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## Objectification Theory and Eating Pathology in Latina College Students: Testing a Culture-Specific Model

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OBJECTIFICATION THEORY AND EATING PATHOLOGY IN LATINA COLLEGE

STUDENTS: TESTING A CULTURE-SPECIFIC MODEL

by

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## ABSTRACT

Objectification Theory and Eating Pathology in Latina College Students: Testing a Culture-specific Model  
by

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To date, sociocultural risk factors for eating disorder development in Latina women are poorly understood. Objectification theory provides a useful framework for understanding how sociocultural and intrapsychic variables influence eating pathology in women. However, few studies apply an objectification theory framework to the study of disordered eating in Latina women and even fewer studies examine the influence of culture-specific variables, such as acculturative stress and marianismo beliefs. Consequently, to address limitations in extant research, the present study applied the tenets of objectification theory to the study of eating pathology in Latina women using a culture-specific model. Specifically, this study investigated the relationships among interpersonal objectification, sociocultural pressures to be thin, acculturative stress, marianismo beliefs, thin-ideal internalization, body surveillance, body shame, appearance anxiety, and disordered eating in a sample of 293 Latina college students using path analysis. Path analysis indicated that the proposed theoretical model provided a poor fit to the data. However, mediation analyses supported components of the proposed model.

Specifically, media pressures contributed to increased body surveillance through thin-ideal internalization; and body surveillance contributed to increased eating pathology through body shame and appearance anxiety. Additionally, moderator analyses indicated that women who were high in acculturative stress reported higher levels of media pressures to be thin and thin-ideal internalization than women low in acculturative stress. Results suggest that objectification theory may, in part, explain eating pathology development in Latina women. However, future researchers may need to adjust this framework to better understand eating disorder development in Latina women.

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## CHAPTER ONE

### INTRODUCTION

College-aged women are considered at risk for eating disorder development (Mintz et al., 1997; Stice, 2002; Taylor et al., 2006). For example, although only a small percentage of college-aged women meet the criteria for an eating disorder (1-3%), it is estimated that 10-30% of these women are at risk for developing an eating disorder over their college careers (e.g., Mintz, O'Halloran, Mulholland, & Schneider, 1997). This is thought to be due, in part, to stress associated with the transition to college: Entering college is a time of significant academic stress, peer influence is particularly strong, and one's identity and social role is being strongly explored (Adams, Gullotta, & Montemayor, 1992; Astin, 1993; Dill & Henley, 1998; Spear, 2000). Consequently, the anxiety and stress associated with this transitional time may exacerbate disordered eating.

Given the high risk of eating disorder development in college-aged women, it is important to understand the causes and correlates of eating pathology in this population. To date, however, the majority of research investigating the development and presentation of disordered eating in this population has been based on studies of White, European American women. Latina college students are a particularly important group in which to study eating disorder development for several reasons. First, research indicates that Latina women experience eating disorders at comparable rates to White women (Crago, Shisslak, & Estes, 1996). For example, findings from a large-scale study of college students in the United States indicated that Latina women reported considerable body dissatisfaction, disordered eating, and associated distress (Franko, Becker, Thomas,



& Herzog, 2007). Despite these data, Latinas are less likely to seek mental health services and are less likely to be diagnosed with an eating disorder than White women (e.g., Marques et al., 2011). In a study examining the prevalence of eating disorders and mental health service utilization across ethnic groups in the United States, researchers found that despite similar prevalence of eating disorders among the ethnic groups examined, lifetime prevalence of mental health service utilization was lower among ethnic minority groups than for White respondents (Marques et al., 2011).

Second, college may be a particularly stressful time for Latina women because of significant cultural role conflict. During this transitional period, many Latina women must navigate the contrasting values of their family culture and popular mainstream culture (Franko et al., 2012). Although there is heterogeneity among Latino groups, Latino culture traditionally values strong family ties, collectivism, and interdependence (Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002). Furthermore, the traditional Latina gender role emphasizes family first, and education is not necessarily viewed as a priority for women (Vásquez-Nuttall & Romero-Garcia, 1989). This differs significantly from American culture, which values individualism and autonomy (Sue & Sue, 2008). Navigating cultural conflict between the values of one's peers and family may cause significant distress for Latina women and may lead to the development of eating pathology (Benavides et al., 2006; Dolan, 1991; Katzman & Lee, 1997).

Third, conflicting appearance ideals of mainstream American culture and Latino culture may influence eating pathology in Latina women. Research suggests that sociocultural pressures to be thin, thin-ideal internalization, and body dissatisfaction are salient risk factors for eating disorder development (Stice, 2002). In mainstream

American culture, the beauty ideal for women is young, thin, and fit (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Theoretically, pressures to be thin from media, family, and peers encourage women to incorporate the thin ideal and its associated values into their own self-identity (Thompson et al., 2004). As the thin ideal is unattainable for most women, this often causes body dissatisfaction or discontent with one's body size and/or shape (Stice, Nemeroff, & Shaw, 1996). Body dissatisfaction, in turn, may lead to disordered eating in an attempt to attain the thin ideal. Numerous studies support the posited links between perceived pressures to be thin, internalization of the thin ideal, increased body dissatisfaction, and disordered eating in adolescent and adult women (Stice, 2002; Stice & Shaw, 2002).

Although Hispanic culture tends to emphasize a larger, curvier ideal, findings indicate that sociocultural pressures for thinness affect Latina women in the United States, including thin-ideal internalization and subsequent body dissatisfaction (Grabe & Hyde, 2006; Shaw, Ramirez, Trost, Randall, & Stice, 2004). For example, in a study of mainstream American appearance ideals and body dissatisfaction in Mexican American, European American, and Spanish female college students, path analysis indicated that awareness of American appearance ideals significantly predicted thin-ideal internalization, which led to increased body dissatisfaction for women of all ethnic groups (Warren, Gleaves, Cepeda-Benito, del Carmen Fernandez, & Rodriguez-Ruiz, 2005).

Given the need for additional research on body image and eating pathology in Latina women, objectification theory may provide a useful sociocultural framework for understanding eating pathology in this population (Frederickson & Roberts, 1997).

Objectification theory posits that through sexual objectification experiences (e.g., interpersonal objectifying encounters, sexualized images presented in media), women are socialized to internalize cultural standards of beauty, and take an observer's perspective on their body (Frederickson & Roberts, 1997). The internalization of this observer's perspective is referred to as self-objectification (Frederickson & Roberts, 1997), which is characterized by habitual monitoring of the body's appearance or body surveillance. Body surveillance is posited to lead to body shame, appearance anxiety, and subsequent disordered eating as a means to reduce the shame and anxiety a woman experiences. Considerable research supports objectification theory's posited links between objectification experiences, body surveillance, body shame, appearance anxiety, and disordered eating in college-aged women (e.g., McKinley & Hyde, 1996; Moradi, Dirks, & Matteson, 2005; Muehlenkamp & Saris-Baglama, 2002; Noll & Frederickson, 1998; Tiggemann & Slater, 2001; Tylka & Hill, 2004).

Objectification theory is empirically supported and integrates aspects of several other important theories from the body image and eating disorder literature. For example, objectification theory includes sociocultural pressures of thinness and internalization of cultural appearance ideals as risk factors for body image disturbance and disordered eating. Additionally, objectification theory has the flexibility to accommodate the experiences of ethnically diverse populations and incorporate culture-specific factors (Moradi, 2010). For example, researchers have incorporated culture-specific factors such as skin-tone surveillance and skin-tone dissatisfaction into an objectification theory model examining body image in African American women (Buchanan, Fischer, Tokar, & Yoder, 2008).

Despite research suggesting that objectification theory is a promising model for eating disorder development in ethnic minority women, few researchers have applied this framework to the study of Latina women (Moradi, 2010; Moradi & Huang, 2008). Consequently, using an objectification theory framework to understand body image concerns and eating pathology in Latina women would expand upon extant research in at least three important ways. First, only a handful of studies have applied an objectification theory framework to the experiences of Latina women (e.g., Boie, Lopez, & Sass, 2012; Montes de Oca, 2005). Second, few studies examine how objectification experiences and sociocultural pressures to be thin influence eating pathology in Latina women (Moradi, 2010; Moradi & Huang, 2008). Given the well-established role of thin-ideal cultural exposure in the development of women's body image concerns and disordered eating, it is important to incorporate these constructs when examining eating pathology in Latina women.

Third, very few studies have incorporated culture-specific variables into the study of eating pathology in Latina women (Moradi, 2010). Two cultural factors that may be particularly salient are acculturative stress and marianismo beliefs. *Acculturative stress* can be described as the stress associated with the process of acculturating to a new, dissimilar culture from one's culture of origin (Berry, 2003). Despite an established relationship between acculturative stress and negative mental health consequences in immigrants in the United States, little is known about the relationship between acculturative stress and eating pathology in ethnic minority women (e.g., Hovey & King, 1996; Smokowski & Bacallao, 2007, Walker, Wingate, Obasi, & Joiner, 2008). However, preliminary findings suggest that ethnic minority women may be vulnerable to the

development of eating disorders when they attempt to cope with the stress associated with cultural conflict (e.g., Gordon, Castro, Sitnikov, & Holm-Denoma, 2010; Kempa & Thomas, 2000). Furthermore, it is not well understood as to how ascribing to *marianismo* beliefs, which describe the traditional female gender role in Latino culture characterized by selflessness, kindness, and purity, may influence eating pathology in Latina women. Some studies suggest that marianismo emphasizes interdependence, which places less importance on physical appearance and can be protective against eating pathology (Gil & Vasquez, 1996). However, other findings suggest that certain personality traits associated with marianismo, such as self-sacrifice and conflict avoidance, may put women at risk for developing eating disorders (Kulis, Marsiglia, & Hurdle, 2003; Piran & Cormier, 2005). Further research is necessary to elucidate the relationships among acculturative stress, marianismo beliefs, and eating pathology in Latina women.

Consequently, to address limitations in extant research, the overarching goal of the present study was to examine the influence of sexual objectification experiences on eating pathology in Latina women using a culture-specific model. Specifically, this study investigated the relationships between interpersonal objectification, sociocultural pressures to be thin, thin-ideal internalization, acculturative stress, marianismo beliefs, body surveillance, body shame, appearance anxiety, and disordered eating. I hypothesized the proposed theoretical model would fit the data, and that thin-ideal internalization would fully mediate the relationship between media pressures and body surveillance, whereas body shame and appearance anxiety would partially mediate the relationship between body surveillance and disordered eating. Furthermore, I hypothesized acculturative stress would moderate the relationship between media

pressures and thin-ideal internalization, such that women who reported higher levels of acculturative stress would demonstrate a stronger relationship between media pressures and thin-ideal internalization. Finally, I chose to explore the moderating effect of marianismo beliefs on the relationship between media pressures and thin-ideal internalization.

## CHAPTER TWO

### REVIEW OF THE LITERATURE

Hispanic or Latino Americans constitute the largest and most rapidly growing ethnic minority group in the United States (Ramirez & de la Cruz, 2003; U.S. Census Bureau, 2010). One important area of mental health that has received little attention in this population is disordered eating (Edwards George & Franko, 2010). The following literature review summarizes literature relevant to the present study. Specifically, I review the extant literature in the following areas: (1) eating pathology in Latina college students; (2) sociocultural and intrapsychic risk factors for disordered eating; (3) objectification theory as a framework for understanding the development of disordered eating; (4) and cultural factors relevant to the development of eating pathology in Latina women.

Before reviewing the relevant literature, it is important to briefly introduce the terms “Hispanic” and “Latino.” The term “Hispanic” was originally established by the U.S. government in the 1970s as an ethnic classification for populations of Spanish origin for data collection purposes (e.g., Garcia, 2003). This classification includes any person of Mexican, Cuban, Puerto Rican, South American, Central American, or other Spanish culture of origin regardless of race (Ramirez, 2004; U.S. Census Bureau, 2010). Although the Hispanic population of the United States is heterogeneous, research suggests that as a collective whole, the Hispanic population holds a variety of attitudes, cultural values, and beliefs that are distinct from non-Hispanic whites (Pew Hispanic Center, 2002).

The term “Latino/a” has also been used to refer to the previously mentioned ethnic population (Gracia, 2000). Although the terms “Hispanic” and “Latino” are often

used interchangeably, there exists much debate surrounding the terminology used to describe individuals of Hispanic/Latino descent. Some argue that these terms are not interchangeable: “Hispanic” has ties to Spain whereas “Latino” excludes Spain and Portugal (e.g., Gutierrez, 2005). Research suggests that there is variation in preference of these terms. For example, in a national survey conducted in 2006, 35% of respondents indicated a preference for the term “Hispanic,” 13.4% preferred the term “Latino”, over 32% of respondents said either term was acceptable, and 18% indicated they did not have a preference (Fraga et al., 2006). With this in mind, for the purposes of this study and the present review, I will use the term “Latina” to refer to women of Mexican, Puerto Rican, Cuban, South American, Central American, or Spanish descent.

### **Section 1: Eating Pathology in Latina College Students**

As defined by the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* [APA], 2013), the four primary eating disorders are anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED), and Unspecified or Other Eating Disorder. AN is characterized by a persistent refusal to maintain normal body weight, restrictive food intake, and fear of fatness. BN is characterized by *binge eating episodes*, during which an individual consumes an excessively large amount of food over a short period of time with an accompanying sense of loss of control over eating. Purging behaviors, including self-induced vomiting, laxative use, diuretic use, or excessive exercise, are used to compensate for binge eating episodes. Unspecified or Other Eating Disorder is a residual diagnostic category, comprised of individuals with significant eating disturbances who do not meet the full diagnostic criteria for AN, BN, or BED. At the core of these disorders are various cognitive, attitudinal, and behavioral features that



indicate a disturbance in how one's weight and shape are perceived, accompanied by an overvaluation of the importance of weight and shape to one's self-concept (Fairburn, 2008). BED, on the other hand, is somewhat distinct from the previously discussed eating disorders. BED has only recently been recognized as an official diagnosis in the DSM. This syndrome is characterized by recurrent episodes of binge eating in the absence of compensatory behaviors (such as those that occur in BN). Furthermore, the overvaluation of shape and weight is not a necessary criterion for a diagnosis of BED.

Although eating disorders are rare, they are serious, potentially life-threatening, conditions that affect one's physical, mental, and interpersonal wellbeing. In the United States, lifetime prevalence for women is less than one percent for AN, approximately 1.5% for BN, 3.5% for BED, and 4.6% for an Unspecified or Other Eating Disorder (Hudson, Hiripi, Pope, & Kessler, 2007; le Grange, Swanson, Crow, & Merikangas, 2012).

Beyond clinically diagnosed eating disorders, there is a large group of people who engage in disordered eating and experience body dissatisfaction who do not meet the criteria for a diagnosable eating disorder (Mintz, O'Halloran, Mulholland, & Schneider, 1997; Kalodner & Delucia-Waack, 2003). The term *eating pathology* is used to describe any disordered eating behaviors (e.g., binging, purging, dietary restriction) or body image disturbance (e.g., overvaluation of weight and shape, significant fear of weight gain) that meet threshold for any of the eating disorders (Thompson et al., 1999). In the present review of the literature, I will use the term eating pathology to broadly discuss such body image disturbance and disordered eating behaviors.

### **Eating Pathology in Ethnic Minority Women**

One significant limitation of existing epidemiological research is that data on the prevalence of eating disorders in non-White women are limited. Historically, eating disorders were believed to be a phenomenon unique to young, middle to upper class, White women (Smolak & Striegel-Moore, 2001; Thompson, 1992). Consequently research efforts have typically not included minority women, as the belief was that these women did not develop eating disorders (Nielsen, 2001). However, recent attention has been directed at understanding potential ethnic differences in the prevalence and manifestation of eating pathology. Currently, there is significant research to refute the claim that ethnic minority women are immune to eating disorders, as findings suggest that eating disorders affect women from various ethnic backgrounds (Deleel, Hughes, Miller, Hipwell, & Theodore, 2009; Wilfley, Schreiber, Pike, Striegel-Moore, Wright, & Rodin, 1996).

Broadly, research suggests that many minority women experience eating disorder symptoms. However, recent epidemiological data suggest that minority women may be somewhat less likely to be diagnosed with an eating disorder than White, European American women (Hoek, 2006; Marques et al., 2011; Wildes, Emery, & Simons, 2001). One important consideration in the interpretation of such findings is whether the presentation of eating disorders in women from various ethnic backgrounds resembles the DSM diagnostic criteria, which are largely developed from syndrome presentation in European American women.

In their review of the literature, Wildes and colleagues (2001) conclude that there are significant ethnic differences in the presentation of disordered eating. For example, African American women are less likely to diet or experience weight related concerns as

compared to European American women (Crago et al., 1996). African American women are also more likely to engage in binge eating or bulimic-like behaviors (Pike et al., 2001; Striegel-Moore et al., 2000), as compared to Latina, Asian American, or European American women. Multigroup comparisons of women of different ethnic groups in the United States suggest that eating pathology is least common in African and Asian American women and most common in Native American women (Crago et al., 1996). Additionally, data suggest comparable rates of eating disturbance for Latina and European American women (Crago et al., 1996). For example, in a national household survey study, Alegría and colleagues (2007) found that Latinas reported elevated rates of binge eating and binge eating disorder, but low prevalence of anorexia nervosa and bulimia nervosa. Similarly, findings from a sample of college students indicated that bulimia nervosa and binge eating occurred frequently among Mexican American women (Lester & Petrie, 1998). However, in a recent study, Cordero, Julian, and Murray (2013) found that in a sample of 248 Latina college students, self-reported drive for thinness and body dissatisfaction were more prevalent than bulimic symptomatology.

Conversely, some studies suggest that ethnic group differences in eating pathology tend to be minimal. For example, results of one study that directly tested whether minority women were less likely to report eating disorder symptoms than non-minority women indicated that there was little support for the proposed ethnic differences (Shaw, Ramirez, Trost, Randall, & Stice, 2004). In a study of cross-ethnic differences in eating disorder symptoms in U.S. college students ( $N = 5,435$ ), Franko and colleagues (2007) found no significant ethnic group differences in the frequency of binge eating, restrictive eating, vomiting, and excessive exercise. This is consistent with previous

research that has found no ethnic differences in bulimic symptoms, binge eating, or frequency of compensatory behaviors in women (e.g., Crago et al., 1996). Given the equivocal findings from previous research, further studies examining the nature, correlates, and predictors of eating pathology in ethnically diverse women are warranted.

### **Eating Pathology in Latina Women**

Overall, findings from numerous studies with Latinas suggest that body image concerns and disordered eating occur at rates similar to and sometimes greater than those found in non-Hispanic, White populations (Alegria et al., 2007; Blow, Taylor, Cooper, & Redfearn, 2010; Ceballos & Czweska, 2011; Chamorro & Flores-Ortiz, 2000; Franko & Herrera, 1997; Gordon et al., 2010; Granillo, Jones-Rodriguez, & Carvajal, 2005; Kuba & Harris, 2001; Shaw, Ramirez, Trost, Randall, & Stice, 2004). For example, prevalence data indicate that adolescent and adult Latinas demonstrate higher and more severe rates of binge eating, dieting, and unhealthy weight control behaviors compared to White, African American, and Asian American women (Bisaga et al., 2005; Croll, Neumark-Sztainer, Story, & Ireland, 2002; Fitzgibbon et al., 1998; Neumark-Sztainer et al., 2002; Pernick et al., 2006; Story, French, Resnick, & Blum, 1995). Furthermore, large-scale studies of Latina college students in the United States and Puerto Rico highlight considerable body dissatisfaction and disordered eating in this population (Becker, Franko, Speck, & Herzog, 2003; Franko, Becker, Thomas, & Herzog, 2007; Reyes-Rodriguez et al., 2010). Despite these data, little is known as to how etiological models of eating disorders may be similar or different for Latina women (Crago et al., 1996), and Latina women continue to be less likely to seek eating disorder treatment than White, European American women (e.g., Becker et al., 2003; Franko et al., 2007). With growing

evidence of eating pathology in this population, more research understanding the causes and correlates for eating disorders in Latina women is warranted.

### **Eating Pathology in Latina College Students**

Dieting and unhealthy weight loss practices are common among college-aged women in the United States (Hart & Kenny, 1997; Mintz, O'Halloran, Mulholland, & Schnedier, 1997). For example, among U.S. college students, approximately 60 percent of women report engaging in disordered eating behaviors such as frequent dieting, skipping meals, and avoiding particular foods; and up to 70 percent report using extreme techniques (e.g., fasting, laxatives, diet pills) to manage their weight (e.g., Schweitzer, Rodriguez, Thomas, & Salimi, 2001; Tylka & Subich, 2002). These statistics are concerning because research suggests that chronic dieting behaviors may progress to more disordered eating (e.g., Shisslak, Crago, & Estes, 1998). In fact, statistics suggest that up to 25% of chronic dieters have symptoms that progress to full-blown eating disorders (Shisslak, Crago, & Estes, 1995).

College-aged women are considered at high-risk for developing eating disorders for several reasons (Mintz et al., 1997; Stice, 2002; Taylor et al., 2006). First, college is a transitional period during which considerable stress occurs (Dill & Henley, 1998; Spear, 2000), peer influence is particularly strong (Astin, 1993), and one's identity and social role is being strongly explored (Adams, Gullotta, & Montemayor, 1992). Consequently, college-aged women may engage in disordered eating as a coping method for the anxiety and stress that accompanies this transitional time. Second, college often brings a significant change in eating environment, in which women become more autonomous in their food choices and eat with peers (Jones, Darcy, Colborn, Stewart, & Fitzpatrick,

2012). Third, as the transition between adolescence and adulthood is a period of increased risk for weight gain and many fear the “Freshman 15” (Nelson, Story, Larson, Neumark-Sztainer, & Lytle, 2008; Smith-Jackson & Reel, 2012), weight management and body image concerns may also be particularly salient to college-aged women.

Within the college population, Latina women are a particularly important group to study eating pathology for several reasons. Beyond the previously mentioned risk factors for eating disorder development in college-aged women, college may be a critical time of cultural conflict for Latina women. During this transitional period, many Latina women must navigate the contrasting values of their family culture and popular mainstream culture (Franko et al., 2012). Although there is heterogeneity among Latino groups, Latino culture traditionally emphasizes a family or group-based orientation (Sue & Sue, 2008), and values strong family ties, collectivism, and interdependence (Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002). This is in stark contrast to mainstream American culture, which values individualism, personal identity, and autonomy (Sue & Sue, 2008). Juggling the values of one’s peers and family may cause significant distress for Latina women and lead to the development of eating pathology as a coping mechanism (Benavides et al., 2006; Dolan, 1991; Katzman & Lee, 1997). In an effort to investigate this contention, Franko and colleagues (2012) conducted a qualitative study with 27 Latina college students. Overall, participants reported general themes in the transition from adolescence to young adulthood of conflicting messages from peers, family, and society regarding body image, food intake, dieting behavior, and weight gain. These women also reported that the transition to college was stressful, particularly related to being autonomous and making food choices in a setting away from home.

## **Summary**

Eating pathology is common in college-aged women. To date, however, the majority of research investigating the development and presentation of disordered eating has been based on studies of White, European American women. Nonetheless, a growing body of literature suggests that Latina women experience eating disorders at comparable rates to White women, making them an important group to study. Unfortunately, Latina women are less likely to seek mental health services and are less likely to be diagnosed with an eating disorder than White women. As such, it is important to understand potential risk factors and correlates of eating disorders in Latina college students.

### **Section 2: Sociocultural and Intrapsychic Risk Factors for Eating Pathology**

Empirical research suggests that three important risk factors for disordered eating in adolescent and college-aged women are perceived pressures to be thin, thin-ideal internalization, and body dissatisfaction (e.g., Pike, 1995; Stice, 2002; Stice, Ziemba, Margolis, & Flick, 1996). Sociocultural pressures to be thin are often perpetuated by mass media through images of appearance ideals and are encouraged by peers and family members (Silberstein, Striegel-Moore, & Rodin, 1987; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). In the United States, the ideal woman is young, very thin, with light eyes, narrow hips, a narrow waist, large breasts, and long legs (e.g., Harrison, 2003; Levine & Harrison, 2004; Spitzer, Henderson, & Zivian 1999). Furthermore, American women are socialized to place considerable value on physical appearance as a central determinant of social desirability and personal worth (Thompson et al., 1999).

Theoretically, when women are exposed to pressures to be thin from media or from significant others in their lives, they are likely to internalize the thin ideal. *Perceived pressure* to be thin can be defined as the extent to which an individual feels that others (media, family, peers) expect her to adhere to cultural appearance ideals of thinness (Thompson et al., 2004). In turn, *thin-ideal internalization* is the psychological process that occurs when a woman incorporates the thin ideal and its associated values into her own self-identity, such that attaining the ideal appearance becomes central to her life (Thompson et al., 2004). Furthermore, as media images depict a standard of thinness that is unattainable for most women (e.g., Harrison, 2003; Maine, 2000; Zones, 2005), women are often left feeling negatively toward their bodies, and thus experience body image disturbance (e.g., body dissatisfaction; Stice, Nemeroff, & Shaw, 1996). Considerable research to date suggests that perceived pressure to attain cultural appearance ideals leads to internalization of these ideals and subsequent body dissatisfaction and disordered eating in women. For example, in a review of the empirical literature in this area, Stice and Shaw (2002) found consistent findings indicating that perceived pressure to be thin was a predictor of thin-ideal internalization, which increased the risk for body dissatisfaction, and in turn, disordered eating in women.

### **Appearance Ideals and Body Image in Hispanic Women**

Sociocultural models of eating pathology predict that ethnic minority women should be at lower risk for disordered eating behaviors than White women because of differences in cultural pressures to be thin (Sabik, Cole, & Ward, 2010; Striegel-Moore, Silberstein, & Rodin, 1986). Research suggests that Latino culture emphasizes a body ideal that is significantly different from the thin ideal espoused by Western culture.



Traditionally, Latino culture encourages a larger, curvier, more attainable body ideal for women (e.g., Cheney, 2010; Gordon et al., 2010; Rubin, Fitts, & Becker, 2003; Shisslak & Crago, 2001; Viladrich, Yeh, Bruning, & Weiss, 2009). Findings from several cross-sectional studies indicate that Latinas endorse a larger body ideal (Harris & Koehler, 1992), report a higher desired body weight (Winkleby, Gardner, & Taylor, 1996), are less concerned about weight (Crago et al., 1996), and are less likely to endorse thin beauty ideals (Rubin et al., 2003) than White women. For example, in a study of American college-aged women ( $N = 276$ ), when asked to select their ethnic group's ideal body shape using the Stunkard Body Figure Scale (Stunkard, Sorenson, & Schlusinger, 1983), Latinas selected a significantly larger body shape to represent their ethnic group's ideal compared to White women (Gordon et al., 2010).

To date, studies of body dissatisfaction in Latina women yield inconsistent findings (Gilbert, 2003; Gluck & Geliebter, 2002; Joiner & Kashubeck, 1996). In support of the theory that having a larger body ideal would positively influence body image, some research suggests that Latina women report lower body dissatisfaction than White women (e.g., Winkelby, Gardner, & Taylor, 1996). For example, Winkelby and colleagues (1996) found in their cross-sectional study that Latina women reported desired weights that would qualify as "overweight." Furthermore, Harris and Koehler (1992) examined attitudes about weight among a sample of Latina and European American women. Overall, the researchers found that Latina women reported less concern about weight and engaged in less exercise than European American women, even though they tended to weigh more.

Conversely, substantial research suggests that Latina women do not report levels of body dissatisfaction that differ significantly from European American women (Grabe & Hyde, 2006). For example, Altabe (1998) compared body image concerns among African American, Asian American, Latino/as and White, European American college students. ANOVA results indicated that compared to Asian American and African American participants, Latinas reported significantly greater levels of body dissatisfaction; however they did not report rates of body dissatisfaction that were significantly different from European American women. Similarly, Franko and colleagues (2007) found no statistically significant differences between Latinas, Asian Americans, and European American women's reported weight/shape concerns and body dissatisfaction.

**Perceived pressures and thin-ideal internalization in Latina women.** One explanation for the discrepancy between reported cultural appearance ideals and body dissatisfaction in Latina women in the United States is that Latina women may struggle with eating pathology as they become exposed to and internalize U.S. values of thinness and attractiveness (Tsai, Curbow, & Heinberg, 2003). For example, in a study of body image in White and Latina women, findings indicated that Latinas who emigrated before the age of 17 or were born in the United States reported similar levels of body dissatisfaction as White women. On the other hand, Latinas who emigrated after age 17 reported a larger body ideal than White women (Lopez, Blix, & Blix, 1995). Therefore, when examining body image in Latina women, it is important to take into account the extent to which an individual perceives sociocultural pressures to be thin and internalizes mainstream appearance ideals (Stice, 1994).

Research investigating the role of perceived pressures to be thin and thin-ideal internalization among Latina women in the United States is mixed. Some studies suggest that Latina women report less perceived pressures to be thin and thin-ideal internalization than European American women (e.g., The McKnight Investigators, 2003). In a study of 785 adolescent girls and adult women ages 11-26 (Asian American, African American, Hispanic, and White), findings indicated that Latina women reported comparable levels of perceived pressures to be thin to Asian American and White women. However, Latina women reported significantly less thin-ideal internalization than other ethnic groups (Shaw et al., 2004).

Warren and colleagues (2005) examined the relationships between awareness of U.S. appearance ideals, internalization of those ideals, and body dissatisfaction in a sample of Mexican American, European American, and Spanish female college students. Path analysis indicated that for women of all ethnic groups, awareness led to internalization, which led to increased body dissatisfaction. Notably, ethnicity moderated the relationship between these variables such that the relationships were significantly stronger for European American women than for Mexican American or Spanish women. Similarly, in a sample of 94 Mexican American women, Warren and colleagues (2010) found that those with high awareness of White American cultural ideals also had high levels of internalization of these ideals, and subsequent body dissatisfaction. In a similar study of Mexican American female college students, researchers found that the internalization of U.S. appearance ideals was significantly related to bulimic symptoms (Lester & Petrie, 1995).

## **Summary**

In sum, research suggests that sociocultural pressures, thin-ideal internalization, and body dissatisfaction are significant risk factors for eating disorder development. While it was once thought that ethnic minority women were protected from mainstream cultural appearance ideals, findings indicate that Latina women are affected by sociocultural pressures for thinness and thin-ideal internalization, and experience subsequent body dissatisfaction. Further research is necessary to better understand sociocultural risk factors for the development of eating pathology in Latina women in the United States.

### **Section 3: Objectification Theory as a Framework to Understand Eating Pathology**

Feminist theorists Frederickson and Roberts (1997) developed objectification theory as a conceptual framework for understanding how women's sexual objectification experiences are translated into psychological risk factors for eating disorders, major depression, and sexual dysfunction (Frederickson & Roberts, 1997, see Figure 1). To date, considerable research provides evidence for objectification theory's utility in understanding eating disorder development in women. Given its empirically supported contentions, objectification theory may be a useful framework to examine how sociocultural factors and gender role socialization experiences influence the development of disordered eating in Latina women (Frederickson & Roberts, 1997).

Objectification theory posits that there are two main venues through which the sexual objectification of women occurs: (1) exposure to sexualized media images of the ideal-looking female (e.g., those that are depicted in film, advertisements, television shows, music videos, and women's magazines) and (2) the *objectifying male gaze*, or the visual inspection that occurs in social and interpersonal encounters (APA, 2010;

Frederickson & Roberts, 1997). *Sexual objectification* occurs when a woman's entire being is identified with her body—she is treated as a body or a collection of body parts (Bartky, 1990). For example, interpersonal objectification encounters such as gazing at a woman's body, sexual comments about a woman's body, and unwanted sexual advances, may communicate to women that they are objects to be looked at and used for the pleasure of others (Frederickson & Roberts, 1997). Furthermore, in media images, women's bodies are often depicted in isolated body parts, such as a bare stomach, buttocks, or cleavage, in the absence of a focus on the rest of the woman (e.g., Kolbe & Albanese, 1996; Sommers-Flanagan, Sommers-Flanagan, & Davis, 1993). Such images promote the message that women are to be viewed as body parts and objects to be desired. Objectifying media messages of women also communicate cultural appearance ideals. For example, in a study of media and body image in adolescent girls, when asked to describe the ideal teenage girl depicted in fashion magazines, participants described the ideal girl as 5'7", 100 pounds, with long blonde hair and blue eyes (Nichter & Nichter, 1991).

Objectification theory posits that as a result of objectification experiences, women learn to equate their personal worth with their physical appearance (Kaschak, 1992). Consequently, women learn to view themselves from an objectifying observer's perspective, which is referred to as *self-objectification* (Calogero, Tantleff-Dunn, & Thompson, 2011; Frederickson & Roberts, 1997; McKinley & Hyde, 1996). Heightened self-objectification often behaviorally manifests in *body surveillance*, or the habitual monitoring of how one's body appears. According to objectification theory, women may use body surveillance as a strategy to determine how other people will view and treat

them based on their appearance. Researchers often conceptualize body surveillance as a cognitive behavioral manifestation of objectification (Slater & Tiggemann, 2010; Steer & Tiggemann, 2008; Tiggemann & Lynch, 2001; Tiggemann & Slater, 2001), and extant research suggests that surveillance often predicts outcomes above and beyond the construct of self-objectification (e.g., Greenleaf & McGreer, 2006; Tiggemann & Kuring, 2004; Tiggemann & Lynch, 2001; Tiggemann & Slater, 2001). For example, in testing a model based on the tenets of objectification theory in college-aged women, Tiggemann and Slater (2001) found that body surveillance was uniquely related to all other variables in the model, while general self-objectification was not. As such, body surveillance is the primary mechanism through which objectification leads to psychological disturbances in women (e.g., Fredrickson and Roberts 1997; Slater & Tiggemann, 2002).

Frederickson and Roberts (1997) propose that self-objectification and surveillance lead to (a) increased body shame, (b) increased appearance anxiety, (c) interference with peak motivational states, and (d) decreased awareness of internal bodily states.

Theoretically, preoccupation with the body from an observer's perspective (as occurs in body surveillance) can lead a woman to compare herself to an internalized beauty standard (Frederickson & Roberts, 1997). In a culture in which the beauty standard is unattainable for most women (e.g., very thin, young, fit), comparisons may lead to feelings of shame and inadequacy for many women. When a woman perceives that she fails to meet internalized, cultural body ideals, she often experiences *body shame*.

Accordingly, women who internalize cultural body standards are likely to associate the achievement of these standards with their self-worth (McKinley & Hyde, 1996).

As a woman becomes more preoccupied with her physical appearance, the more she fears when and how her body will be evaluated, referred to as *appearance anxiety*. Objectification theory also posits that surveillance interrupts the ability to achieve peak motivational states (termed “flow”)—a state in which one is completely and totally involved in an enjoyable activity (Csikszentmihalyi, 1990). Additionally, body surveillance may consume a woman’s attentional resources such that it interferes with her ability to attend to her inner body experience, thereby disrupting her *awareness of internal bodily states*. For example, it may disrupt her ability to detect and accurately interpret physiological sensations, such as hunger cues and physiological sexual arousal. Although disruption of flow and awareness of internal body states are specified in objectification theory, researchers have not found these variables to consistently contribute to proposed outcome variables above and beyond body shame and appearance anxiety (Slater & Tiggemann, 2002; Tiggemann & Slater, 2001). Consequently, for the purposes of the present study, I will focus primarily on the constructs of body shame and appearance anxiety.

### **Empirical Research on Self-objectification and Mental Health Consequences**

A rich body of empirical research supports the tenets of objectification theory. The majority of research in this area investigates objectification theory’s constructs in predominantly White samples of college-aged women in the United States and Australia (e.g., Greenleaf, 2005; McKinley & Hyde, 1996; Moradi, Dirks, & Matteson, 2005; Noll & Frederickson, 1998; Tiggemann & Lynch, 2001; Tiggemann & Slater, 2001; Tylka & Hill, 2004). Furthermore, much of extant research focuses on the relationships between self-objectification, body image disturbance, and disordered eating. Comparatively, a

smaller body of research investigates and provides support for objectification theory as it relates to depression (e.g., Miner-Rubino, Twenge, & Frederickson, 2002; Muehlenkamp & Saris-Baglama, 2002; Tiggemann, & Kuring, 2004) and the development of sexual dysfunction in women (e.g., Calogero & Thompson, 2009; Steer & Tiggemann, 2008).

For the purpose of the present review, I will primarily discuss empirical findings concerning objectification theory and the outcome of disordered eating. The term disordered eating as used in this review encompasses clinical level eating disorders (anorexia nervosa, bulimia nervosa, binge eating disorder) in addition to subclinical eating pathology such as skipping meals, dieting, and dietary restraint.

**Empirical findings on precursors to self-objectification.** Extant findings support objectification theory's proposed links between socialization experiences, self-objectification, and disordered eating outcomes (e.g., Boie, Lopez, & Sass, 2012; Mitchell & Mazzeo, 2009; Moradi, 2010; Moradi & Huang, 2008). Specifically, previous research has investigated the role of sociocultural appearance pressures, interpersonal sexual objectification, and internalization of appearance ideals as precursors to self-objectification and its negative consequences.

Morry and Staska (2001) examined the role of internalization of cultural beauty standards in the relationship between media exposure (i.e., exposure to sexually objectifying messages) and self-objectification and eating behaviors among a sample of 61 college-aged men and 89 college-aged women. Regression analyses indicated that exposure to beauty magazines was associated with thin-ideal internalization; and in turn, self-objectification and greater eating disturbance. In a similar study of 90 Australian undergraduate women ages 18-35, Harper and Tiggemann (2008) found that participants



who viewed advertisements featuring a woman depicting the thin ideal (i.e., the objectification condition) reported greater state self-objectification, appearance anxiety, negative mood, and body dissatisfaction than participants in the control condition.

Research also provides support for the mediating role of thin-ideal internalization in the relationship between sociocultural pressures to achieve the thin ideal and body image disturbance. Findings from a study of 463 college-aged women using structural equation modeling (SEM) indicated that pressure for thinness from media and significant others predicted thin-ideal internalization, and that this predicted body image disturbance, and in turn, eating disorder symptoms (Tylka & Subich, 2004). A study by Myers and Crowther (2007) provides further support for the connection between sociocultural pressures, thin-ideal internalization, self-objectification, and body dissatisfaction in a sample of undergraduate women. These authors found that thin-ideal internalization and self-objectification served as mediators in the relationship between sociocultural pressures to meet the thin ideal and body dissatisfaction.

Additional research links internalization of appearance ideals to body surveillance and body shame. In a clinical sample of women with eating disorders in residential treatment, participants completed self-report measures of self-objectification, body shame, media influence, and drive for thinness upon admission to treatment (Calogero, Davis, & Thompson, 2005). Findings indicated that the internalization of appearance ideals predicted self-objectification, and self-objectification partially mediated the relationship between internalization and drive for thinness. Furthermore, body shame partially mediated the relationship between self-objectification and drive for thinness. Additionally, in a study of 499 Latino and White college students, internalization of

appearance ideals predicted both body surveillance and body shame (Boie, Lopez & Sass, 2012). Specifically, body surveillance partially mediated the relationship between internalization and body shame, which in turn was associated with increased dieting behaviors.

To date, very few studies have investigated how interpersonal sexual objectification experiences may influence self-objectification and women's psychological wellbeing. The limited research that exists provides support for objectification theory's contention that interpersonal sexual objectification contributes to self-objectification and its negative consequences. In a sample of 221 mostly White, European American undergraduate women, Moradi and colleagues (2005) conducted path analyses to examine a model of the direct and indirect relationships among self-reported sexual objectification experiences, internalization of cultural beauty standards, self-objectification (manifested as body surveillance), body shame, and eating disorder symptoms. Results indicated that sexual objectification was associated with increased body surveillance, partially mediated by internalization of cultural beauty ideals. Furthermore, internalization fully mediated the link from sexual objectification to body shame and eating disorder symptoms. Overall, the path model accounted for 50% of the variance in eating disorder symptomatology.

To measure women's experiences of sexual objectification in interactions with partners, family, or friends, Kozee and colleagues (2007) developed the Interpersonal Sexual Objectification Scale (ISOS). These authors validated their measure using two samples of predominantly White, college-aged women, and found that interpersonal sexual objectification experiences consisted of two major factors: body evaluation and

unwanted explicit sexual advances. In their college samples, findings indicated that sexual objectification experiences, as measured by the ISOS, accounted for unique variance in body surveillance, thin-ideal internalization, body surveillance, and body shame (Kozee, Tylka, Augustus-Horvath, & Denchik, 2007).

Several studies provide further support for the links between interpersonal sexual objectification, self-objectification, and eating pathology. For example, Kozee and Tylka (2006) found support for the posited chain of relationships among interpersonal sexual objectification experiences, body surveillance, body shame, internal awareness of bodily states, and eating disorder symptoms in a sample of heterosexual and lesbian women. Path analysis indicated that for the heterosexual sample, the model provided a good fit to the data, and interpersonal sexual objectification led to increased body surveillance, which led to increased body shame, decreased internal awareness, and increased eating pathology. However, the hypothesized model provided a poor fit to the data for lesbian participants. Augustus-Horvath and Tylka (2009) tested objectification theory's core constructs with 330 women ages 25-68 using the ISOS. Results from multiple-groups analysis comparing model fit in a group of women ages 18-24 and women 25 and older indicated that the proposed objectification theory model upheld for both groups of women. For both age groups, results indicated that when controlling for body mass index (BMI), interpersonal sexual objectification led to increased body surveillance, which led to increased body shame, and in turn, disordered eating. Finally, in a study of White, British undergraduate women, participants completed self-report measures of interpersonal sexual objectification, body guilt, body shame, self-surveillance, and dietary restraint (Calogero & Pina, 2011). Results from path analyses indicated that

interpersonal sexual objectification led to increased body shame, partially mediated by body surveillance.

**Body shame and appearance anxiety as mediators.** Substantial research provides correlational support for objectification theory's proposed links between body surveillance, body shame, appearance anxiety, and disordered eating (e.g., McKinley & Hyde, 1996; Muehlenkamp & Saris-Baglama, 2002; Noll & Frederickson, 1998; Tiggemann & Slater, 2001; Tylka & Hill, 2004). More specifically, several studies have attempted to test specific mediational pathway models proposed by objectification theory, in which appearance anxiety and body shame partially or fully mediate the relationship between self-objectification and disordered eating (Calogero & Pina, 2011; Hurt et al., 2007; Moradi et al, 2005; Tiggemann & Kuring, 2004; Tiggemann & Slater, 2001). In their seminal study, Noll and Frederickson (1998) examined the mediating role of body shame in the relationship between self-objectification and disordered eating in two samples of predominantly White, European American undergraduate women. Results from self-report questionnaires supported their proposed mediational model, in that self-objectification was related to increased body shame, which in turn was related to greater disordered eating symptomatology. Self-objectification also had a direct positive relationship with disordered eating. Tiggemann and Kuring (2004) investigated an objectification theory model of depressed mood and disordered eating in a sample of 115 undergraduate men and 171 undergraduate women in South Australia. Their model provided a good fit to the data: in women, self-objectification led to surveillance, which led to increased body shame and appearance anxiety, which contributed to greater

disordered eating symptoms. Results indicated that body shame and appearance anxiety fully mediated the relationship between self-objectification and disordered eating.

In a study conducted by Tiggemann and Slater (2001), 50 former students of classical ballet and 51 undergraduate psychology students completed self-report measures of self-objectification, body shame, body surveillance, appearance anxiety, and disordered eating. For both groups of women, body shame partially mediated the relationship between self-objectification and disordered eating, such that self-objectification was associated with increased body shame, and in turn disordered eating. The direct link between self-objectification and disordered eating was also significant. Although body surveillance significantly predicted appearance anxiety, appearance anxiety did not lead to disordered eating for either group of women. Similarly, in a study of 460 ethnically diverse undergraduate female college students (81% White, 11% African American, 3% Latina, 2% Asian American), Tylka and Hill (2004) tested a model of objectification theory in predicting disordered eating using SEM. Results indicated that body surveillance predicted unique variance in body shame, and body shame predicted increased disordered eating symptomatology. Additionally, in a sample of British college men and women, path analysis results strongly supported a model based on objectification theory in which body shame fully mediated the relationship between self-objectification and disordered eating for women (Calogero, 2009).

Tiggemann and Lynch (2001) were the first researchers to examine objectification theory in a non-college sample. Tiggemann and Lynch (2001) found developmental trends in the relationships among objectification theory constructs such that, in a sample of women ranging from ages 20-84, body shame was a stable correlate of self-

objectification. Similarly, in a study of physically active ( $n = 115$ ) and sedentary ( $n = 70$ ) women, self-objectification directly and indirectly (via body shame and appearance anxiety) predicted disordered eating in both groups (Greenleaf & McGreer, 2006). Furthermore, women who were high in self-objectification reported higher levels of body surveillance, body shame, appearance anxiety, and disordered eating attitudes.

Frederickson, Roberts, Noll, Quinn, and Twenge (1998) expanded on cross-sectional research by investigating the influence of self-objectification on body image and disordered eating in a laboratory environment. In their study, Frederickson and colleagues (1998) experimentally manipulated self-objectification by having undergraduate women try on either a swimsuit (heightened self-objectification condition) or sweater (control condition) in front of a full-length mirror. Results indicated that women in the swimsuit condition reported significantly more body shame and appearance-related thoughts than those in the control condition. Furthermore, body shame positively predicted eating pathology in the form of restrained eating of cookies in the latter phase of the study such that women who reported the highest levels of body shame consumed less chocolate chip cookies than women lower in body shame.

In another experimental investigation of self-objectification and eating pathology, Roberts and Gettman (2004) investigated the effects of self-objectification on a sample of college-aged women by having participants unscramble sentences with objectification-related words (e.g., thinness, sexiness) or body competence-related words (e.g., stamina, health). Findings indicated that women assigned to the objectification condition reported more body shame and appearance anxiety than women assigned to the body-competence condition. In another study, Calogero (2004) manipulated self-objectification by telling

female participants they were going to interact with a male (heightened self-objectification) or female (control) stranger. Results indicated that women in the heightened self-objectification condition reported more body shame and appearance anxiety than women in the control condition.

### **Expanding Objectification Theory to Ethnic Minority Groups**

The majority of the previously discussed studies were conducted with predominantly White women of European descent. Consequently, some authors question the generalizability of objectification theory to ethnic minority women and argue that there may be important differences in terms of model and theory when applying an objectification theory framework to the study of minority populations (e.g., Calogero, Tantleff-Dunn, & Thompson, 2011; Carr & Szymanski, 2011; Heimerdinger-Edwards et al., 2011). However, recent investigations of objectification theory in ethnic minority groups generally provide support for objectification theory's generalizability to the experiences of ethnic minorities (e.g., Buchanan, Fischer, Tokar, & Yoder, 2008; Hebl, King, & Lin, 2004; Mitchell & Mazzeo, 2009).

In one of the few studies to examine self-objectification in an ethnically diverse U.S. sample, researchers investigated the influence of self-objectification in undergraduate men and women who self-identified ethnically as African American, Hispanic, European American, or Asian American (Hebl, King, & Lin, 2004). After experimentally inducing a state of self-objectification by having participants wear a bathing suit, men and women of every ethnicity experienced lower self-esteem and increased body shame than those in the control condition. Frederick, Forbes, Grigorian, and Jarcho (2007) conducted a study examining self-objectification, gender, body mass,

and ethnic differences in body satisfaction in a sample of 2,206 American undergraduate students of Asian, Hispanic, and European descent. These researchers found that body surveillance was associated with decreased body satisfaction for both men and women of all ethnic groups. Furthermore, they found that the strength of the relationship between surveillance and body satisfaction did not differ significantly by ethnic group. Similarly, in a sample of 499 Latina/o and European American college students, White and Latino participants reported similar levels of internalization, body surveillance, body shame, and dieting behaviors (Boie, Lopez & Sass, 2012). Finally, Mitchell and Mazzeo (2009) investigated an SEM model of objectification theory in European American and African American women ( $N = 641$ ) in which thin-ideal internalization and body monitoring were associated with eating disorder symptoms and depression. Results indicated that their proposed model was invariant across ethnic groups.

Some authors have even begun to incorporate culture-specific variables into their objectification theory models. For example, Buchanan and colleagues (2008) used a culture-specific model to examine objectification experiences in African American women. They incorporated body image variables that are considered to be particularly salient for African American women, such as skin tone dissatisfaction and skin tone monitoring. Findings indicated that these culture-specific constructs were relevant factors to incorporate in their model. Consistent with findings from European American women, body surveillance predicted body shame, and skin tone-specific monitoring was associated with increased body shame and skin-tone dissatisfaction.

## **Summary**



The research reviewed thus far provides consistent support for objectification theory's explanation for the development of eating disorder symptomatology in women. Overall, findings of experimental studies and cross-sectional research generally suggest that sexual objectification experiences and self-objectification are associated with eating disorder symptoms, both directly and indirectly through body shame and appearance anxiety. Despite support for objectification theory's posited links, few studies examine these experiences in ethnic minority women. Preliminary findings suggest that objectification theory can be applied to understanding body image concerns and eating pathology in women of ethnic minorities; however, some culture-specific constructs may be important to consider when testing these theoretical models.

#### **Section 4: Cultural Factors that May Influence Eating Pathology in Latina Women**

As previously discussed, applying culture-specific models to the study of objectification theory with ethnic minority groups may be important. Two cultural factors that may be particularly important to incorporate into an objectification theory model as applied to Latina women are acculturative stress and marianismo beliefs.

##### **Acculturative Stress**

*Acculturation* refers to the process of cultural and psychological change that occurs in adapting to a new, dissimilar culture from one's culture of origin (Berry, Trimble, & Olmedo, 1986). Berry (2003) conceptualizes *acculturative stress* as a stress-coping process that occurs as an individual attempts to resolve cultural differences between her culture of origin and the host culture during the acculturation process. According to Berry and Annis (1974), the greater the disparity between an immigrant's culture of origin and the new host culture, the greater the amount of stress generally

associated with the acculturation process. Typical stressors associated with acculturation include adapting to different social norms (e.g., changes in dress, eating); separation from family and lack of community; learning a new language; familial conflict (e.g., intergenerational conflict surrounding discrepancies in cultural norms and values); and environmental stressors (e.g., financial difficulties, discrimination; see Lee, Choe, Kim, & Ngo, 2000; Masgoret & Ward, 2006; Miller, Yang, Farrell, & Lin, 2011; Ward & Kennedy, 1999).

To date, substantial research documents the relationships between acculturative stress and mental health problems such as depression, substance use, low self-esteem, and suicidal ideation (e.g., Hovey, 1998; Hovey & King, 1996; Smokowski & Bacallao, 2007, Williams & Berry, 1991; Walker, Wingate, Obasi, & Joiner, 2008). For example, in a sample of 452 college students, Walker and colleagues (2008) found that acculturative stress moderated the relationship between depression and suicidal ideation for African American students, such that students who reported higher acculturative stress demonstrated a stronger relationship between depression and suicidal ideation. However, few studies have investigated the relationship between acculturative stress and eating pathology (e.g., body dissatisfaction, restrictive eating, binge eating) in ethnic minorities in the United States (e.g., Perez et al., 2002; Warren & Rios, 2013).

**Acculturative stress and eating pathology.** Some researchers argue that acculturative stress may be predictive of eating pathology in ethnic minority women (e.g., Gordon, Castro, Sitnikov, & Holm-Denoma, 2010; Kempa & Thomas, 2000). Kempa and Thomas (2000) propose that ethnic minority women may be vulnerable to the development of eating disorders when they attempt to cope with the stress associated

with being a member of a devalued group, in addition to the cultural conflict between their culture of origin and the dominant culture. Harris and Kuba (1997) posit that women of color may engage in disordered eating as a coping strategy for dealing with conflicting messages of appearance ideals from their culture of origin and the dominant culture. In support of this theory, the etiological link between mainstream American values and ideals of appearance and eating pathology is well-documented (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Theoretically, exposure to mainstream American values and ideals of appearance may lead to significant stress as minority women attempt to negotiate differences between their culture of origin and the host culture in terms of beauty ideals (e.g., skin tone, facial features), ideal body shape or weight, the importance of physical appearance to the female gender role, and eating norms (Evans & McConnell, 2003; Striegel-Moore, Silberstein, & Rodin, 1986). Furthermore, minority women may be at particular risk for body dissatisfaction and disordered eating as the appearance ideal for American women may be unattainable for many women of color (e.g., based on skin tone, facial features; Evans & McConnell, 2003; Harrison, 2003; Stein, Corte, & Ronis, 2010; Zones, 2005). Thus, disordered eating may serve the function of helping minority women attain the thin ideal and subsequently fit into mainstream culture. Disordered eating may also serve as an escape behavior to cope with the distress associated with the acculturation process (e.g., Heatherton & Baumeister, 1991).

Although only a small body of research examines the relationship between acculturative stress and eating pathology, preliminary results suggest that acculturative stress is associated with increased eating disorder symptomatology in American immigrant women. For example, in a sample of 74 South Asian women in the United

States, Reddy and Crowther (2007) found that higher levels of acculturative stress were related to body dissatisfaction and attitudinal features of eating disorders. Similarly, in a sample of White, Black, and Latina, college-aged women, Gordon and colleagues (2010) found that higher levels of acculturative stress predicted higher levels of drive for thinness, body dissatisfaction, and bulimic symptoms. Among Latina women more specifically, regression analyses indicated that acculturative stress was positively associated with body dissatisfaction and drive for thinness; however, acculturative stress was not predictive of bulimic symptomatology. Finally, in a study of Hispanic college men ( $N = 100$ ), Warren and Rios (2011) utilized a sociocultural framework to investigate the relationships between appearance-based media ideals, social comparison to models in the media, body image, acculturative stress, and acculturation. Findings indicated that acculturative stress was significantly positively correlated with endorsement of Western media ideals including increased awareness, perceived pressures, athletic-ideal internalization, and body image problems. Although this study was conducted with men, it may have implications for research with women.

Additional research investigates the moderating role of acculturative stress as it relates to eating pathology. In a sample of European American, African American, and Hispanic/Latina, college-aged women, results from hierarchical regression analyses indicated that acculturative stress moderated the relationship between body dissatisfaction and bulimic symptomatology in Latina women, such that the relationship between body dissatisfaction and bulimic symptoms was stronger for women high in acculturative stress than for those low in acculturative stress (Perez, Voelz, Pettit, & Joiner, 2002). Furthermore, for women who reported low acculturative stress, the

relationship between body dissatisfaction and eating pathology was not significant.

Similarly, in a recent study of undergraduate, ethnic minority women, acculturative stress moderated the relationship between body dissatisfaction and eating disorder symptoms among African American women (Kroon Van Diest, Tartakovsky, Stachon, Pettit, & Perez, 2013).

### **Marianismo Beliefs**

*Marianismo* is the term used to describe the feminine gender role in Latino culture. In Latino culture, traditional male and female gender roles are influenced by the values of the Catholic Church, and are rooted in a collectivist cultural context that emphasizes the family as the most important social group (*familismo*; Kulis, Marsiglia, & Hurdle, 2003). Thus, interdependence (*familismo, personalismo*) is central to a woman's social role and value (Castillo & Cano, 2007; Chamorro & Flores-Ortiz, 2000). Within the gender role of marianismo, the ideal woman is a nurturing, self-sacrificing caregiver, who puts her personal interests and needs behind those of her husband and children (Low & Organista, 2000; Root, 2001; Talashek, Peragallo, Norr, Dancy, 2004; Villaurruel et al., 2007). Furthermore, Latinas are likened to the Virgin Mary by being pure, dutiful mothers and faithful wives (Gloria, Ruiz, & Castillo, 2004; Kulis, Marsiglia, & Hurdle, 2003; Rocha-Sanchez & Diaz-Loving, 2005). Marianismo is complementary to the male gender role, *machismo*, which emphasizes men as dominant, aggressive, and authoritative providers for their family (Valencia-García et al., 2008).

**Marianismo beliefs and eating pathology.** Some authors argue that marianismo plays a central role in the mental health and wellbeing of Latina women in the United States (e.g., Gil & Vazquez, 1996). However, little to no studies investigate how

ascribing to the ideals of *marianismo* may influence eating pathology in Latina women. From one point of view, *marianismo* depicts the woman's role as being a strong figure in the family who is respected and revered (Rocha-Sánchez & Diaz-Loving, 2005). On the other hand, some suggest that *marianismo* encourages dependency, submissiveness, and passivity in women, which may have negative psychological consequences for women (Kulis, Marsiglia, & Hurdle, 2003).

The relationship between the female gender role and mental health problems is well-documented in studies of European American women. Investigations of adherence to female gender role in American women suggest that personality traits traditionally considered to be feminine, such as conflict avoidance and dependence on others, may predispose women to depression, anxiety, and disordered eating (Bekker & Boselie, 2002; Broderick & Korteland, 2002; Murnen & Smolak, 1997; Mussap, 2007; Nolen-Hoeksema, 1987; Silverstein & Blumenthal, 1997; Tinsley, Sullivan-Gest, & McGuire, 1984; Worell & Todd, 1996). Theoretically, this may be because: (a) in the United States, women's gender role is traditionally marked by physical appearance as a determinant of self-worth; and (b) personality traits traditionally considered to be feminine may predispose women to negative mental health consequences. Although gender roles in the United States may not be as dichotomized or pronounced as in the Latino culture, the female gender role for European American women seems to have some similarities. For example, in the United States, being agreeable, passive, emotionally sensitive, and polite are considered feminine qualities (Schmitz & Diefenthaler, 1998).

One could argue that *marianismo* may be protective against eating pathology development, as less worth is placed on a woman's physical attractiveness, and more

emphasis is placed on a woman's role in her interpersonal relationships (Gil & Vazquez, 1996). Research suggests that, for Latina women, being feminine and attractive may be associated with qualities of *personalismo* (the importance of interpersonal relationships), *respeto* (respect of authority), and *simpatía* (kindness; de Casanova, 2004; Gil-Kashiwabara, 2002; Rubin et al., 2003). For example, in group interviews of 81 Ecuadorian adolescent girls, participants used terms such as “respectful,” “kind,” “honest,” and “polite” when asked to describe a beautiful woman (de Casanova, 2004). Moreover, Rubin and colleagues (2003) conducted focus groups with 18 Black and Latina college-aged women to examine the relationships among ethnicity, beauty ideals, and body image. Women's responses for both ethnic groups indicated that they believed beauty was a multifaceted construct that had little to do with aesthetics, but incorporated personal style, self-care, and spirituality.

Conversely, one could argue that the value placed on self-silencing or self-sacrifice within marianismo may negatively influence women's eating behaviors (Gil & Vazquez, 1996; Locker, Heesacker, & Baker, 2012). *Self-silencing* refers to a process of withholding emotions and opinions in order to maintain harmony in a relationship (Jack, 1991). Some researchers suggest that women may engage in disordered eating behaviors in order to cope with unexpressed negative emotions (e.g., McLean et al., 2007). In support of this phenomenon, research findings in women with anorexia nervosa and bulimia nervosa indicate that women with eating disorders are more likely than nonclinical women to suppress anger and endorse “silencing the self” (Jack & Ali, 2010). Findings from samples of non-clinical women also support this notion. In a study of college-aged women, findings indicated that self-silencing was associated with several

indices of disordered eating (Wechsler, Riggs, Stabb, & Marhhal, 2006). Similarly, in a community sample of 394 women, self-silencing and suppression of anger significantly predicted eating disorder symptomatology (Piran & Cormier 2005).

To the best of my knowledge, only one study has investigated the relationship between marianismo and eating pathology in Latina women in the United States. In her unpublished doctoral dissertation, Reddy (2009) investigated a culture-specific SEM model of eating pathology in Latina college students. Specifically, she investigated the influence of acculturative experiences and marianismo beliefs as moderators of the relationship between sociocultural pressures and thin-ideal internalization. It was hypothesized that marianismo beliefs would moderate the relationship between sociocultural pressures and internalization of appearance ideals such that there would be a stronger relationship between these variables for women who identified with stronger marianismo beliefs. Contrary to expectations, marianismo beliefs did not moderate this relationship. However, marianismo beliefs were significantly correlated with increased thin-ideal internalization, negative communication, perceived pressure to be thin, body dissatisfaction, acculturative stress, negative affect, and disordered eating behaviors.

### **Summary**

Acculturative stress and marianismo beliefs are salient cultural factors for Latina women, and may influence the development of disordered eating. Preliminary findings suggest that ethnic minority women may be vulnerable to the development of eating disorders when they attempt to cope with the stress associated with cultural conflict. Furthermore, findings suggest that certain personality traits associated with marianismo, such as self-silencing, may put women at risk for developing eating disorders. Given the



limited research investigating the relationships between these cultural factors and eating pathology in Latina women, further research is necessary.

### **Study Objectives**

Despite considerable evidence that eating pathology is prevalent in Latina college students, many questions still exist surrounding the causes and correlates of eating pathology in this population. Furthermore, despite compelling research to suggest that objectification theory is a useful framework for understanding disordered eating, very few studies have applied the tenets of objectification theory to the study of Latina women, and even fewer studies have attempted to incorporate culture-specific factors into the study of objectification theory.

Consequently, to expand upon the existing literature, the aim of the current study was to examine the tenets of objectification theory as they apply to Latina women's eating pathology. Specifically, this study investigated the relationships among interpersonal objectification, media pressures, thin-ideal internalization, body surveillance, body shame, appearance anxiety, and disordered eating using path analysis (see Figure 2). Furthermore, I examined the moderating effects of acculturative stress and marianismo beliefs on the relationships between media pressures and the thin-ideal internalization. The study hypotheses were as follows:

Hypothesis 1: The model proposed in Figure 2 would fit the data, with all paths yielding statistically significant explanatory variance.

Hypothesis 2: Thin-ideal internalization would mediate the relationship between media pressures and body surveillance.

Hypothesis 3: Body shame and appearance anxiety would mediate the relationship between body surveillance and disordered eating.

Hypothesis 4: Acculturative stress would moderate the relationship between media pressures and thin-ideal internalization. Specifically, women who reported higher levels of acculturative stress would demonstrate a stronger relationship between media pressures and thin-ideal internalization.

Hypothesis 5: Given the dearth of literature to explain how marianismo beliefs would influence the relationship between media pressures and thin-ideal internalization, I chose to explore the moderating effect of marianismo beliefs on the relationship between media pressures and thin-ideal internalization.

CHAPTER 3  
METHODOLOGY

**Participants**

A total of 293 self-identified Latina women, age 18 to 24, were recruited from the Psychology Department Subject Pool at University of Nevada, Las Vegas (UNLV) and awarded research credit for their participation. From this sample, data from 14 participants were removed because they failed to correctly answer a validity item, resulting in a final sample size of 279 participants. This sample size exceeds the minimum number of cases required to estimate the proposed model ( $N = 160$ , as determined by the conservative cases-to-parameter ratio of 10:1 for each model parameter estimated, Hu & Bentler, 1999).

**Procedure**

Participants provided informed consent before completing any study measures. All data were collected online, via the computerized data collection system *Qualtrics*. Once participants signed up for the study, a website link directed them to an online battery of questionnaires that took approximately an hour to complete. Participants were free to complete the study material at their convenience, through any access point to the Internet. Three validity questions were embedded in the questionnaire battery to ensure participants were not randomly responding or being inattentive (e.g., “Please answer [highest rating possible] if you are paying attention.”).

**Measures**

**Demographics**

Participants completed a demographic questionnaire that measured self-identified gender, age, ethnicity, sexual orientation, weight and height (used to calculate BMI  $\text{kg/m}^2$ ), country of birth, parents' country of birth, first language, languages spoken, and generational status.

### **Body surveillance**

The Surveillance subscale of The Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) measured body surveillance. The Surveillance subscale measures the frequency with which participants monitor their physical appearance (e.g., “During the day, I think about how I look many times.”). The scale consists of eight items, which participants respond to on a 7-point scale from *strongly disagree* to *strongly agree* but have the option of responding *N/A* if the question does not pertain to them. Total scores on this subscale range from 8-56, with higher scores indicating higher levels of body surveillance. In a study of undergraduate women, this subscale demonstrated adequate test-retest reliability over a 2-week period ( $r = .79$ ) and internal consistency reliability ( $\alpha = .89$ ; McKinley and Hyde, 1996). Internal consistency reliability for the current sample was  $.77$ .

### **Body shame**

The Body Shame subscale of The Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) measured body shame. This subscale measures the extent to which a participant experiences shame if she does not meet cultural body standards (e.g., “I feel like I must be a bad person when I don't look as good as I could.”). This subscale is comprised of eight items, which are rated in the same manner as the Surveillance subscale described previously. Higher scores indicate higher levels of body shame. This

subscale demonstrated adequate internal consistency reliability ( $\alpha = .75$ ) and test-retest reliability ( $r = .84$ ) over a 2-week period in a sample of undergraduate women (McKinley and Hyde, 1996). Internal consistency reliability for the current sample was .77.

### **Appearance anxiety**

The Social Appearance Anxiety Scale (SAAS; Hart et al., 2008) measured appearance anxiety. For this 16-item, self-report measure, participants rate how characteristic items are of them on a scale from *not at all* to *extremely* (1-5; e.g., “I am concerned people will find me unappealing because of my appearance.”). The SAAS has demonstrated high test-retest reliability and internal consistency reliability in samples of undergraduate men and women (Hart et al., 2008). Internal consistency reliability for the current sample was .94.

### **Acculturative stress**

The Societal, Attitudinal, Familial and Environmental Acculturative Stress Scale (SAFE; Padilla, Wagatsuma, & Lindholm 1985) measured acculturative stress. This self-report measure assesses for acculturative stress in social, attitudinal, familial, and environmental contexts. The scale consists of 24 items that participants rate from *not stressful* (1) to *extremely stressful* (5), with the option of *not applicable* (0). Scores range from 0-120, with higher scores indicating higher levels of acculturative stress. Previous research indicates this scale has good internal consistency reliability for Hispanic/Latino students (coefficient alpha = .89; Fuertes & Westbrook, 1996). Internal consistency reliability for the current sample was .91.

### **Marianismo Beliefs**

Given research suggesting that the construct of marianismo beliefs is best understood as a multidimensional construct, three subscales of the Marianismo Beliefs Scale (MBS; Castillo, Perez, Castillo, & Ghosheh, 2010) measured the extent to which participants ascribed to marianismo ideals of self-silencing to maintain harmony, acting subordinate to others, and woman as the spiritual pillar of the family: Silencing Self to Maintain Harmony subscale (MBS-Silencing) Subordinate to Others subscale (MBS-Subordinate), and Spiritual Pillar subscale (MBS-Spiritual). The MBS-Silencing subscale consists of 6 items that reflect the belief that Latina women should not share their thoughts or needs in order to maintain harmony in relationships (e.g., “A Latina should not express her needs to her partner.”). The MBS-Subordinate subscale consists of 5 items that reflect the belief that Latina women should act subordinate to others (e.g., “A Latina should do anything a male in the family asks her to do.”). The MBS-Spiritual subscale consists of 3 items that reflect the belief that Latina women should be the spiritual pillar of the family (e.g., “A Latina should be the spiritual leader of the family.”).

Participants rate responses on a 4-point scale, from *strongly disagree* (1) to *strongly agree* (4). Total scores on subscales are calculated by summing and taking the mean of participants’ responses to subscale items, with higher scores indicating more affinity to marianismo beliefs of self-silencing to maintain harmony, acting subordinate to others, and emphasizing spirituality. The internal consistency reliability for these subscales has been supported in samples of Latina college students (coefficient alpha = .78; Castillo et al., 2010). Internal consistency reliability for the current sample for each subscale was .84 (MBS-Subordinate), .83 (MBS-Silencing), and .86 (MBS-Spiritual).

## **Eating Pathology**

The Eating Attitudes Test-26 (EAT-26; Garner, Olmstead, Bohr, & Garfinkel, 1982) assessed behavioral and attitudinal symptoms of eating disorders. For this self-report measure, participants rate their eating habits and attitudes using a 6-point Likert-type scale ranging from *never* (1) to *always* (6). The scale consists of three factors: dieting (drive for thinness and dieting behaviors), bulimia and food preoccupation (food thoughts and bulimia behaviors), and oral control (perceived pressure from others to gain weight and control eating). Sample items include, “I am terrified of being overweight,” and “I engage in dieting behavior.” Total scores on this measure are summed, with higher scores indicating greater disordered eating symptoms. This scale has demonstrated adequate internal consistency reliability in samples of non-clinical women (Warren et al., 2005; Joiner & Kashubeck, 1996; Garner et al., 1990). Internal consistency reliability for the current sample was .92.

## **Media Pressures**

The Pressures: Media subscale of The Sociocultural Attitudes Towards Appearance Questionnaire-4 (SATAQ-4; Schaefer et al., 2014) measured perceived media pressures to be thin. The SATAQ-4 is a recent revision of the Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3), which is a widely used and well-validated measure of appearance ideal internalization. The Pressures: Media subscale consists of 4 items, for which participants rate their level of agreement with each item using a 5-point Likert-type scale (1 = *definitely disagree*; 5 = *definitely agree*). Subscale scores are calculated by summing the subscale items and dividing by the number of items within the subscale, with higher scores indicating higher perceived

media pressures. Psychometric findings indicate that internal consistency reliability for this subscale was excellent in college and community samples of British, American, Australian, and Italian women (Schaefer et al., 2014). Internal consistency reliability for the current sample was .96.

### **Thin-ideal Internalization**

The Internalization: Thin/Low Body Fat subscale of the SATAQ-4 (Schaefer et al., 2014) measured thin-ideal internalization. This subscale consists of 5 items that reflect a desire to attain a thin figure with little body fat. Subscale scores are calculated in the same manner as previously described for the Pressures: Media subscale. Previous research suggests excellent internal consistency reliability and validity for this subscale in samples of British, American, Australian, and Italian women (Schaefer et al., 2014). Internal consistency reliability for the current sample was .79.

### **Interpersonal Sexual Objectification**

The Interpersonal Sexual Objectification Scale (ISOS; Kozee et al., 2007) assessed self-reported interpersonal sexual objectification experiences over the past year. This measure consists of 15 items for which participants rate the frequency to which they experience objectification from *never* to *always* (1-5). Item responses are averaged, with higher total scores indicating greater objectification. Internal consistency reliability and construct validity for the ISOS have been established in studies with college-aged women (e.g., Kozee et al., 2007). In the current study, internal consistency reliability for this scale was .92.

## **Data Analyses**



Prior to analyses, I examined the data to screen for outliers on outcome variables and determine whether they were normally distributed. Although various outlier values emerged, these data appeared to be accurate responses and there was no rationale to remove them from the dataset. Visual examination of normal Q-Q plots, kurtosis, and skewness statistics indicated that sample data were normally distributed on several outcome variables (SATAQ-Thin, SATAQ-Media, ISOS, MBS-Spiritual, OBCS-SURV, OBCS-Shame, SAAS). However, BMI and scores on the SAFE, MBS-Silencing, MBS-Subordinate, and EAT-26 were not normally distributed. Consequently, I transformed these variables prior to analysis to normalize their distributions. Specifically, I used a square root transformation for SAFE scores; and a log transformation for BMI, MBS-Silencing, MBS-Subordinate, and EAT-26 scores. Missing data were removed using listwise deletion.

Prior to conducting the primary study analyses, I examined basic descriptive information about the sample. This included mean values on variables of interest and bivariate correlations among body surveillance, body shame, thin-ideal internalization, media pressures to be thin, interpersonal sexual objectification, BMI, generational status, and eating pathology (see Table 2).

Next, I tested the primary study hypotheses (see Figure 2) through path analysis using the EQS 6.2 program. In the path model, I controlled for body mass index (BMI) by having it predict body shame and disordered eating, as the relationships among BMI, body image disturbance, and disordered eating are well-supported in community samples of women (e.g., Pingitore, Spring, & Garfield, 1997; Presnell, Bearman, & Stice, 2004; Stice & Whitenton, 2002). To test Hypothesis 1, I examined the adequacy of model fit

(see Figure 2) to the data and examined path coefficients. Adequacy of model fit to the data was determined by indexes recommended by Hu and Bentler (1999) and provided by the EQS program. Since data violated the assumptions of normality, as demonstrated by Mardia's (1970, 1974) coefficient values greater than 5.00 (Bentler, 2005), I used robust test statistics to determine model fit (Hu, Bentler, & Kano, 1992). According to Hu and Bentler, values greater than .95 on the comparative fit index (CFI) and values lower than .06 on the root mean square error of approximation (RMSEA) indicate a good fit. Only participants that responded to all indicators were included in these analyses ( $n = 232$ ). Total scores on measures served as the observed variables in the model using the Maximum Likelihood method of estimation.

To test Hypothesis 2 and 3, I conducted mediation analyses using regression analyses to determine whether (a) thin-ideal internalization mediated the link between sociocultural pressures and body surveillance; (b) body shame mediated the link between body surveillance and disordered eating; and (c) appearance anxiety mediated the link between body surveillance and disordered eating. The significance of the calculated indirect effects was tested using bootstrapping methods with bias-corrected confidence estimates (Preacher & Hayes, 2004). Following the method of Preacher and Hayes (2008), I obtained the 95% confidence interval of indirect effects with 5000 bootstrap resamples.

Finally, to test Hypothesis 4 and 5, I conducted tests of moderation using the method proposed by Aiken and West (1991). Specifically, I used hierarchical multiple regression analyses to investigate the presence and nature of the moderating effects of acculturative stress and marianismo beliefs on the relationship between media pressures

and thin-ideal internalization. Variables were centered prior to regression analyses to reduce multicollinearity.

## CHAPTER FOUR

### RESULTS

#### **Descriptive Information, Bivariate Correlations and Means of Outcome Variables**

Participants were just over 19 years old ( $M_{\text{age}} = 19.29$ ,  $SD = 1.61$ , range 18-24) and of average body size ( $M_{\text{BMI}} = 23.75$ ,  $SD = 4.41$ , range 16.31-44.09). Of the study sample, 93.6% ( $n = 253$ ) self-identified as heterosexual, 1.4% ( $n = 4$ ) as equally hetero/homosexual, and 3.3% ( $n = 9$ ) as predominantly homosexual; 1.7% of participants did not report their sexual orientation. Further breakdown of the study sample's demographics is provided in Table 1.

Means (SDs) and bivariate correlations among outcome variables appear in Table 2. As expected, bivariate correlations indicated a number of statistically significant relationships among variables. First, BMI was positively associated with eating pathology, appearance anxiety, body shame, and media pressures to be thin. Second, acculturative stress was positively correlated with disordered eating, body shame, appearance anxiety, thin-ideal internalization, media pressures to be thin, and interpersonal sexual objectification. Third, eating pathology was positively correlated with marianismo beliefs related to self-silencing and acting subordinate to others, as well as body surveillance, body shame, and appearance anxiety. Fourth, body surveillance was positively associated with body shame and appearance anxiety. Fifth, body shame was positively associated with marianismo beliefs related to acting subordinate to others, in addition to appearance anxiety. Sixth, interpersonal sexual objectification, thin-ideal internalization, and media pressures were all associated with one another and positively correlated with eating pathology, body surveillance, body shame, and appearance anxiety.

Seventh, all marianismo belief subscales were positively associated with one another. Finally, generational status was weakly, positively associated with thin-ideal internalization and marianismo beliefs of self-silencing and acting subordinate to others.

### **Path Analysis**

After getting an initial descriptive picture of the data, I tested the path model presented in Figure 2 to determine model fit and the size of coefficients. For the initial model tested, results indicated a poor fit to the data (CFI = .785, RMSEA = .172). Consequently, modifications to the path model were made using the LaGrange Multiplier Test (Breusch & Pagan, 1980) and the Wald Test (Wald, 1943). The Lagrange Multiplier Test recommended adding a pathway directly from media pressures to appearance anxiety, body shame, and body surveillance. It also recommended adding a direct pathway from interpersonal sexual objectification to thin-ideal internalization and eating pathology. Additionally, the Wald test recommended dropping the pathway from BMI to eating pathology. As these recommendations were theoretically plausible, they were included in a revised path model (Model 2). Goodness-of-fit indices indicated an improved fit to the data. However, model fit was still poor: CFI = .891, RMSEA = .138. Furthermore, the direct path from interpersonal sexual objectification to body surveillance was no longer significant ( $p > .05$ ).

Given poor model fit, even with modifications, the next revision of the model (Model 3) changed specifications such that interpersonal sexual objectification was removed as a significant predictor of body surveillance. Model fit slightly improved, but the model still did not provide a good fit to the data: CFI = .904, RMSEA = .130. In this model, body surveillance was no longer a significant predictor of eating pathology ( $p >$

.05). In the fourth and final path model, the direct path from body surveillance to eating pathology was removed to further trim the model. Goodness-of-fit indices were mixed: CFI = .898, RMSEA = .128. For the final model, all paths were statistically significant (see Figure 3) and the model accounted for 33% of the variance in eating pathology.

### **Mediation**

Given the poor overall model fit, it was desirable to assess specific components of the proposed mediation models using multiple regression to determine whether any paths represented the data. The first mediation model tested thin-ideal internalization as a mediator of the relationship between media pressures to be thin and body surveillance. Regression coefficients indicated that media pressures were associated with body surveillance,  $B = .28$ ,  $t(268) = 6.24$ ,  $p < .001$ . Additionally, media pressures were positively associated with the proposed mediator, thin-ideal internalization,  $B = .28$ ,  $t(268) = 7.89$ ,  $p < .001$ . Lastly, thin-ideal internalization was positively associated with body surveillance,  $B = .45$ ,  $t(268) = 6.28$ ,  $p < .001$ . The significance of the indirect effect of media pressures on body surveillance through thin-ideal internalization using bootstrapping procedures resulted in an unstandardized indirect effect of .13, with a 95% confidence interval ranging from 0.08 to 0.19. Thus, the indirect effect was statistically significant and results of the bootstrapping analysis support the mediating role of thin-ideal internalization on the relationship between media pressures to be thin and body surveillance.

The second mediation model tested body shame and appearance anxiety as mediators of the relationship between body surveillance and eating pathology. Regression coefficients indicated that body surveillance was positively associated with eating

pathology,  $B = 7.66$ ,  $t(241) = 6.48$ ,  $p < .001$ . Additionally, body surveillance was positively associated with body shame,  $B = 0.41$ ,  $t(241) = 6.15$ ,  $p < .001$ , and appearance anxiety,  $B = 5.98$ ,  $t(241) = 7.11$ ,  $p < .001$ . Finally, the mediators body shame and appearance anxiety were positively associated with eating pathology (appearance anxiety,  $B = 0.41$ ,  $t(241) = 4.80$ ,  $p < .001$ ; body shame,  $B = 4.91$ ,  $t(241) = 4.57$ ,  $p < .001$ ). The bootstrapped unstandardized indirect effect of body surveillance on eating pathology through appearance anxiety was 2.47, and the 95% confidence interval ranged from 1.29 to 4.06. The bootstrapped unstandardized indirect effect of body surveillance through body shame was 2.02, and the 95% confidence interval ranged from 1.02 to 3.28. Consequently, results indicated that social appearance anxiety and body shame significantly mediated the relationship between body surveillance and eating pathology.

### **Moderation**

**Marianismo Beliefs.** Hierarchical multiple regressions tested whether marianismo beliefs moderated the relationship between media pressures to be thin and thin-ideal internalization (see Table 3). Specifically, I examined the influence of self-silencing (i.e. inhibition of self-expression to avoid conflict), Latinas as a spiritual pillar (i.e., Latina as the spiritual leader of the family), and acting subordinate to others (i.e., acting submissive to the demands of men) in three separate analyses. For the first regression analysis, self-silencing and media pressures were entered in the first step of the analysis; and, the interaction between self-silencing and media pressures was entered in Step 2.

In Step 1, the model accounted for 18% of variance in thin-ideal internalization, with media pressures serving as the only statistically significant predictor,  $F(2, 268) =$

30.12,  $p < .001$ . Examination of unstandardized regression coefficients indicated that as media pressures increased, thin-ideal internalization increased. After adding the interaction term in Step 2, the model did not account for any additional variance in thin-ideal internalization scores,  $\Delta R^2 = .00$ ,  $\Delta F(1, 267) = .30$ ,  $p = .59$ , and media pressures remained the only significant predictor of thin-ideal internalization.

In the second regression analysis, I entered subordinate to others and media pressures in Step 1; and the interaction between subordinate to others and media pressures was entered in Step 2. In Step 1, media pressures served as the only statistically significant predictor of thin-ideal internalization,  $F(2, 268) = 29.88$ ,  $p < .001$ , accounting for 18% of the variance in thin-ideal internalization scores. Examination of unstandardized regression coefficients and their associated  $t$ -values indicated that as media pressures increased, thin-ideal internalization increased. After adding the interaction term in Step 2, the model did not account for any additional variance in thin-ideal internalization total scores,  $\Delta R^2 = .00$ ,  $\Delta F(1, 267) = .80$ ,  $p = .37$ , and media pressures remained the only significant predictor.

In the third regression analysis examining the moderating effect of marianismo beliefs, I entered spiritual pillar and media pressures in Step 1. In Step 2, I entered the interaction term between spiritual pillar and media pressures. In Step 1, the model accounted for 18% of the variance in thin-ideal internalization scores,  $F(2, 268) = 30.97$ ,  $p < .001$ , with media pressures serving as the only significant predictor. As in the previous analyses, there was no change in variance accounted for in Step 2, and media pressures remained the only significant predictor of thin-ideal internalization ( $\Delta R^2 = .00$ ,  $\Delta F(1, 267) = 1.15$ ,  $p = .28$ ).



**Acculturative Stress.** To test whether acculturative stress moderated the relationship between media pressures to be thin and thin-ideal internalization, acculturative stress and media pressures were entered into an equation predicting thin-ideal internalization in Step 1 (see Table 3). In Step 2, the media pressures to be thin and acculturative stress interaction was entered. Overall, the model accounted for 19% of the variance in thin-ideal internalization scores. In Step 1, the model accounted for 18% of the variance in thin-ideal internalization scores, with media pressures serving as the only statistically significant predictor of thin-ideal internalization,  $F(2, 243) = 25.56, p < .01$ . Examination of unstandardized regression coefficients and their associated  $t$ -values indicated that as media pressures increased, thin-ideal internalization increased. After adding the interaction term in Step 2, the model accounted for an additional 1% of the variance in thin-ideal internalization total scores, with media pressures remaining a significant predictor of thin-ideal internalization,  $\Delta R^2 = .01, \Delta F(2, 243) = 4.24, p < .05$ . Furthermore, the media pressures x acculturative stress interaction was a statistically significant negative predictor of thin-ideal internalization.

To understand the nature of this interaction, I divided the sample into three groups by level of acculturative stress: a high acculturative stress group (1  $SD$  above mean,  $n = 40$ ), a medium acculturative stress group ( $n = 169$ ) and low acculturative stress group (1  $SD$  below mean,  $n = 37$ ). Contrary to predictions, after re-running the regression analysis by group and examining confidence intervals around the slopes, the relationship between media pressures to be thin and thin-ideal internalization was significantly stronger ( $p < .05$ ) for women in the low acculturative stress group ( $B = .41$  SE  $B = .09, t(240) = 4.61, p < .001$ ) than in the medium ( $B = .23, SE B = .05, t(240) = 4.81, p < .001$ ) or high

acculturative stress group ( $B = .20$ ,  $SE B = .10$ ,  $t(240) = 1.97$ ,  $p < .05$ ). These relationships are depicted in Figure 4 using Interaction (Soper, 2010). A one-way MANOVA indicated that significant group differences emerged on mean values of media pressures to be thin, such that women in the high acculturative stress group reported higher levels of media pressures than women in the low group,  $F(2, 243) = 3.77$ ,  $p = .02$ . MANOVA results also indicated that women in the medium acculturative stress group reported significantly higher levels of thin-ideal internalization than the low acculturative stress group,  $F(2, 243) = 3.30$ ,  $p = .04$ .

## CHAPTER FIVE

### DISCUSSION AND CONCLUSIONS

Using an objectification theory framework to study eating pathology in Latina women, this study yielded several important findings that have implications for future research and clinical work with Latina college women. Specifically, although the proposed theoretical model did not fit the data well, follow-up analyses did support components of the relationships among objectification, sociocultural factors, and eating pathology that are consistent with objectification theory. Specifically, thin-ideal internalization mediated the relationship between media pressures and body surveillance; and body shame and appearance anxiety mediated the relationship between body surveillance and eating pathology. Finally, findings highlighted that the culture-specific variable of acculturative stress is related to increased media pressures to be thin, thin-ideal internalization, body shame, appearance anxiety, and eating pathology; whereas, marianismo beliefs were weakly or not associated with outcome variables. I discuss each of these primary findings in detail below, as well as study limitations, and implications for clinical practice and future research.

#### **Poor Overall Model Fit**

One key finding from this study is that, contrary to hypotheses, these data did not support the proposed theoretical model. In fact, model fit was poor even after making changes based on statistical recommendations. This result is surprising given that theoretical models guided by objectification theory have been supported in previous studies of Latina women (Boie, Lopez, & Sass, 2012; Montes de Oca, 2005). That said, there are various reasons that may account for the lack of model fit. One possibility is

that we need to further refine our theoretical model based in objectification theory to adequately capture the experience of eating pathology among Latina women. In other words, we are missing something important and unique about the experience of Latina women. For example, researchers have incorporated culture-specific factors such as skin-tone surveillance and skin-tone dissatisfaction into the research of objectification theory and body image in African American women (Buchanan, Fischer, Tokar, & Yoder, 2008). Skin-tone may also be a salient aspect of body image for Latinas, and thus important to incorporate into theoretical models examining how objectification experiences influence body image in this population. Furthermore, for Latina women, the experience of sexual objectification may combine with other oppressions (e.g. racism, discrimination) to produce somewhat different psychological consequences than for White women (Fredrickson & Roberts, 1997). As such, it may be important to incorporate more within-group factors (e.g., racial identity, ethnic identity, discrimination experiences) into theoretical models examining the influence of objectification on eating pathology among Latinas.

A second possible explanation is that parts of the model fit well whereas others insufficiently describe these relationships in Latina women. Consistent with this idea, this is the first study to test a more comprehensive model of objectification theory in Latina women that includes precursors to self-objectification (i.e., interpersonal sexual objectification, media pressures). Previous research suggests that interpersonal sexual objectification contributes to a very limited amount of unique variance in body surveillance among U.S. adult women (August-Horvath & Tylka 2009; Moradi et al., 2005). In the present study, interpersonal sexual objectification was removed as a

predictor of body surveillance to improve model fit. As such, interpersonal sexual objectification experiences may not be particularly relevant to the experience of body image disturbance and eating pathology development among Latina women.

Furthermore, in previous studies that examined path models of eating pathology development among Latinas, researchers found that thin-ideal internalization contributed directly to body shame and eating pathology (e.g., Boie, Lopez, & Sass, 2012; Montes de Oca, 2005). In the present study, I did not test these direct links.

### **Objectification, Sociocultural Factors, and Eating Pathology**

Despite the lack of overall model fit, a second key finding from this study is that data did support components of the relationships among objectification, sociocultural factors, and eating pathology that are consistent with objectification theory. Bivariate correlations among media pressures to be thin, interpersonal sexual objectification, thin-ideal internalization, body surveillance, body shame, appearance anxiety, and eating pathology were all positively correlated. Although causality among these variables cannot be inferred, these findings support objectification theory's contentions that objectification (via media and interpersonal experiences) is associated with internalization of the thin ideal, the behavioral consequence of body surveillance, negative body image experiences (body shame and appearance anxiety), and eating pathology. Additionally, bivariate correlations indicated that body shame and appearance anxiety were significantly positively correlated with BMI. In other words, having a higher BMI was associated with increased appearance anxiety and body shame. This is consistent with objectification theory because women whose bodies deviate the most

from the thin ideal would theoretically experience more anxiety of evaluation and shame about their bodies when they engage in body surveillance.

Furthermore, mediation analyses supported objectification theory's contentions regarding the relationships among media pressures, thin-ideal internalization, and body surveillance. Results indicated that thin-ideal internalization mediated the relationship between media pressures and body surveillance. These data are consistent with previous research highlighting the mediating role of thin-ideal internalization on the relationship between sociocultural pressures to be thin and self-objectification (e.g., Morry & Staska, 2001; Myers & Crowther, 2007). Such findings suggest that when a woman experiences sociocultural pressures to look a certain way, she internalizes these appearance ideals, which may lead her to monitor her appearance in an effort to gauge how she compares to this ideal. These data also underscore that Latina women experience media pressures to be thin and internalize the thin ideal, despite some research suggesting their being protected against these sociocultural pressures (Grabe & Hyde, 2006; Shaw, Ramirez, Trost, Randall, & Stice, 2004; Warren, Gleaves, Cepeda-Benito, del Carmen Fernandez, & Rodriguez-Ruiz, 2005).

Finally, consistent with previous research, results indicated that body shame and appearance anxiety mediated the relationship between body surveillance and eating pathology (Calogero & Pina, 2011; Hurt et al., 2007; Moradi et al, 2005; Tiggemann & Kuring, 2004; Tiggemann & Slater, 2001). These results help elucidate the mechanisms through which body surveillance contributes to eating pathology. In other words, women who are aware that they may be evaluated at any time (i.e., objectified) may develop a fear of negative evaluation of their appearance and shame about their bodies if they

perceive their bodies deviate from the cultural ideal. This may prompt a woman to engage in disordered eating as a means to control her weight and shape to more closely match the cultural appearance ideal (Peat & Muehlenkamp, 2011).

### **Acculturative Stress, Marianismo Beliefs, and Eating Pathology**

A third primary finding from this study is bivariate correlations indicated acculturative stress was associated with increased eating pathology, body shame, social appearance anxiety, thin-ideal internalization, media pressures to be thin, and interpersonal sexual objectification experiences. Additionally, analyses indicated that acculturative stress moderated the relationship between media pressures and thin-ideal internalization. Contrary to predictions, women who reported higher levels of acculturative stress demonstrated a weaker relationship between media pressures and thin-ideal internalization. Although the direction of these findings was not as predicted, the results are sensible: Women who experienced higher acculturative stress reported significantly higher mean levels of media pressures and thin-ideal internalization. As such, the relationship between predictor and outcome variables was weaker because women experiencing medium and high levels of acculturative stress already had high levels of thin-ideal internalization at each level of media pressures to be thin. These findings were consistent with previous research indicating that women who report higher levels of acculturative stress report higher levels of eating pathology (e.g., Gordon et al., 2010; Menon & Harter, 2012).

With regard to marianismo beliefs, analyses were somewhat exploratory because of the extremely limited research on this construct in general and how it relates to eating pathology, more specifically. Bivariate correlations indicated that the three aspects of

marianismo beliefs that I examined (i.e. Latina as a spiritual pillar, self-silencing to maintain harmony, and acting subordinate to others) were weakly or not associated with outcome variables. The construct of acting subordinate to others was weakly, positively associated with body shame; and self-silencing to maintain harmony was weakly, positively associated with eating pathology. Furthermore, marianismo beliefs did not moderate the relationship between media pressures and thin-ideal internalization. Similar findings have occurred in previous studies with Latina women (e.g., Reddy, 2009).

One reason for lack of significant moderation or association among these variables may be due to the nature of the study sample. Notably, the reported mean levels of marianismo beliefs in the present sample were low compared to norms found in previous research (Castillo et al., 2010). This may be due to the fact that the majority of the study sample consisted of second-generation Latina women. Second-generation Latina women may report low levels of marianismo beliefs because they may ascribe more to the dominant U.S. culture rather than the beliefs of their culture of origin. Furthermore, college women may view marianismo beliefs differently than other Latina women, given their education and age. It may be that women who report higher levels of marianismo beliefs would be protected against or at higher risk of internalizing the thin ideal. Further research is necessary to enhance our understanding of the relationships among these variables.

### **Limitations**

Despite the importance of study findings, the present findings must be interpreted with the study limitations in mind. First, this study analyzed data collected from self-report measures, which can lead to issues of impression management, accuracy of recall,



and response bias. These data are also cross-sectional, which precludes the ability to infer causal relationships among study variables. Furthermore, the internal consistency reliability of several scales used in the present study was only in the acceptable range: Body Shame subscale, Body Surveillance subscale, and The Internalization: Thin/Low Body Fat subscale.

The path models tested in the present study were also limited in several ways. In addition to the previously discussed limitations of the tested models, limitations include the exclusion of variables from path models that may be highly related to the study variables of interest. For example, I chose to focus on media pressures to be thin as a precursor to thin-ideal internalization and subsequent eating pathology. However, in addition to media pressures, family and peer pressures to be thin may also be highly influential of women's body image, particularly for Latina women (Franko et al., 2012). Furthermore, I chose to use the EAT-26 as a measure of eating pathology. Generally, this measure captures symptoms related to anorexia nervosa such as dieting and food restriction. This may be a limitation of this study given that some data suggest Latinas report higher levels of bulimia nervosa and related symptoms compared to dieting and restriction (Marques et al., 2011; Reyes-Rodríguez et al., 2010). Furthermore, I only examined the influence of acculturative stress and marianismo beliefs on the relationship between media pressures and thin-ideal internalization. It is likely that acculturative stress and marianismo beliefs may play a role in other relationships among variables examined in the present study. For example, previous researchers have found that acculturative stress influences the relationship between body surveillance and eating pathology, as well as body dissatisfaction and bulimia symptoms (Montes de Oca, 2005; Perez et al., 2002).

Finally, the interpretation of study findings is limited in its generalizability to populations that differ from the present study sample. Specifically, the age range of this sample was 18-24 years old. The present findings may not generalize to women outside of this age range, because research indicates that body image and objectification experiences vary by age for women (e.g., Augustus-Horvath & Tylka, 2009; Davison & McCabe, 2005). It is also important to note that there exists much heterogeneity among the Hispanic/Latino ethnic group, not only by cultural affiliation (e.g., South American, Mexican, Cuban, etc.), but regarding language, socioeconomic class, and education (Phinney, 1996). This study sample consisted of primarily second-generation women, and women of Mexican descent. Although there is limited research on the influence of generational status on eating pathology, findings suggest that increased time in the United States is associated with increased body dissatisfaction (Stein et al., 2010) and incidence of eating disorder symptoms (Cachelin, Veisel, Bargezamazari, & Striegel-Moore, 2000). Findings also suggest that generational status may influence the level and type of stress associated with the acculturation process (Mena, Padilla, & Maldonado, 1987; Padilla, Alvarez, & Lindholm, 1986).

## **Research and Clinical Implications**

### **Research Implications**

Future researchers could expand upon the present study in several ways. First, the present sample was not large enough to examine the influence of within-group differences such as subculture orientation and generational status. Thus, future researchers should examine within-group differences among Hispanic/Latinos and how these influence eating pathology (Wildes, Emery, & Simons, 2001). Furthermore,

research utilizing longitudinal or experimental designs would further enhance our understanding of the causal relationships among self-objectification and disordered eating in Latina women. As we are attempting to capture a very complex process that incorporates both intrapersonal and sociocultural variables, qualitative data may also help us with our understanding of Latinas' experience of objectification and disordered eating. Additional research is also needed to generalize these findings across non-college-student populations.

The poor model fit found in the present study highlights the need for careful consideration of how ethnic differences may influence the experience of sexual objectification among women. For the present study, I chose to incorporate cultural factors into the moderator analyses to see how they influenced the strength of the proposed relationships. However, it may be important to incorporate these into the theoretical model as mediators in future studies. For example, in her unpublished dissertation, Montes de Oca (2005) included acculturative stress as a predictor of eating disorder symptomatology in Latina women. She found that acculturative stress contributed to eating pathology both directly and indirectly through body shame. Moreover, as I only examined select aspects of the multidimensional construct of marianismo beliefs, future researchers may want to examine how other aspects of marianismo beliefs (i.e., virtuous and chaste, family pillar) are related to eating pathology.

### **Clinical Implications**

This study has important implications for the conceptualization, prevention, and treatment of eating pathology in Latina women. First, results highlight that objectification

theory may, in part, provide a conceptual framework for understanding eating pathology in Latina women. Specifically, aspects of objectification theory that appear relevant based on the current findings include that Latina women are susceptible to the negative influence of media pressures to be thin and internalization of the thin ideal. Second, findings suggest that appearance anxiety and body shame are mechanisms through which self-objectification contributes to eating pathology among Latina women. Finally, findings highlight that it is important to consider the influence of acculturative stress on eating pathology among Latina women, as acculturative stress may exacerbate the influence of objectification experiences on body image and eating pathology.

The present findings may also be useful in guiding eating disorder prevention efforts. Overall, findings indicated that media pressures to be thin and thin-ideal internalization are precursors to self-objectification. As such, prevention programs designed with objectification theory in mind may aim to decrease thin-ideal internalization as a means to improve women's body image and reduce risk for eating disorders. Extant research suggests that prevention programs challenging the internalization of the thin ideal can reduce self-objectification, improve women's body image, and prevent disordered eating (Becker, Hill, Greif, Han, & Stewart, 2013; Stice, Marti, Spoor, Presnell, & Shaw, 2008). Research also highlights that interventions promoting media literacy, or a critical analysis of media messages, may be an important tool to combat the influence media pressures have on internalizing appearance ideals. Research to date involving predominantly White, European American examples suggests that media literacy programs are effective with adolescent and college-age women (e.g., Levine & Murnen, 2009; Levine & Piran, 2004). As the majority of research on

prevention programs has been conducted with White samples, it will be important for future researchers to examine whether these programs are effective for Latina women, more specifically, as well.

Finally, due to their moderating and mediating roles, acculturative stress, thin-ideal internalization, body surveillance, body shame, and appearance anxiety may all be important assessment and intervention targets when Latina women present in clinical settings. Assessing for acculturative stress in clinical settings may help clinicians identify Latinas who are at-risk for eating disorder development. For example, when Latinas present with issues of acculturative stress, it may be important to assess for body image concerns and disordered eating attitudes and behaviors. Additionally, it may be possible for clinicians to enhance eating disorder treatment for Latinas by assessing for and addressing acculturative stress issues (e.g., familial conflict surrounding intergenerational differences in cultural norms and values, cultural differences in appearance ideals). Furthermore, through a cognitive-behavioral (CBT) approach to eating disorder treatment (Fairburn, 2008), clinicians can target body surveillance and thin-ideal internalization. Clinicians can address body surveillance by helping clients reduce the frequency with which they engage in monitoring their physical appearance (Szymanski, Carr, & Moffitt, 2011). As thin-ideal internalization appears to be an important precursor to self-objectification, and the means through which objectification experiences contribute to negative body image, psychoeducation may be an important technique to reduce the importance placed on attaining the thin ideal. Clinicians can help their clients understand the extent to which they internalize the thin ideal, as well as decrease the shame

associated with not meeting this body standard. Clinicians could also empower clients to focus on their strengths and qualities that do not involve their physical appearance.

Overall, findings from the present study suggest that objectification theory provides a basic theoretical foundation to build upon in future studies, and speaks to the importance of developing a more nuanced understanding of eating problems and body image concerns among Latina women. Findings highlighted that Latina women are not immune to media pressures to be thin and the development of body image concerns and eating pathology associated with thin-ideal internalization. Furthermore, experiencing acculturative stress may render Latina women more vulnerable to the negative consequences of objectification. Additional research is necessary to help us further understand the causes and correlates of eating pathology among Latina women in order to provide culturally competent prevention and intervention services for this at-risk population.

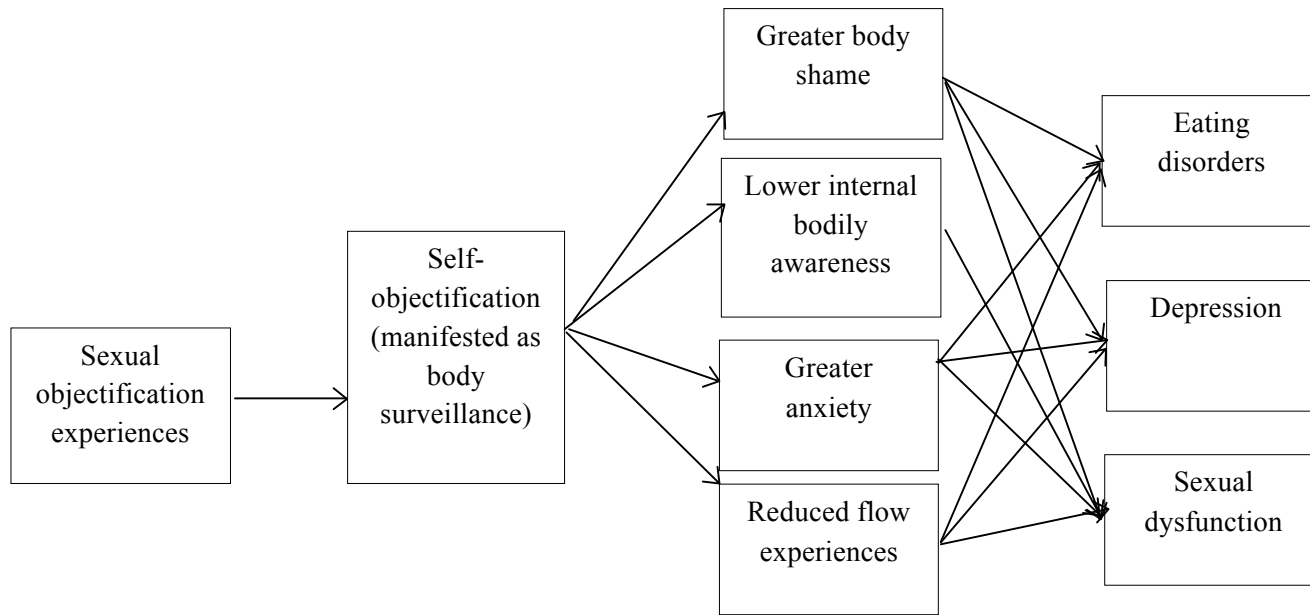
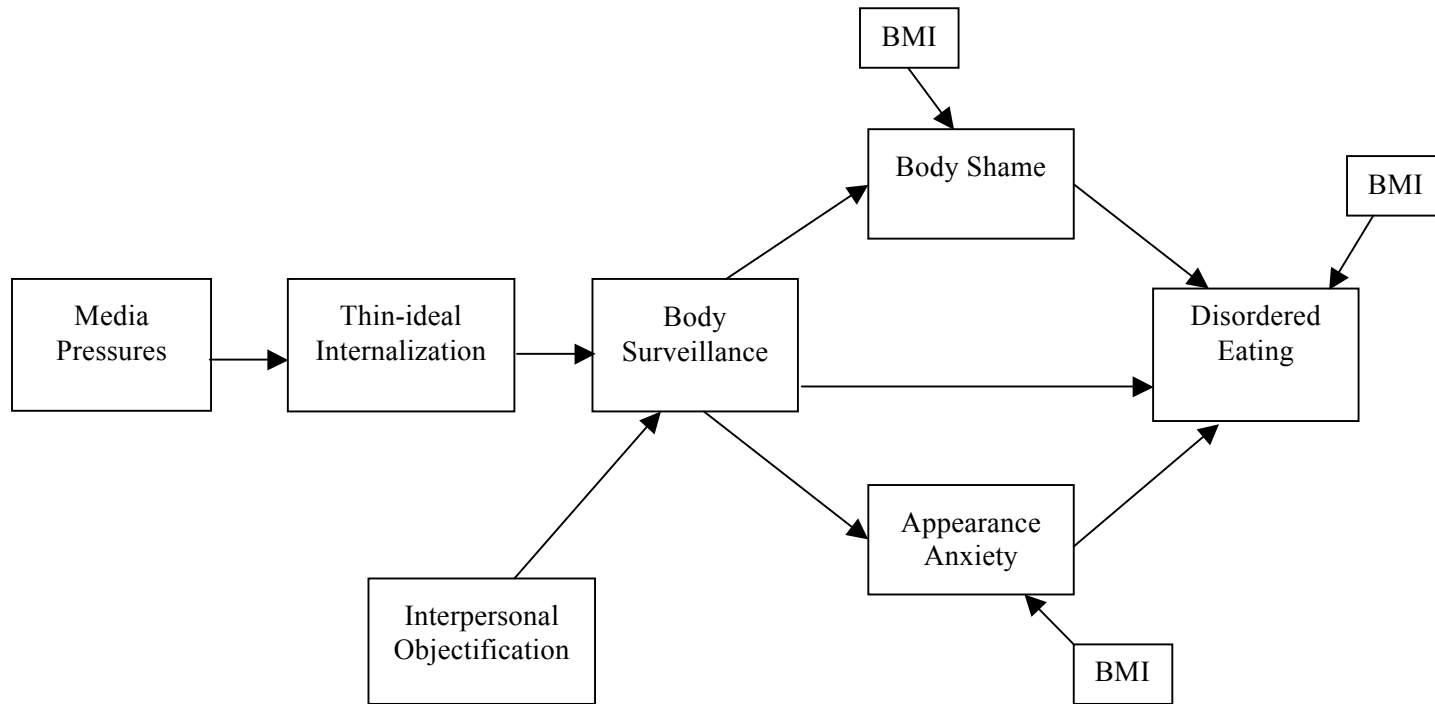


Figure 1. Objectification theory framework as proposed by Frederickson and Roberts (1997).



*Figure 2.* Hypothesized model.

*Note.* BMI = Body mass index; Media Pressures = Pressures: Media subscale of The SATAQ-4; Thin-ideal Internalization = Internalization: Thin/Low Body Fat subscale of the SATAQ-4; Body Shame = the Body Shame subscale of The Objectified Body Consciousness Scale; Body Surveillance = the Body Surveillance subscale of The Objectified Body Consciousness Scale; Appearance Anxiety = the Social Appearance Anxiety Scale; Disordered Eating = EAT-26.



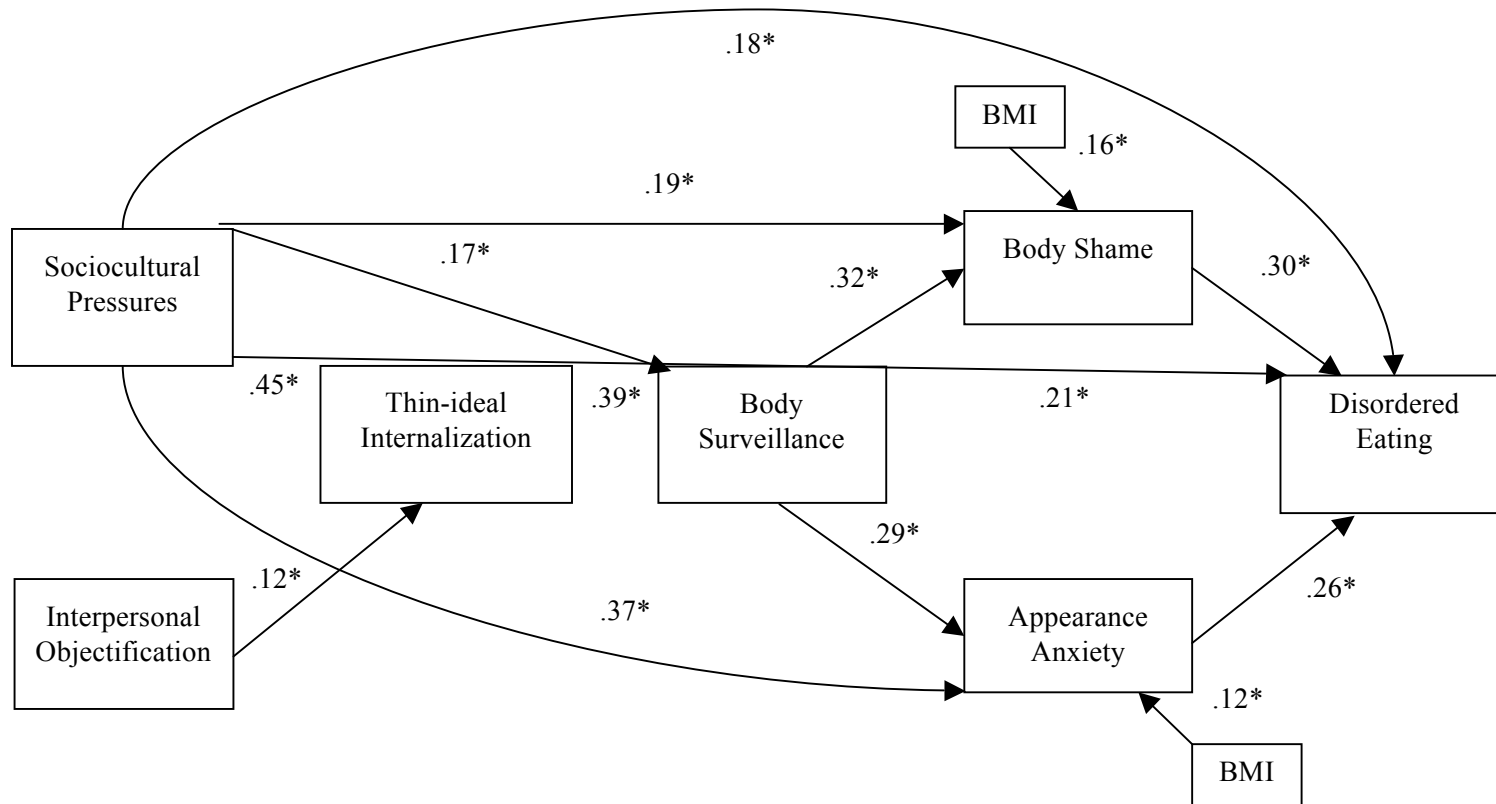


Figure 3. Final path model with coefficients.

Note. BMI = Body mass index; Media Pressures = Pressures: Media subscale of The SATAQ-4; Thin-ideal Internalization = Internalization: Thin/Low Body Fat subscale of the SATAQ-4; Body Shame = the Body Shame subscale of The Objectified Body Consciousness Scale; Body Surveillance = the Body Surveillance subscale of The Objectified Body Consciousness Scale; Appearance Anxiety = the Social Appearance Anxiety Scale; Disordered Eating = EAT-26.

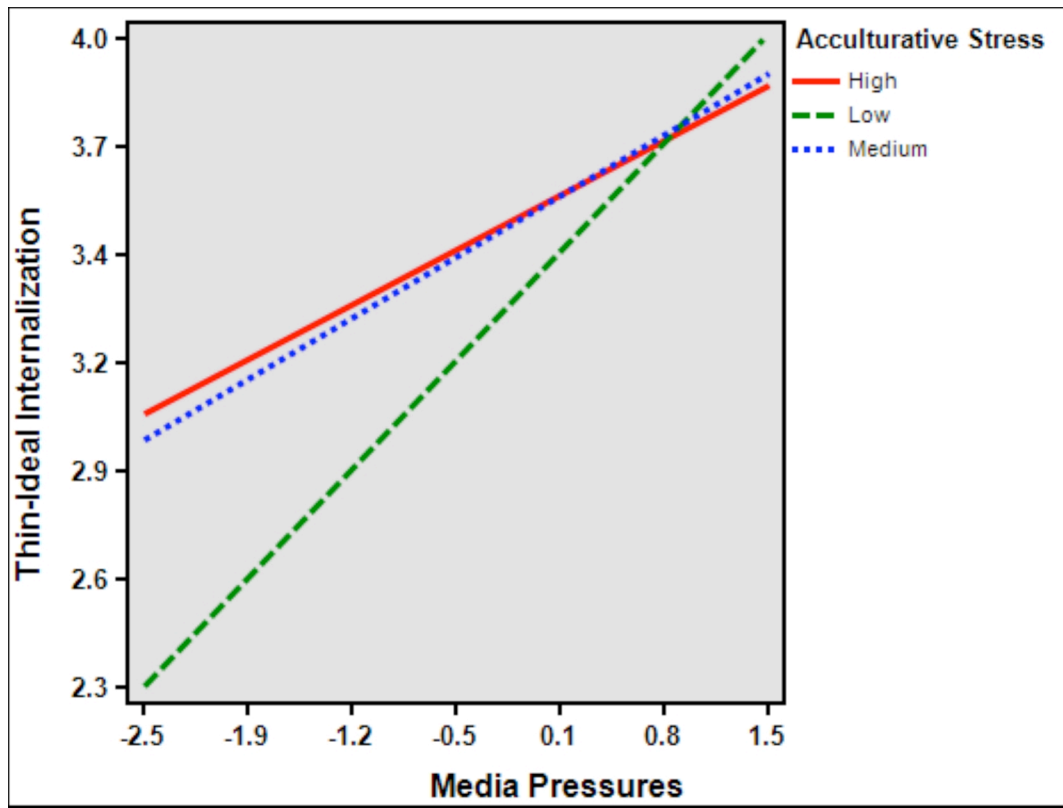


Figure 4. Moderational effect of acculturative stress on the relationship between media pressures and thin-ideal internalization.

Table 1

*Demographics of the Study Sample*

Variable	<i>n</i>	Percentage
<b>Ethnic background</b>		
Mexican	201	72%
Cuban	12	4.3%
Dominican	2	0.7%
Puerto Rican	8	2.9%
Salvadoran	16	5.7%
Other	37	13.3%
Failed to specify	3	1.1%
<b>Generation Status</b>		
First generation	38	13.6%
Second generation	178	63.8%
Third generation	23	8.2%
Fourth generation	17	6.1%
Fifth generation or higher	10	3.6%
Failed to specify	5	1.8%
<b>English as first language?</b>		
Yes	129	46.2%
No	146	52.3%

Table 2

*Pearson r Correlations and Means (SDs) of Outcome Variables*

	Mean (SD)	Range	BMI	SAFE	EAT-26	OBCS-SURV	OBCS-Shame	SAAS	SATAQ-Thin	SATAQ-Media	ISOS	MBS-Spirit	MBS-Sil	MBS-Sub
BMI	23.75(4.41)	16.3-44.09	-											
SAFE	36.50(18.29)	3-110	.11	-										
EAT-26	64.17(21.18)	29-142	.13*	.38**	-									
OBCS-SURV	4.67(1.03)	1-7	-.03	.06	.39**	-								
OBCS-Shame	3.64(1.17)	1-7	.22**	.21**	.46**	.38**	-							
SAAS	42.04(14.94)	19-76	.23**	.44**	.51**	.42**	.44**	-						
SATAQ-Thin	3.47(0.85)	1-5	.10	.22**	.54**	.46**	.33**	.38**	-					
SATAQ-Media	3.50(1.32)	1-5	.24**	.28**	.43**	.36**	.35**	.48**	.43**	-				
ISOS	2.52(0.71)	1-4.80	-.01	.22**	.35**	.23**	.22**	.19**	.18**	.24**	-			
MBS-Spirit	2.34(0.75)	1-4	.03	.10	.10	.03	.07	.06	.11	.07	.06	-		
MBS-Sil	1.51(0.52)	1-3.83	.01	.02	.16*	.04	.13	.10	.00	.06	.09	.49**	-	
MBS-Sub	1.57 (0.60)	1-4	.03	.02	.13*	.03	.22**	.11	.05	.11	.12	.37**	.68**	-
Gen Stat	2.25(1.02)	1-6	.07	-.01	.05	.08	.12	.10	.16*	.01	.03	.03	.15*	.19*

*Note.* BMI = Body Mass Index; SAFE = Societal, Attitudinal, Familial and Environmental Acculturative Stress Scale; EAT-26 = Eating Attitudes Test-26; OBCS-SURV = Body Surveillance subscale of Objectified Body Consciousness Scale; OBCS-Shame = Body Shame subscale of Objectified Body Consciousness Scale; SATAQ-Thin = Thin/Low Body Fat subscale of the Sociocultural Attitudes Towards Appearance Questionnaire-4; SATAQ-Media = Pressures: Media subscale of The Sociocultural Attitudes Towards Appearance Questionnaire-4; ISOS = Interpersonal Sexual Objectification Scale; MBS-Spirit = Spiritual Pillar subscale of Marianismo Beliefs Scale; MBS-Sil = Self-Silencing to Maintain Harmony subscale of Marianismo Beliefs Scale; MBS-Sub = Subordinate to Others subscale of Marianismo Beliefs Scale; Gen Stat = Generational status. \* $p < .05$ ; \*\* $p < .01$

Table 3

*Hierarchical Multiple Regressions Predicting Thin-Ideal Internalization*

Step and predictor variable	B	SE B	$\beta$	<i>t</i>
<b>Self-Silencing and Media Pressures</b>				
Step 1				
SATAQ-Media	.28	.04	.43	7.76**
MBS-Silencing	-.06	.09	-.04	-0.69
Step 2				
SATAQ-Media	.28	.04	.43	7.76**
MBS-Silencing	-.07	.09	-.04	-0.72
Media*Silencing	.04	.07	.03	0.55
<b>Subordinate and Media Pressures</b>				
Step 1				
SATAQMedia	.28	.04	.43	7.71**
MBS-Subordinate	-.02	.08	-.02	-0.27
Step 2				
SATAQ-Media	.28	.04	.43	7.75**
MBS-Subordinate	-.03	.08	-.02	-0.42
Media*Subordinate	.06	.06	.05	0.90
<b>Spiritual and Media Pressures</b>				
Step 1				
SATAQ-Media	-11.58	4.30	-.11	-2.70**
MBS-Spiritual	-3.66	4.65	-.03	-.79
Step 2				
SATAQ-Media	-13.68	4.26	-.13	-3.21
MBS-Spiritual	-1.64	4.60	-.02	-.36
Media*Spiritual	-.05	.05	-.06	-1.07
<b>Acculturative Stress and Media Pressures</b>				
Step 1				
SATAQ-Media	.26	.04	.39	6.56**
SAFE	.00	.00	.08	1.27
Step 2				
SATAQ-Media	.24	.04	.37	6.16**
SAFE	.00	.00	.07	1.18
Media*SAFE	-.00	.00	-.12	-2.06*

*Note.* BMI = Body Mass Index; SAFE = Societal, Attitudinal, Familial and Environmental Acculturative Stress Scale; SATAQ-Media = Pressures: Media subscale of Sociocultural Attitudes Towards Appearance Questionnaire-4; MBS-Spiritual = Spiritual Pillar subscale of Marianismo Beliefs Scale; MBS-Silencing = Self-Silencing to Maintain Harmony subscale of Marianismo Beliefs Scale; MBS-Subordinate = Subordinate to Other subscale of Marianismo Beliefs Scale

\* $p < .05$ ; \*\* $p < .01$ .

APPENDIX 2  
FORMS  
Demographic Items

1. What is your age?
2. What is your gender?
  - a. Female
  - b. Male
  - c. Transgender
3. How would you describe your sexual identity?
  - 0- Exclusively heterosexual
  - 1- Predominantly heterosexual, only incidentally homosexual
  - 2- Predominantly heterosexual, but more than incidentally homosexual
  - 3- Equally heterosexual and homosexual
  - 4- Predominantly homosexual, but more than incidentally heterosexual
  - 5- Predominantly homosexual, only incidentally heterosexual
  - 6- Exclusively homosexual
4. What is your current height?
5. What is your current weight?
6. What is your race?
  - a. White
  - b. Black
  - c. Asian
  - d. Hispanic/Latina
  - e. Native American
  - f. Other (please specify)
7. What is your ethnicity?
  - a. Euro-American (e.g., Irish, English, Scottish, French, Italian)
  - b. African American (e.g., African)
  - c. Hispanic/Latina (e.g., Mexican, South American, Puerto Rican)
  - d. Asian American/Pacific Islander (e.g., Chinese, Japanese, Indonesian)
  - e. Native American
  - f. Other (please specify)
8. What is your mother's ethnicity? \_\_\_\_\_
9. What is your father's ethnicity? \_\_\_\_\_
10. What best describes your ethnic background?
  - a. Mexican
  - b. Cuban
  - c. Puerto Rican
  - d. Salvadoran
  - e. Dominican

- f. Other ethnic background (please describe): \_\_\_\_\_
11. What is your marital status?
- Never married
  - Married
  - Separated
  - Divorced
  - Widowed
12. Do you have any children?
- If yes, how many?
13. What is the highest education level you have completed?
- Did not complete high school
  - Did not graduate from high school but obtained a GED
  - High school diploma
  - Some college (at least 1 year)
  - Degree from a 2 year college
  - Degree from a 4 year college
  - Some graduate school (at least 1 year)
  - Completed post-graduate degree
14. Income: Check the box that best estimates how much money you, your mother, your father, and your spouse earned in the last year (leave blank if not applicable).

	<b>You</b>	<b>Mother</b>	<b>Father</b>	<b>Spouse</b>
Less than \$10,000	_____	_____	_____	_____
\$10,000-15,000	_____	_____	_____	_____
\$15,000-25,000	_____	_____	_____	_____
\$25,000-40,000	_____	_____	_____	_____
\$40,000-55,000	_____	_____	_____	_____
\$55,000-75,000	_____	_____	_____	_____
\$75,000-100,000	_____	_____	_____	_____
\$100,000-200,000	_____	_____	_____	_____
\$200,000 and greater	_____	_____	_____	_____

15. 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: \_\_\_\_\_)

16. Where were your parents born?

**Mother:**

- 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: \_\_\_\_\_)

**Father:**

- 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: \_\_\_\_\_)

17. *If you are an American*, mark the generation that best applies to you:

- 1 = 1<sup>st</sup> generation = You were born in another country but live in the USA.
- 2 = 2<sup>nd</sup> generation = You were born in USA; either parent was born in another country.
- 3 = 3<sup>rd</sup> generation = You were born in USA, both parents were born in USA and all grandparents were born in another country.
- 4 = 4<sup>th</sup> generation = You and your parents were born in the USA and at least one grandparent was born in another country with remainder born in the USA.
- 5 = 5<sup>th</sup> generation or greater = You and your parents were born in the USA and all grandparents were born in the USA.
- 6 = Other \_\_\_\_\_

18. If you were born outside of the U.S., at what age did you first arrive? \_\_\_\_\_

19. Language:

Is English your first language? Yes: \_\_\_\_\_ No: \_\_\_\_\_

If no, what was your first language? \_\_\_\_\_

Do you speak a language other than English at home? Yes \_\_\_ No \_\_\_

If YES, please indicate what languages you speak at home \_\_\_\_\_



### Eating Attitudes Test (EAT-26)

Choose one response for each of the questions:

Always          Usually          Often          Sometimes          Rarely          Never

1. I am terrified of being overweight.
2. I avoid eating when I am hungry.
3. I find myself preoccupied with food.
4. I have gone on eating binges where I feel that I may not be able to stop.
5. I cut my food into small pieces.
6. I am aware of the calorie content of the foods I eat.
7. I particularly avoid food with a high carbohydrate content (i.e., bread, rice, potatoes, etc.)
8. I feel that others would prefer if I ate more.
9. I vomit after I have eating.
10. I feel extremely guilty after eating.
11. I am preoccupied with a desire to be thinner.
12. I always think about burning up calories when I exercise.
13. Other people think that I am too thin.
14. I am preoccupied with the thought of having fat on my body.
15. I take longer than others to eat my meals.
16. I avoid foods with sugar in them.
17. I eat diet foods.
18. I feel that food controls my life.
19. I display self-control around food.
20. I feel that others pressure me to eat.
21. I give too much time and thought to food.
22. I feel uncomfortable after eating sweets.
23. I engage in dieting behavior.
24. I like my stomach to be empty.
25. I enjoy trying new, rich foods.
26. I have the impulse to vomit after meals.

### Interpersonal Sexual Objectification Scale (ISOS)

Please think carefully about your experiences in the past year as you answer the questions below.

1. How often have you been whistled at while walking down a street?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

2. How often have you noticed someone staring at your breasts when you are talking to them?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

3. How often have you felt like or known that someone was evaluating your physical appearance?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

4. How often have you felt that someone was staring at your body?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

5. How often have you noticed someone leering at your body?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

6. How often have you heard a rude, sexual remark made about your body?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

7. How often have you been touched or fondled against your will?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

8. How often have you been the victim of sexual harassment (on the job, in school, etc)?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

9. How often have you been honked at when you were walking down the street?

1	2	3	4	5
Never	Rarely	Occasionally	Frequently	Almost Always

10. How often have you seen someone stare at one or more of your body parts?

1	2	3	4	5
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Never          Rarely          Occasionally          Frequently          Almost Always

11. How often have you overheard inappropriate sexual comments made about your body?

1                  2                  3                  4                  5  
Never          Rarely          Occasionally          Frequently          Almost Always

12. How often have you noticed that someone was not listening to what you were saying, but instead gazing at your body or a body part?

1                  2                  3                  4                  5  
Never          Rarely          Occasionally          Frequently          Almost Always

13. How often have you heard someone make sexual comments or innuendos when noticing your body?

1                  2                  3                  4                  5  
Never          Rarely          Occasionally          Frequently          Almost Always

14. How often has someone grabbed or pinched one of your private body areas against your will?

1                  2                  3                  4                  5  
Never          Rarely          Occasionally          Frequently          Almost Always

15. How often has someone made a degrading sexual gesture towards you?

1                  2                  3                  4                  5  
Never          Rarely          Occasionally          Frequently          Almost Always

## SAFE

DIRECTIONS: In the following questionnaire you will be asked questions on your level of stress to different cultural issues. There is no right or wrong answer. Please answer all items and read each statement carefully.

0 = Not Applicable

1 = Not Stressful

2 = Little Stressful

3 = Somewhat Stressful

4 = Very Stressful

5 = Extremely Stressful

- \_\_\_\_\_ 1. I feel uncomfortable when others make jokes about or put down people of my ethnic background.
- \_\_\_\_\_ 2. I have more barriers to overcome than most people.
- \_\_\_\_\_ 3. It bothers me that family members I am close to do not understand my new values.
- \_\_\_\_\_ 4. Close family members and I have conflicting expectations about my future.
- \_\_\_\_\_ 5. It is hard to express to my friends how I really feel.
- \_\_\_\_\_ 6. My family does not want me to move away but I would like to.
- \_\_\_\_\_ 7. It bothers me to think that so many people use drugs.
- \_\_\_\_\_ 8. It bothers me that I cannot be with my family.
- \_\_\_\_\_ 9. In looking for a good job, I sometimes feel that my ethnicity is a limitation.
- \_\_\_\_\_ 10. I don't have any close friends.
- \_\_\_\_\_ 11. Many people have stereotypes about my culture or ethnic group and treat me as if they are true.
- \_\_\_\_\_ 12. I don't feel at home.
- \_\_\_\_\_ 13. People think I am unsociable when in fact I have trouble communicating in English.
- \_\_\_\_\_ 14. I often feel that people actively try to stop me from advancing.
- \_\_\_\_\_ 15. I often feel that people pressure me to assimilate.
- \_\_\_\_\_ 16. I often feel ignored by people who are supposed to assist me.
- \_\_\_\_\_ 17. Because I am different I do not get enough credit for the work I do.
- \_\_\_\_\_ 18. It bothers me that I have an accent.
- \_\_\_\_\_ 19. Loosening the ties with my country is difficult.
- \_\_\_\_\_ 20. I often think about my cultural background.
- \_\_\_\_\_ 21. Because of my ethnic background, I feel that others often exclude me from participating in their activities.
- \_\_\_\_\_ 22. It is difficult for me to "show off" my family.
- \_\_\_\_\_ 23. People look down upon me if I practice customs of my culture.
- \_\_\_\_\_ 24. I have trouble understanding others when they speak.

## Objectified Body Consciousness Scale (OBCS)

Please choose the most appropriate response from the following items.

Strongly disagree (0) Disagree (1) Somewhat disagree (2) Neither agree nor disagree  
(3)

Somewhat agree (4) Agree (5) Strongly agree (6)

1. I rarely think about how I look.
2. I think it's more important that my clothes are comfortable than whether they look good on me.
3. I think more about how my body feels than how my body looks.
4. I rarely compare how I look with how other people look.
5. During the day, I think about how I look many times.
6. I worry about whether the clothes I am wearing make me look good.
7. I rarely worry about how I look to other people.
8. I am more concerned with what my body can do than how it looks.
9. When I can't control my weight, I feel like something must be wrong with me.
10. I feel ashamed of myself when I haven't made the effort to look my best.
11. I feel like I must be a bad person when I don't look as good as I could.
12. I would be ashamed for people to know what I really weigh.
13. I never worry that something is wrong with me when I am not exercising as much as I should.
14. When I'm not exercising enough, I question whether I am a good enough person.
15. Even when I can't control my weight, I think I am an okay person.
16. When I'm not the size I think I should be, I feel ashamed.
17. I think a person is pretty much stuck with the looks they are born with.
18. A large part of being in shape is having that kind of body in the first place.
19. I think a person can look pretty much how they want to look if they are willing to work at it.
20. I really don't think I have much control over how my body looks.
21. I think a person's weight is mostly determined by the genes they are born with.
22. It doesn't matter how hard I try to change my weight, it's probably always going to be about the same.
23. I can weight what I'm supposed to when I try hard enough.

24. The shape you are in depends mostly on your genes.

## MBS

The statements below represent some of the different expectations for Latinas. For each statement, please mark answer that best describes what you believe rather than what you were taught or what you actually practice.

Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4)

A LATINA...

1. must be a source of strength for her family.
2. is considered the main source of strength of her family.
3. mother must keep the family unified.
4. should teach her children to be loyal to the family.
5. should do things that make her family happy.
6. should (should have) remain(ed) a virgin until marriage.
7. should wait until after marriage to have children.
8. should be pure.
9. should adopt the values taught by her religion.
10. should be faithful to her partner.
11. should satisfy her partner's sexual needs without argument.
12. should not speak out against men.
13. should respect men's opinions even when she does not agree.
14. should avoid saying no to people.
15. should do anything a male in the family asks her to do.
16. should not discuss birth control.
17. should not express her needs to her partner.
18. should feel guilty about telling people what she needs.
19. should not talk about sex.
20. should be forgiving in all aspects.
21. should always be agreeable to men's decisions.
22. should be the spiritual leader of the family.
23. is responsible for taking family to religious services.
24. is responsible for the spiritual growth of the family

## SAAS

Please indicate how characteristic each statement is of you, using the response scale provided.

Not at All (1) Slightly (2) Moderately (3) Very (4) Extremely (5)

1. I feel comfortable with the way I appear to others.
2. I feel nervous when having my picture taken.
3. I get tense when it is obvious people are looking at me.
4. I am concerned people would not like me because of the way I look.
5. I worry that others talk about flaws in my appearance when I am not around.
6. I am concerned people will find me unappealing because of my appearance.
7. I am afraid that people find me unattractive.
8. I worry that my appearance will make life more difficult for me.
9. I am concerned that I have missed out on opportunities because of my appearance.
10. I get nervous when talking to people because of the way I look.
11. I feel anxious when other people say something about my appearance.
12. I am frequently afraid I would not meet others' standards of how I should look.
13. I worry people will judge the way I look negatively.
14. I am uncomfortable when I think others are noticing flaws in my appearance.
15. I worry that a romantic partner will/would leave me because of my appearance.
16. I am concerned that people think I am not good looking.



#### SATAQ-4

Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

Definitely Disagree = 1

Mostly Disagree = 2

Neither Agree Nor Disagree = 3

Mostly Agree = 4

Definitely Agree = 5

1. It is important for me to look athletic.
2. I think a lot about looking muscular.
3. I want my body to look very thin.
4. I want my body to look like it has little fat.
5. I think a lot about looking thin.
6. I spend a lot of time doing things to look more athletic.
7. I think a lot about looking athletic.
8. I want my body to look very lean.
9. I think a lot about having very little body fat.
10. I spend a lot of time doing things to look more muscular.
11. I feel pressure from family members to look thinner.
12. I feel pressure from family members to improve my appearance.
13. Family members encourage me to decrease my level of body fat.
14. Family members encourage me to get in better shape.
15. My peers encourage me to get thinner.
16. I feel pressure from my peers to improve my appearance.
17. I feel pressure from my peers to look in better shape.
18. I get pressure from my peers to decrease my level of body fat.
19. I feel pressure from the media to look in better shape.
20. I feel pressure from the media to look thinner.
21. I feel pressure from the media to improve my appearance.
22. I feel pressure from the media to decrease my level of body fat.

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