explaining gender differences in body esteem among a sample of 164 female and 163 male mostly White/European American participants. For their sample, the Body Surveillance Scale was found to have a significant negative correlation with body esteem and a significant positive correlation with actual/ideal weight discrepancy. These relations were stronger for women than for men. Across prior samples, alpha internal consistency estimates for Body Surveillance were .89 (McKinley & Hyde), .79 (McKinley), .83 (Tiggeman & Slater, 2001), and .80 (Tiggeman & Lynch, 2001). In the present sample, an alpha internal consistency estimate of .83 was found, which is similar to previous findings and supports the internal consistency of body surveillance scores for this sample of 112 Latinas.

The Self-Objectification Questionnaire (SOQ; Noll & Fredrickson, 1998) was developed based on objectification theory and is designed to assess concern with appearance without an evaluative component because self-objectification is purportedly distinct from body satisfaction. Respondents are asked to rank-order a list of 5 appearance based body attributes (e.g., physical attractiveness, weight) and 5 competence based body attributes (e.g., physical fitness, energy level) in terms of how important they

are to their physical self-concept (9 = most important, 0 = least important). Scores range from -25 to 25 and are calculated by subtracting the sum of the competence ranks from the sum of the appearance ranks. Higher scores reflect greater emphasis on appearance and are interpreted as greater self-objectification. In their samples of 93 and 111 mostly White/European American women, Noll and Fredrickson reported means of 7.7 ($SD = 17.6$) and 5.7 ($SD = 18.4$), respectively. They reported good construct validity for the SOQ based on correlations with the Appearance Anxiety Scale (Dion, Dion, & Keelan, 1990) and with the Body Image Assessment (Williamson et al., 1985). No reliability data has been reported for this measure in previous studies.

In the present sample, 5 participants (in addition to the 8 that were excluded from the study) were missing substantial amounts of data on the SOQ because they did not correctly follow the scoring instructions. These participants either did not rank one attribute or ranked one attribute twice and thereby missed ranking another attribute. According to the scoring instructions, such errors in ranking require that the data for that participant be considered missing. Due to this high number of missing data and potential participant confusion about SOQ instructions, compared to missing data for only 2 participants on the OBCS Surveillance Scale, it was decided that the SOQ would not be used in the analyses. The OBCS Surveillance Scale was therefore used as the only measure of self-objectification in the analyses as it has previously been shown to be a valid and reliable measure of self-objectification and habitual body monitoring.

Body Shame

Body shame was measured using both the Body Shame Questionnaire (BSQ; Noll & Fredrickson, 1998) and the Body Shame Scale, a subscale of the OBCS (McKinley & Hyde, 1996). The Body Shame Scale of the OBCS assesses how likely one is to feel

badly about not fulfilling cultural expectations for one's body and higher scores indicate greater body shame. It contains 8 items and is scored on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Item ratings are summed and a score of 0 is assigned to each "NA" response. The sums are then divided by the total number of responses, not including "NA" or missing responses. Scale scores can range from 1 to 7. Items include "I feel like I must be a bad person when I don't look as good as I could" and "I feel ashamed of myself when I haven't made the effort to look my best." The full instrument can be found in McKinley and Hyde.

Similar to the Body Surveillance scores, Body Shame scores demonstrated good construct validity based on a significant negative correlation with body esteem among a sample of 502 young adult women and 151 middle-aged women (McKinley & Hyde, 1996). The Body Shame scores also were significantly positively correlated with eating disorder symptoms for that sample. Furthermore, as expected, Body Shame scores yielded a significant positive correlation with actual/ideal weight discrepancy and a significant negative correlation with body esteem among a sample of 164 mostly White/European American women (McKinley, 1998). In her sample, McKinley also reported an alpha internal consistency estimate of .73 for the Body Shame scores. Across other samples, Body Shame scores yielded alpha internal consistency estimates of .75 (McKinley & Hyde, 1998), .80 (Tiggeman & Lynch, 2001) and .85 (Tiggeman & Slater, 2001). The alpha internal consistency estimate for the present sample was .81.

The Body Shame Questionnaire (BSQ; Noll & Fredrickson, 1998) was designed as a measure of how likely one is to feel ashamed about one's body. Respondents are asked to indicate whether they would like to change a given body part, how strong their desire

for change is (intensity), and how often they think about changing that body part (frequency). Composite scores are obtained by rating the frequency and intensity with which one would like to change a list of 28 body attributes (e.g., weight, profile, and height). Intensity ratings range from 1 to 9 (1 = very mild desire for change; 9 = very intense desire for change), as do frequency ratings (1 = seldom thought of change; 9 = very often thought of change). Total scores are obtained by summing standardized scores derived from the total number of body attributes the respondent would like to change, the total intensity rating scores, and the total frequency rating scores. Higher standardized scores reflect increased body shame.

Mean standardized scores of .18 ($SD = 2.8$) and .01 ($SD = 2.9$) were reported on the BSQ across two samples of mostly White/European American women (Noll & Fredrickson, 1998). In terms of validity, the BSQ predicted unique variance in eating disorder symptoms beyond that accounted for by other measures of general shame and neuroticism (Noll & Fredrickson, 1998). In their sample of mostly White/European college aged women, Fredrickson et al. (1998) reported an alpha internal consistency estimate of .91 for the BSQ composite.

In the present sample, the BSQ was not used in the final analyses due to too many errors made by participants in intensity and frequency ratings. A total of 23 participants incorrectly made intensity and frequency ratings on body attributes that they had not indicated were body attributes they would like to change. Data for these participants would need to be excluded based on scoring criteria. As substantial amounts of data were not missing from the Body Shame Scale of the OBCS and this instrument has been used

as a valid and reliable measure of body shame by other researchers, it was the only measure of body shame used in the final analyses for the present study.

Eating Disorder Symptoms

The 26-item version of the Eating Attitudes Test (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982) was developed from a factor analysis of the original 40-item EAT (Garner & Garfinkel, 1979), which has been widely used as a reliable and valid measure of eating disorder symptoms and body image disturbance. Items include “Feel extremely guilty after eating” and “Vomit after I have eaten”. The full EAT-26 can be found in Garner et al. and online at <http://river-center.org/information.html>. In the original scoring method, which is used for differentiating between clinical and nonclinical ranges, weights of 1-3 are assigned to the three most severe item responses, ranging from “often” to “always,” with all other responses weighted 0. Overall scores range from 0 to 78 and are obtained by weighting responses considered symptomatic, with scores above 20 considered to indicate the presence of an eating disorder. It has been argued that for nonclinical research samples (as in the present study), it is best to use a continuous score of the full 6-point scale (“never” to “always”) in order to obtain a less skewed distribution (Seiver, 1994). Additionally, in their review of assessment methods for eating disorders, Kashubeck-West et al. (2001) recommended that continuous scoring be used for research purposes. The present study followed this continuous scoring method, in which items are scored on a Likert-type scale ranging from 1 (never) to 6 (always). Scale scores are derived by summing item ratings and can range from 26 to 156.

EAT-26 scores are highly correlated with EAT-40 scores ($r = .98$) and a recent review of eating disorder assessment tools identified the EAT-26 as a reliable and valid measure of undifferentiated DSM-IV eating disorders (Kashubek-West et al., 2001) with

good concurrent and predictive validity in numerous studies. Internal consistency reliability estimates have been reported for overall EAT-26 scores with coefficient alphas of .83 (Koslowsky, Scheinberg, Bleich, Mark, Apter, Danon, Solomon, 1992) and .88 (Tiggeman & Slater, 2001) across samples. An alpha internal consistency estimate of .87 was found for the present sample.

Internalization of Cultural Beauty Standards

The Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ; Heinberg, Thompson, & Stormer, 1995) is a 14-item measure of women's awareness and internalization of dominant Western cultural standards of thinness as beauty. Items are scored on a 5-point Likert-type scale ranging from 1 (completely disagree) to 5 (completely agree). The scale consists of two factors, Awareness of societal standards of beauty for women and Internalization of such standards. The present study used the 8-item Internalization subscale of the SATAQ to measure internalization of cultural beauty standards. Item ratings are summed and total scores range from 8 to 40, with higher scores reflecting greater awareness and internalization of this cultural beauty standard. Items on the Internalization scale include "women who appear in TV shows and movies project the type of appearance that I see as my goal" and "photographs of thin women make me wish that I were thin." The full instrument can be found in Heinberg et al.

For a sample of 162 undergraduate university women, Heinberg et al. (1995) reported good convergence between the SATAQ scores and scores on several measures of body dissatisfaction and eating disorders, such as the Eating Disorders Inventory (Garner, 1991) and the Multidimensional Body Self-Relations Questionnaire – Physical Appearance Evaluation scale (Brown et al., 1990). Heinberg et al. reported an alpha coefficient of .93 for Internalization scores in a sample of 194 undergraduate university

women and .88 for another cross-validation sample of 150 undergraduate university women. Other authors reported an alpha internal consistency estimate of .85 for the Internalization subscale (Morry & Staska, 2001). Alpha internal consistency was .87 for the present sample.

Acculturation

The Short Acculturation Scale for Hispanics (SASH; Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987) is a multidimensional measure of acculturation to U.S. culture for use with people from various Latino cultures. The overall scale consists of 12 items rated on a 5-point Likert-type scale. Item ratings are summed and overall totals range from 12 to 60. Totals can then be averaged to yield scores ranging from 1 to 5. Higher scores reflect greater levels of acculturation and, according to Marin et al., a cutoff score 2.99 can be used to differentiate between persons who are highly acculturated from those who are less acculturated. The SASH assesses three aspects of acculturation, including Language Use with five items, Media with three items, and Ethnic Social Relations with four items. Sample questions include: “What language(s) do you usually speak at home?” (Language Use subscale); “In what language(s) are the radio programs you usually listen to?” (Media subscale); and “You prefer going to social gatherings/parties at which the people are:” (Ethnic Social Relations subscale). The full instrument can be found in Marin et al.

The normative sample for Marin et al. (1987) consisted of 363 Latinos/as and 228 non-Latino Whites. The Latinos/as in the sample consisted of 44% Mexican Americans, 6% Cuban Americans, 2% Puerto Ricans, and 47% Latinos from various Central American countries. SASH scores demonstrated good convergent validity when correlated with another acculturation index that assessed generation level, length of

residence in the U.S., and self-evaluation of acculturation level. SASH scores also differentiated between Latinos and non-Latinos and correlated negatively with age of arrival to the U.S. Marin et al. reported an alpha internal consistency reliability estimate of .92 for overall SASH scores. An alpha internal consistency of .88 was found for the present sample.

Acculturative Stress

The short 24-item version of the Social, Attitudinal, Familial, and Environmental Acculturative Stress Scale (SAFE; Mena et al., 1987) was used to assess acculturative stress. The short form of the SAFE was derived from the 17 items in the original 60-item version (Padilla et al., 1985) that were found to differentiate between generations among Japanese and Mexican American participants, with an additional 7 items that measure perceived discrimination toward immigrant populations. Thus, in addition to assessing experiences of acculturative stress within several different contexts, the short form of the SAFE also assesses perceived discrimination. Respondents are asked to indicate how they perceive cultural stress by answering questions scored on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). If respondents indicate that a question does not apply to them, that item is scored 0. Item ratings are summed and total scores can range from 0 to 120. Items include “Close family members and I have conflicting expectations about my future” and “People look down upon me if I practice customs of my culture.” The full instrument can be found in Mena et al.

The normative group consisted of 96 women and 118 men. Eighty six participants were first-generation, 37 were second-generation, 75 were third-generation, and 16 were reported to be “mixed-generation.” The ethnic/racial breakdown of first-generation immigrant participants was as follows: 61 Asians, 9 Hispanics/Latinos, 7 Europeans, 4

Middle Easterners, 3 Canadians, 1 South African, and 1 Indian. In terms of validity, the SAFE was found to differentiate between generation levels as well as between immigrants who moved to the U.S. before age 12 and those who moved to the U.S. after age 12 (Mena et al., 1987). An internal consistency reliability of .89 was reported for the normative sample of ethnically diverse participants. Internal consistencies also have been reported at .89 for Latinos (Fuertes & Westbrook, 1996) and .87 for a diverse group of African Americans, Latinos, and White/European Americans (Perez et al., 2002). Similar to previous results, an alpha internal consistency of .87 was found for this sample of Latinas.

Demographics

In addition to the battery of instruments, participants were asked several demographic questions, including self-reported ethnic/racial identification, socioeconomic class as reflected by average annual household income, age, sexual orientation identification, country of birth, generation level, and age of arrival to the U.S. if born in another country. They were also asked to report weight and height in order to compute BMI using Quetelet's index of body mass (weight in kilograms divided by height in meters squared), which has been reported as a reliable and valid measure of body size (Garrow & Webster, 1985; Heymsfield, Allison, Heshka, & Pierson, 1995). These demographic questions are presented in the Appendix and were included as the last portion of the questionnaire.

CHAPTER 4 RESULTS

Preliminary Analyses

Prior to analysis, all demographics and variables of interest were examined for accuracy of data entry, missing values, and fit between their distributions and the assumptions of multivariate analysis. The assumption of normality was met by verifying that there was no significant skewness or kurtosis, as well as inspection of histograms and normal and detrended probability plots. Linearity and homoscedasticity were verified by inspection of bivariate scatterplots. Inspection of the correlation matrix revealed no bivariate correlations above .70 among the variables of interest, indicating that multicollinearity did not exist.

Links between demographic variables and other variables of interest were examined using ANOVA for categorical variables and Pearson product moment correlations for continuous variables in order to identify potential covariates to be entered in subsequent analyses. This examination revealed significant negative correlations between increased age and three variables of interest; acculturation, $r = -.31, p = .001$, internalization of cultural beauty standards, $r = .35, p < .001$, and self-objectification as measured by the OBCS Body Surveillance Scale, $r = -.30, p = .001$. Additionally, significant positive correlations were found between actual body size as measured by Body Mass Index (BMI) and body shame, $r = .25, p = .009$. Therefore, age and BMI were included as covariates in all analyses to adjust for their links when testing

hypotheses. The variables of interest were not related significantly to any other demographic variables (e.g., socioeconomic status, sexual orientation).

Descriptive Statistics

Descriptive statistics for the current sample (see Table 4-1) were generally comparable to sample means presented in previous studies. More specifically, the present sample's mean for Body Surveillance was 4.34 ($SD = 1.15$) which is comparable to the mean of 4.82 (no standard deviation reported) obtained with a sample of 156 mostly White/European American women (McKinley, 1998). In the same study, McKinley reported a mean score of 3.46 (but no standard deviation) for the Body Shame Scale. The present sample of Latina women had a mean score of 3.01 ($SD = 1.27$), which was similar to, though slightly lower than, that reported by McKinley. The mean EAT-26 score for the current sample was 59.82 ($SD = 16.19$), which is similar to previous results ($M = 69.75$, $SD = 16.76$) for heterosexual women, using the same continuous scoring method (Seiver, 1994). Among the women in their sample, Morry and Staska (2001) reported a mean score of 22.89 ($SD = 6.32$) on the Internalization scale of the SATAQ. Similarly, a mean score of 23.34 ($SD = 7.22$) was found in the present sample. Thus, overall, descriptive data for the present sample on eating disorder-related constructs were comparable to that found in previous samples.

The present sample's mean acculturation score was comparable to previous samples of women with at least some college education. Marin et al. (1987) reported SASH acculturation mean scores of 2.69 (standard deviations were not reported) for Latina women in their normative community based sample. The mean level of education for all Latino/Hispanic participants in the normative sample was 12.3 years. The current sample's mean score of 3.55 ($SD = .57$) was somewhat higher than that reported by

Marin et al. for their community based sample, but was comparable to mean scores found in other studies with educational levels comparable to that of the present sample. For example, Caldera, Robitschek, Frame, and Pannell (2003) reported a mean SASH acculturation score of 3.49 ($SD = .60$) in their sample of 98 Mexican American college women. Similarly, in a young, mostly female sample with either some college or college degree, Valentine (2001) reported a mean SASH acculturation score of 3.30 ($SD = .77$).

With regard to acculturative stress scores, Mena et al. (1987) reported a mean score of 30.2 on the SAFE for their mixed gender and ethnically diverse normative sample of college students. Perez et al. also found a mean score ($M = 30.48$, $SD = 14.16$) among their ethnically diverse sample of college women. The mean acculturative stress score on the SAFE for the present sample of Latina women was 47.16 ($SD = 9.77$), which is somewhat higher than that found by Mena et al. (1987) and by Perez et al. (2002).

However, Mena et al. and Perez et al. examined acculturative stress in ethnically diverse samples and the present study's results are consistent with the higher mean SAFE scores found in other studies conducted specifically on Latino immigrant samples. For example, Miranda and Matheny (2000) reported a SAFE mean score of 78.3 ($SD = 11.6$) in their sample of primarily immigrant generation Latinos from various Latin American countries and Hovey and Magaña (2002) reported a mean of 56.4 ($SD = 19.7$) on the SAFE in their sample of Mexican migrant farm workers. Hovey (2000) also reported a mean SAFE score of 49.90 ($SD = 18.56$) among 76 Mexican immigrant women enrolled in ESL classes at a community college. In their theoretical review of research on acculturation and acculturative stress, Smart and Smart (1995) suggested that Latinos may have higher average acculturative stress levels than other immigrant populations due to multilevel

sociopolitical and sociocultural stressors. Therefore, it seems reasonable that the mean SAFE score for the current Latina women sample would be somewhat higher than that found in the ethnically diverse normative sample, even though both were primarily college samples.

Interrelations Among Variables of Interest

To provide an initial examination of preconditions for the mediational hypotheses, interrelations among the variables of interest were examined using partial correlations, controlling for age and BMI (see Table 4-1). As described by Baron and Kenny (1986), in order for a variable to be considered a mediator, the following three criteria must be met: (a) the predictor and mediator must be related significantly, (b) the mediator and criterion must be related significantly, and (c) the predictor and criterion must be related significantly. Preliminary inspection of the data based on these correlations indicated that preconditions for Hypothesis 1 were not met. Preconditions for Hypothesis 2 and Hypothesis 3 were met.

Hypothesis 1

The expected positive relation of acculturation with internalization of cultural beauty standards was not significant and, therefore, an indirect (i.e., mediated) link from acculturation, through internalization of cultural beauty standards, to self-objectification, body shame, and eating disorder symptoms could not be tested.

Hypothesis 2

Internalization of cultural beauty standards was expected to relate directly and positively to self-objectification, to body shame, and to eating disorder symptomatology. Furthermore, the link from internalization to eating disorder symptomatology was expected to be mediated partially by both self-objectification and body shame. Consistent

with these expectations, partial correlations indicated significant positive links from internalization of cultural beauty standards to self-objectification, body shame, and eating disorder symptoms. Also, the mediational roles of self-objectification and body shame in the relation of internalization of cultural beauty standards to eating disorder symptoms received initial support. According to the correlational data presented in Table 4-1, all three criteria are satisfied for the mediations. In other words, in addition to the significant positive links from internalization to all three variables, significant positive relations were found between self-objectification and eating disorder symptoms as well as between body shame and eating disorder symptoms. Thus, the significance of these mediations could be tested (described under path analyses).

Hypothesis 3

Hypothesis 3 proposed that self-objectification would be related to eating disorder symptoms and that this relation would be partially mediated by body shame. Partial correlations indicated that self-objectification was significantly and positively related to both body shame and eating disorder symptoms. Body shame and eating disorder symptoms were also significantly and positively linked. Thus, preconditions for Hypothesis 3 were met and the significance of the mediation could be tested (described under path analyses).

Hypothesis 4

Hypothesis 4 called for an exploratory analysis of the relation of acculturative stress to all other variables of interest. Initial inspection of partial correlations suggested that acculturative stress was related to both body shame and eating disorder symptoms. Based on Baron & Kenny's (1986) recommendations regarding mediational relationships, it may be that acculturative stress was related indirectly to eating disorders through the

mediational role of body shame. This and other direct and indirect links were then examined through path analysis. Acculturative stress also had a significant negative correlation with acculturation, which is consistent with the definitions of these two constructs as well as with prior research (e.g., Berry, 2003; Hovey & Magaña, 2002).

Path Analyses

Test of Originally Hypothesized Model

Path analysis using AMOS 5.0 (Arbuckle, 2003) was used to test the fit of the data to the proposed model (presented in Figure 2-1) and allow for testing the significance of mediations for which preconditions were met. As mentioned previously, age and BMI were controlled as covariates in the model. Maximum likelihood estimation was used with the covariance matrix of the variables of interest as input. Figure 4-1 presents the results for Model 1 (the originally proposed model) with all standardized path coefficients. Several goodness-of-fit indices for Model 1 were indicative of a good-fitting model, including the Goodness-of-Fit index (GFI) = .99, Comparative Fit Index (CFI) = 1.00, Non-Normed Fit Index (also known as Tucker-Lewis Index [NNFI/TLI]) = 1.06, and Root Mean Square Error of Approximation (RMSEA) = .00. Recommended values of $\geq .90$ for GFI, CFI, and NFI indicate a good-fitting model, while RMSEA is recommended to be at or below a value of .05 (Kline, 1998). The NNFI/TLI is considered to be one of the fit indices least affected by sample size and can be valued above 1, unlike GFI and CFI, which vary between 0 and 1.

The overall model accounted for 44% of the variance in eating disorder symptoms, 31% of the variance in body shame, 22% of the variance in self-objectification, and 13% of the variance in internalization of cultural beauty standards. As shown in Figure 4-1, direct paths from internalization of cultural beauty standards to self-objectification, body

shame, and eating disorders all were significant and positive. Direct paths from self-objectification to body shame and eating disorders, as well as from body shame to eating disorders, also were significant and positive. These results indicated that the originally hypothesized model was mostly supported by the data, with some modifications. More specifically, all expected relations were consistent with the data, with the exception that relations of acculturation to the other variables of interest, as predicted by Hypothesis 1, were not supported.

Modified Model Including Acculturative Stress

Although Model 1 was a good fit and explained a total of 44% of the variance in eating disorder symptomatology, there was no significant unique link from acculturation to internalization of cultural beauty standards, as expected in the hypothesized model. In light of this finding and to explore the role of acculturative stress in the model, a new model was created that incorporated acculturative stress based on an examination of the partial correlation matrix and the results of Model 1. This alternative model, identified as Model 2, included all the expected direct and indirect paths from internalization of cultural beauty standards to self-objectification, body shame, and eating disorder symptoms that were proposed in Hypotheses 2 and 3 and that were substantiated in Model 1. In addition, Model 2 included direct paths from acculturative stress to body shame and eating disorder symptomatology as well as an indirect link from acculturative stress to eating disorder symptoms, through body shame. As with Model 1, BMI and age were controlled as covariates in the path analysis. Figure 4-2 represents Model 2, including all standardized path coefficients.

Goodness-of-fit indices were indicative of a good-fitting model (GFI = .99, CFI = 1.00, NNFI/TLI = .98, RMSEA = .04). Similar to Model 1, the model accounted for 44%

of the variance in eating disorder symptoms, 35% of the variance in body shame (an increase from the 31% accounted for by Model 1), and 22% of the variance in self-objectification. As can be seen in Figure 4-2, all standardized path coefficients were significant, indicating significant unique direct links. In addition to the direct links found in Model 1, direct paths from acculturative stress to body shame and to eating disorder symptoms also were significant and positive. According to these results, the direct links predicted in Hypotheses 2 and 3 were consistent with the result of the path analyses. That is, internalization of cultural beauty standards was related directly and positively to self-objectification, which, in turn, was related directly and positively to body shame, which, in turn, was related directly and positively to eating disorder symptoms. Additionally, internalization of cultural beauty standards also was related directly and positively to body shame and eating disorder symptoms. Self-objectification also was related directly and positively to eating disorder symptoms. Not specifically hypothesized, but explored as proposed in Hypothesis 4, acculturative stress was related directly and positively to body shame as well as eating disorder symptoms.

Testing Significance of Mediations

The significance of mediational relations proposed in the hypotheses were tested using the path coefficients for Model 2 as this model contained all possible significant relations among variables. Cohen and Cohen (1983) recommended multiplication of path coefficients to compute magnitude of indirect links. This procedure was used along with Sobel's formula (Baron & Kenny, 1986; Sobel, 1982) for calculating the significance of indirect links, which indicates significance of mediation. As proposed in Hypothesis 2, internalization of cultural beauty standards, through self-objectification as a mediator, had a significant indirect link of .12 (.35 x .34; $z = 2.89, p = .004$) with body shame and a

significant indirect link of .07 (.35 x .21; $z = 2.15, p = .031$) with eating disorder symptoms. Consistent with Hypothesis 3, self-objectification, through body shame as a mediator, had a significant indirect link of .07 (.34 x .22; $z = 2.12, p = .034$) with eating disorder symptoms. Acculturative stress, through body shame as a mediator, had a significant indirect link of .06 (.26 x .22; $z = 1.93, p = .05$) with eating disorder symptoms.

Thus, all of the expected mediations predicted by Hypotheses 2 and 3 were supported by the data. An additional indirect link from acculturative stress to eating disorder symptoms through body shame as a mediator was also found. The indirect links predicted in Hypothesis 1 could not be tested and were not supported given that acculturation was not related significantly to any of the other variables of interest.

Summary of Findings

As predicted by Hypothesis 2, internalization of cultural beauty standards was related directly and positively to self-objectification, body shame, and eating disorder symptomatology. Also as predicted by Hypothesis 2, the link between internalization of cultural beauty standards and eating disorder symptoms was mediated partially by self-objectification and body shame. As predicted by Hypothesis 3, self-objectification was related positively and directly to eating disorders symptoms and this link also was mediated partially by body shame. Hypothesis 4 called for an exploration of the link between acculturative stress and the other variables of interest. Acculturative stress was related directly and positively to eating disorder symptoms and this relation was mediated partially by body shame. Acculturation was not related to any of the other variables of interest.

Table 4-1. Summary Statistics and Partial Correlations Among Variables of Interest with Age and BMI Controlled (N=112)

Variables	1	2	3	4	5	6	Possible Range	Sample Range	M	SD	α
1. Self-objectification							1-7	1.00-7.00	4.33	1.15	.83
2. Internalization	.35**						8-40	8.00-40.00	23.34	7.22	.87
3. Body shame	.44**	.36**					1-7	1.00-6.25	3.01	1.27	.81
4. Eating disorder symptoms	.45**	.54**	.49**				26-156	31.00-99.00	59.82	16.19	.87
5. Acculturation	.01	.04	-.06	-.06			1-5	2.25-4.83	3.55	.57	.88
6. Acculturative stress	.13	.09	.33**	.26*	-.38**		0-120	28.00-80.00	47.16	9.77	.87

Note. * $p < .005$. ** $p < .001$. Higher scores indicate higher levels of the construct assessed.

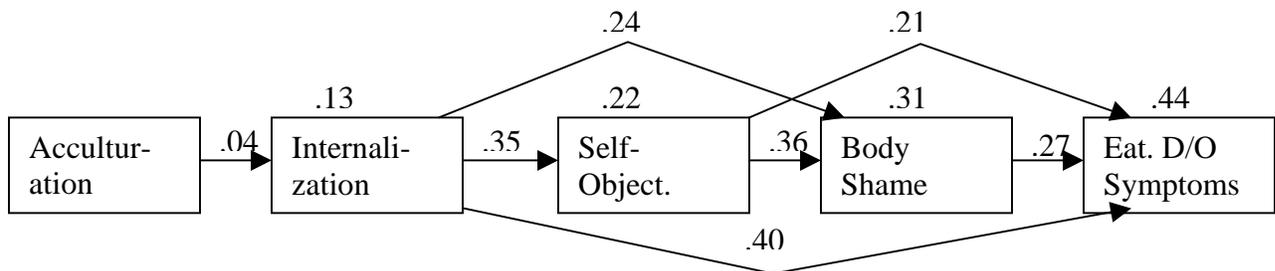


Figure 4-1. Model 1, controlling for BMI and age, with standardized path coefficients shown. All paths are significant at $p < .05$.

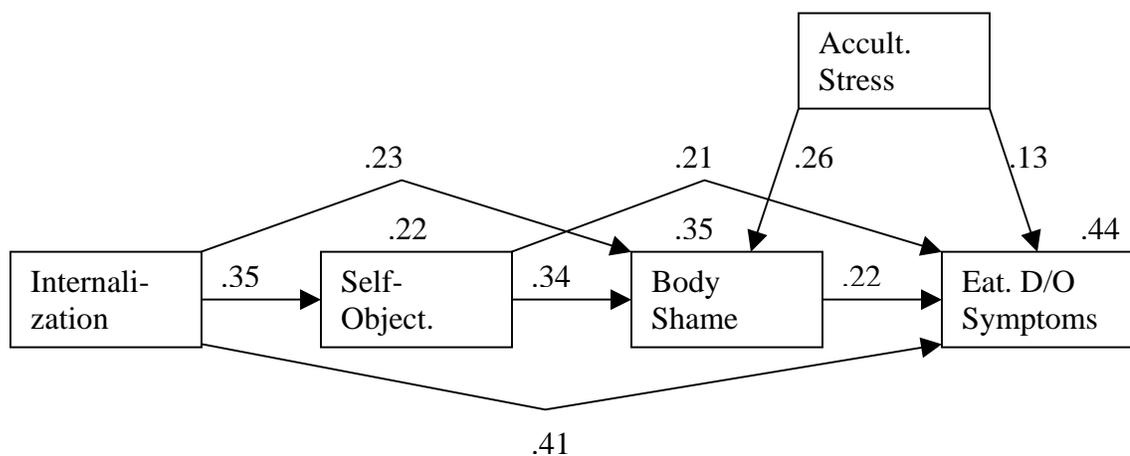


Figure 4-2. Model 2, controlling for BMI and age, with standardized path coefficients. All paths are significant at $p < .05$.

CHAPTER 5 DISCUSSION

The literature has provided extensive support for an integration of sociocultural factors in understanding the etiology of eating disorders among women (Gordon, 2001; Groesz et al., 2002; Rodin et al., 1984; Pate et al., 1992; Stice, 1994; Striegel-Moore & Cachelin, 2001; Vandereycken & Hoek, 1992). Objectification theory (Fredrickson & Roberts, 1997) combines the empirical and theoretical support for such an understanding into a testable model of the sociocultural factors that may shape eating disorder symptomatology in women. Support has accumulated for several of the propositions of objectification theory; specifically, that sexually objectifying cultural contexts for women may lead to self-objectification (Fredrickson et al., 1998; Moradi et al., 2005; Morry & Staska, 2001) and that self-objectification predicts eating disorder symptomatology both directly and indirectly, through the mediating role of body shame (Fredrickson et al.; Moradi et al.; Morry & Staska; Noll & Fredrickson, 1998; Tiggeman & Lynch, 2001; Tiggeman & Slater, 2001). The most recent studies on objectification theory have also integrated internalization of cultural beauty standards into the model and it appears that this internalization may be the mechanism by which sexually objectifying cultural contexts shape self-objectification in women (Moradi et al.; Morry & Staska).

Although recent reported incidence rates of eating disorders among women of color have increased (Crago et al., 1996; Striegel-Moore & Smolak, 2000), most of the research on objectification theory and its correlates has been conducted on primarily White/European American women. The present study addressed this gap in the literature

by extending objectification theory to a model applicable for Latina women. No prior research has specifically examined the tenets of objectification theory in Latinas. All of the hypothesized relations among variables specific to objectification theory, as well as internalization of cultural beauty standards, were supported by the results for this sample of Latina women. Acculturative stress was also found to play a significant role in understanding eating disorder symptoms in the present sample. Accordingly, the results of this study indicate that objectification theory can be applied to Latinas, with the added culturally relevant variables of internalization of cultural beauty standards and acculturative stress.

Similar to previous findings among samples of mostly White/European American women (Fredrickson et al., 1998; Moradi et al., 2005; Morry & Staska, 2001; Noll & Fredrickson, 1998; Tiggeman & Lynch, 2001; Tiggeman & Slater, 2001), results with the present sample of Latina women indicated that each of the variables relevant to objectification theory (i.e., self-objectification, body shame, and the most recently incorporated variable of internalization of cultural beauty standards) are related directly and uniquely to eating disorder symptomatology. Additionally, the present results suggested that self-objectification and body shame also partially mediated the link of internalization of cultural beauty standards to eating disorder symptoms. Based on these findings and the results of previous research, it appears that for Latinas as well as for White/European American women, increased internalization of cultural beauty standards is related to increased self-objectification, which is linked with increased body shame, which, in turn, is related to eating disorder symptoms. In addition to this series of

mediated links, internalization, self-objectification, and body shame each are related uniquely and directly to eating disorder symptomatology.

Fredrickson and Roberts (1997) proposed that objectification theory is applicable to women of different ethnic and cultural backgrounds to the extent that all women, regardless of ethnicity, are embedded within patriarchal, sexually objectifying cultural contexts. The current findings indicate that this proposition may be true, at least in extending objectification theory to Latinas. However, the results of this study also suggest that the ethnocultural variable of acculturative stress is an important addition to objectification theory in extending its applicability to understanding eating disorder symptomatology among Latinas. The results indicated that acculturative stress was related significantly and uniquely to both greater body shame and eating disorder symptoms among Latinas. Furthermore, body shame was a partial mediator of the link from acculturative stress to eating disorder symptoms in the present sample of Latinas. These results are consistent with the only other known study that examined the role of acculturative stress in eating disorders, in which acculturative stress was found to contribute to variance in bulimia symptoms (Perez et al., 2002). The present results suggest that acculturative stress is an important sociocultural factor associated with both body shame and eating disorder symptomatology in Latinas and should be included as an additional component when examining objectification theory among Latinas.

Contrary to the significant role of acculturative stress in the present results, hypothesized relations between acculturation and the other variables under study were not supported. Acculturation was expected to relate positively and directly to internalization of cultural beauty standards and indirectly to increased self-objectification,

body shame, and eating disorder symptoms. These expectations were based on past research suggesting that acculturation may be related positively with eating disorder symptoms (Cachelin et al., 2000; Chamorro & Flores-Ortiz, 2000; Franko & Herrera, 1997; Pumariega, 1986). However, most of the previous studies that found a positive link between acculturation and eating disorder symptoms examined acculturation either very narrowly (Cachelin et al.), measuring acculturation based primarily on generation level and English language preference, or used measures of acculturation that are not well validated (Franko & Herrera; Pumariega). In a review of research on ethnic differences in eating disorders, Gilbert (2003) postulated that one of the various limitations of eating disorder research among women of color is inconsistency in the use of valid acculturation measures and that improper measurement of acculturation fails to consider the multidimensional aspects of acculturation. In addition, even when a well-validated measure of acculturation was used (Chamorro & Flores-Ortiz), analyses did not control for the important role of BMI when examining the relation between acculturation and eating disorder symptoms.

The present study used a measure of acculturation that has been well validated and has been used extensively in acculturation research (SASH; Marin et al., 1987). The present study also accounted for the role of BMI and used path analytic techniques to assess more complex interrelationships among all of the variables under study. Indeed, Lester and Petrie (1995) found similar results when they also measured acculturation with a well-validated measure (ARSMA; Cuellar et al., 1980) and conducted regression analyses accounting for the role of both BMI and sociocultural beliefs about attractiveness (a construct comparable to internalization of cultural beauty standards).

Their findings, similar to the present study, indicated that acculturation did not account for unique variance in bulimia symptoms among their sample of Mexican American undergraduate university women, though both BMI and sociocultural beliefs about attractiveness did. Another study conducted with a sample of Mexican American adolescent girls similarly did not find a link between acculturation and eating disorder symptoms (Joiner & Kashubeck, 1996).

The lack of a significant relationship in the current study between acculturation and either internalization of cultural beauty standards or eating disorders may have been due to a true lack of relationship between these variables, once the roles of BMI and age are considered. On the other hand, the current sample had a high mean acculturation score on the SASH compared to the normative sample, perhaps indicating that this sample of Latinas is not representative of the full range of acculturation among the U.S. population of Latinas. Consequently, this study should be replicated with a sample having a wider range of acculturation scores in order to determine whether restricted range may have affected the current results. Nevertheless, the accumulated knowledge seems to suggest that either there is not a true relationship between acculturation and eating disorders or that the relationship is complex and is subsumed by the roles of BMI, age, internalization of cultural beauty standards, and acculturative stress.

Furthermore, it appears that the stress associated with the acculturation process (rather than acculturation in general) is a critical variable to consider in extending objectification theory to Latinas. The current findings indicate that it is not the process of becoming more acculturated to U.S. society that is related to Latina women's levels of body shame and eating disorder symptoms, but rather the extent to which that process is

experienced as stressful that is linked to increased body shame and increased tendency to exhibit eating disorder symptoms. This interpretation also is supported by Moyerman and Forman (1992), who conducted a meta-analysis of research on the relationship between acculturation and various adjustment variables, including self-esteem, locus of control, family conflict, anxiety/stress, intelligence, and psychosocial/health. Based on an examination of overall effect sizes, they concluded that acculturation did not have a consistent relationship with any of the adjustment measures. They also concluded that anxiety/stress was highest at the beginning of the acculturation process and decreased with greater acculturation, which is consistent with the concept of acculturative stress as well as with the significant negative correlation found in this study between the two variables. It is important to note, however, that despite a significant negative correlation between acculturation and acculturative stress, the mean scores for both of these scales were somewhat high for the present sample. This indicates, as has been proposed by other authors (Smart & Smart, 1995), that acculturative stress may be a particularly relevant mental health concern for Latinas in general and in particular as a risk factor for eating disorders, even among those who are highly acculturated.

Additionally, neither acculturative stress nor acculturation was linked to internalization of cultural beauty standards in the current sample. It has been proposed that the risk for developing eating disorders in women of color may relate to attempts to emulate a beauty ideal based on White/European American standards of beauty (Thompson, 1996). This might mean that either acculturation or acculturative stress, perhaps experienced from comparing oneself to White/European American beauty standards, might be associated with internalization of cultural beauty standards. The

current results indicate that neither general acculturation nor acculturative stress is related to internalization of cultural beauty standards. It may thus be argued that such internalization is more likely, as found by both Moradi et al. (2005) and Morry and Staska (2001), to occur uniquely from gender related sexually objectifying cultural experiences in which all women in general find themselves. Therefore, as postulated by Fredrickson and Roberts (1997), the results of this study suggest that Latina women may be as likely to self-objectify as White/European American women and in turn be at risk for body shame and eating disorders due to being embedded within a sexually objectifying patriarchal cultural context. The present results indicate that, in addition to internalization of cultural beauty standards and self-objectification, acculturative stress is an important risk factor for both body shame and eating disorders among Latinas and should be considered in any examination of the cultural factors associated with eating disorders for Latinas.

Limitations and Future Directions

Although the current study adds to research supporting objectification theory by extending its applicability to Latina women, several limitations should be considered when interpreting its findings. As mentioned above, the somewhat high average acculturation level of this sample may have affected the lack of an observed relationship between acculturation and other variables of interest. On the other hand, the research on the relationship between acculturation and eating disorders is equivocal and more clarity on the association between these variables would be provided by continued research using appropriately validated measures of acculturation. The effects of age in this sample were an interesting finding that were not specifically hypothesized and lends further support to previous findings that self-objectification tends to decrease with increased age

(Greenleaf, 2005). More research is needed on the relationship between age and the variables associated with objectification theory.

Another limitation of this study was the use of self-reported weight and height to make calculations about actual body size through BMI. The potential exists for inaccuracy in self-reports and future studies should be conducted in which women are actually weighed using a scale and have their heights measured as well. On the other hand, this limitation exists for the majority of eating disorder research and Heymsfield et al. (1995) recommended BMI as a practical self-report measure of human body composition given that most people tend to know their approximate height and weight and any potential systematic bias would be unimportant in studies where BMI is correlated with other variables. It is also important to recognize that, though path analytic research is helpful in assessing complex relationships among several variables and in determining which relationships among the variables are the most important, the results are still correlational. Experimental research is needed to test the inferences about the direction of the relationships from internalization of cultural beauty standards to self-objectification, to body shame, and to eating disorder symptoms, as well as from acculturative stress to body shame and to eating disorder symptoms.

Although the present study begins to provide support for the applicability of objectification theory to women of color, these results can only be generalized to women of Latino/Hispanic background. Therefore, future research should attempt to replicate the current findings in women of other ethnic/cultural groups, taking into consideration any other variables that may be of particular interest in that population. It would also be interesting to replicate this study with samples of women whose backgrounds are from

different Latin American countries as well as examine differences among Latinas of varying racial compositions. As was noted by responses to the demographic question about ethnic/racial self-identification, not all Latinas self-identify as just “Latina.” More research is also needed on the factors that contribute to eating disorders in men.

Another related issue is that these results are only generalizable to nonclinical populations and primarily college students. However, it has been found that Latinas are less likely to be identified as having an eating disorder when symptoms exist (Gordon, Perez, & Joiner, 2002) and have differential access to treatment for eating disorders (Becker, Franko, Speck, & Herzog, 2003). Therefore, clinical samples of Latinas may not capture the full extent of the impact of self-objectification and related variables on eating disorders among Latinas. Epidemiological research is needed to examine the prevalence of eating disorders among Latinas as well as other women of color. It was relevant to the purpose of this study to recruit a community-based sample in addition to university students and future research could also focus either primarily or exclusively on community-based samples. Conducting similar research with clinical samples would also provide an understanding of the relevance of objectification theory among Latinas who are in treatment for eating disorders.

This study extends the research on eating disorders in general and objectification theory in particular by providing a comprehensive model that can be applied to the understanding of eating disorders among Latina women. The current results highlight the important role that acculturative stress may play in eating disorders among Latinas and further research is needed in this area. Acculturative stress research in general is in early development and only one previous study was found that evaluated the role of

acculturative stress in eating disorders (Perez et al., 2002). Future research could focus on which factors contribute to acculturative stress and which aspects of acculturative stress affect eating disorders.

Implications for Practice

This research also has important implications for clinical practice. Clinicians should be aware of the extent to which the women they work with, including Latinas, have internalized cultural standards of beauty, especially for those who clearly have experienced examples of sexually objectifying contexts, such as incest, sexual assault, or harassment. Women should be educated about the potential mental health consequences of internalization of cultural beauty standards, including self-objectification and body shame, which can then lead to eating disorder symptoms. For clinicians working with Latinas in particular, it is important to understand the role of acculturative stress in body shame and eating disorder symptoms. The results of this study indicate that acculturation may not play a significant role in eating disorders. Therefore, Latinas from all acculturation levels may be at comparable levels of risk for developing eating disorders. However, clinicians should attend to the various sociocultural stressors that Latinas they work with have experienced and how these may contribute to acculturative stress and by extension to body shame and eating disorders.

APPENDIX
DEMOGRAPHIC QUESTIONS

The following questions are for demographic purposes, to get a sense of who you are. Please fill in your responses or circle the number for the appropriate response to each question.

1. Age _____ 2. Sex/Gender _____ 3. Height _____ 4. Weight _____

5. How would YOU describe your ethnicity/race? (If multiracial, mark all that apply.)

- 1 = African-American/Black (non-Hispanic)
- 2 = American Indian or Alaskan Native
- 3 = Asian or Pacific-Islander
- 4 = European-American/White (non-Hispanic)
- 5 = Latina(o)/Hispanic White
- 6 = Latina(o)/Hispanic Black
- 7 = Other (Specify: _____)

6. How would OTHERS describe your ethnicity/race? (If multiracial, mark all that apply.)

- 1 = African-American/Black (non-Hispanic)
- 2 = American Indian or Alaskan Native
- 3 = Asian or Pacific-Islander
- 4 = European-American/White (non-Hispanic)
- 5 = Latina(o)/Hispanic White
- 6 = Latina(o)/Hispanic Black
- 7 = Other (Specify: _____)

7. What is your estimated average household income? (Refer to your parents' income level if you live with them or are a dependent).

- 1 = below \$15,000 annually
- 2 = \$15,000 – \$20,000 annually
- 3 = \$21,000 – \$30,000 annually
- 4 = \$31,000 – \$50,000 annually
- 5 = \$51, 000 – \$100,000 annually
- 6 = \$101,000 – \$200,000 annually
- 7 = above \$200,000 annually

8. What is your sexual orientation?

- 1 = heterosexual
- 2 = gay or lesbian
- 3 = bisexual

4 = transgendered or other

9. Where were you born?

1 = U.S.A. (not including Puerto Rico)

2 = México

3 = Cuba

4 = Puerto Rico

5 = Central/South America (Specify Country: _____)

6 = Other (Specify Country: _____)

10. Where were your parents born? (If parents were each born in different countries, circle both and indicate each by writing in an "M" next to your mother's country of birth and an "F" next to your father's country of birth.)

1 = U.S.A. (not including Puerto Rico)

2 = México

3 = Cuba

4 = Puerto Rico

5 = Central/South America (Specify Country: _____)

6 = Other (Specify Country: _____)

11. Answer this question only if you were born in the U.S. Please indicate whether you are:

1 = 1st generation (parents not born in the US)

2 = 2nd generation American (parents were the first in their families born in the US)

3 = 3rd generation American (grandparents were the first in their families born in the US)

4 = Other (family has been in the US for more than 3 generations)

12. If you were born outside of the U.S., at what age did you first arrive? _____

13. How well do you read and understand English?

1 = very poorly

2 = poorly

3 = fairly well

4 = well

5 = very well

14. Based on your level of English reading ability, do you feel that you understood the questions in this survey enough to provide accurate responses?

1 = Yes

2 = No

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BIOGRAPHICAL SKETCH

I am a Cuban American raised in Miami, FL. I completed my undergraduate studies at the University of Florida, where I graduated with honors in 1997 with a Bachelor of Science in psychology and a Bachelor of Arts in sociology. I then attended the University of Miami and obtained a Master of Science in Education for mental health counseling in 1999. My psychotherapy training at the University of Miami included practicum experiences in its university-based community mental health center as well as at a transitional living facility for persons with severe mental illness. I returned to the University of Florida in Fall of 1999 to complete a Doctor of Philosophy degree in counseling psychology. I continued with practical training experiences at the University Counseling Center and at a forensic state psychiatric hospital. I also gained research knowledge and experience working in projects on emotional expressiveness, roles in the family environment, and posttraumatic stress among car crash survivors. I completed my first original research with a master's level thesis equivalency on body image and acculturation among Latinas.

I have expanded on that research with the present dissertation study on the role of objectification theory and other sociocultural variables in eating disorder symptomatology among Latinas. I also continued my practical training with an internship at a community mental health center servicing low-income, multicultural, primarily Latino/Hispanic clients in Brooklyn, New York. After completing the one-year pre-doctoral internship, I have remained in New York for the past year and a half and

continue to work in Brooklyn at an outpatient chemical dependency center affiliated with the institution where I completed my internship and servicing a similar population. I specialize in working with co-occurring substance abuse and mental health issues, including eating disorders, as well as with women's issues, multicultural issues, posttraumatic stress, domestic violence, and survivors of sexual assault and abuse. I consider myself a scientist-practitioner and have applied what I learned in completing this dissertation within my professional psychotherapy work.