To my two daughters, Vivian and Grace Chang, for being the way they are
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This study aimed to test the generalizability of direct and mediated links posited in objectification theory (B. L. Fredrickson & T. Roberts, 1997) among sexual objectification experiences, internalization of sociocultural standards of beauty, body surveillance, body shame, and eating disorder symptoms. Within this framework, the roles of culture-related constructs, acculturation, enculturation, and perceived bicultural competence were examined. Specifically, the study examined (a) links of culture-related variables and sexual objectification experiences to body image- and eating disorder-related variables, and (b) the mediating roles of internalization of sociocultural standards of beauty, body surveillance, and body shame. As hypothesized, with a sample of 307 Asian American women, results from a path analysis suggested that (a) perceived bicultural competence was negatively correlated with eating disorder-related variables, (b) sexual objectification experiences was related positively with body surveillance through the mediating role of internalization, (c) internalization was related positively with body shame through the mediating role of body surveillance, and (d) body surveillance was expected to relate positively with eating disorder symptoms through the mediating role of body shame. However,
acculturation and enculturation were not correlated with eating disorder-related variables. Implications for future research and practice with Asian American women were discussed.
CHAPTER 1
REVIEW OF THE LITERATURE

Introduction

In many modern societies, girls and women are socialized to learn that beauty is central to their sense of self (Fredrickson & Roberts, 1997). The consumer-oriented society not only encourages women to maintain the idea that beauty should be every woman’s goal but also promotes a beauty standard that is difficult to meet (Kaw, 1993). Thus, women may internalize a body image produced by the dominant culture and attempt to modify their bodies (e.g., through dieting) to meet those unrealistic standards. In the United States (U.S.), the pressure to conform to societal expectations of beauty reflects a cultural ideal of thinness (Chernin, 1981; Garfinkel & Garner, 1982). The cultural standard of beauty often also reflects the dominant racial or ethnic ideal. This may be especially difficult for women of color because they may not fit the mainstream ideals of beauty (Hall, 1995). For Asian American women, the traditional standards of beauty within Asian culture may be different from that of the dominant Western image (Kaw, 1993). Therefore, conforming to the norms, values, and expectations of the dominant society may become increasingly difficult for Asian American women as they struggle to retain traditional cultural values or meet dominant societal images and cultural stereotypes (Mastria, 2002; Ting & Hwang, 2007). In addition, Asian American women are often depicted in media as a) the sexy, devious dragon lady, and b) the beautiful, docile, quiet, and subservient women (Chow, 1996; Hall, 1995). These distorted images may disempower Asian American women and place pressure on them to be unrealistically thin and beautiful, which can in turn be a risk factor for body image and eating concerns.

Research on body image and eating problems has been conducted mostly with White college women (Hotelling, 2001; Root, 2001; Striegel-Moore & Cachelin, 2001). Scholars have
highlighted the importance of extending this research to women of color (Hotelling, 2001; Root, 2001). Empirical evidence points to the presence of body image and eating concerns among Asian American women (e.g., Mintz & Kashubeck, 1999; Wildes, Emery, & Simons, 2003). Many studies suggested that Asian American women experience similar and, in some cases higher, levels of body image and eating problems relative to Caucasian American women (Evzans & McConnell, 2003; Forbes & Jung, 2008; Koff, Benavage, & Wong, 2001). Asian American women’s body image dissatisfaction can be a result of their status as a minority group whose body features are different from the White standard of beauty held in the U.S. (Hall, 1995).

Indeed, scholars have called for research that can inform culturally-sensitive mental health practice with Asian American clients in general (e.g., Sue & Sue, 1990) as well as eating disorder interventions with Asian American women in particular (e.g., Cummins & Lehman, 2007). In response to such calls, the present study aims to integrate culture into a theoretical model of body image and eating problems among Asian American women. Specifically, this study will test the generalizability of direct and mediated links posited in objectification theory (Fredrickson & Roberts, 1997) among sexual objectification experiences, internalization of sociocultural standards of beauty, body surveillance, body shame, and eating disorder symptoms. Within this framework, the roles of culture-related constructs - specifically, acculturation, enculturation, and perceived bicultural competence - will also be examined.

**Culture-Based Variables**

**The Unilinear Model of Acculturation**

Acculturation has been a particularly important construct in ethnic minority research (Zane & Mak, 2003). Scholars have called attention to the inclusion of acculturation specifically
in research among racial or ethnic minority women (Fischer, Bettendorf, & Wang, 2011; Smolak & Striegel-Moore, 2001). Acculturation is a culture-based factor that may be relevant to Asian American women’s body image and eating problems. According to Berry (2005), acculturation is “the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members (p.698).” In particular, cultural change refers to changes that occur in the components of culture (e.g., values, beliefs, expectations, norms, roles) as well as changes in cultural practices and related psychological functioning (Koneru, de Mamani, Flynn, & Betancourt, 2007). It is possible that Asian American women experience changes in terms of their body image and eating behaviors when they become more acculturated to the U.S. cultural norms. Thus far, research on the links of acculturation with body image and eating disorder symptoms has produced mixed findings (Wildes et al., 2003). Many studies found no relation between acculturation and eating disorder symptomatology for Asian American women (e.g., Gowen, Hayward, Killen, Robinson, & Taylor, 1999; Haudek, Rorty, & Henker, 1999; Iyer & Haslam, 2003; Stark-Wroblewski, Yanico, & Lupe, 2005; Yoshimura, 1995). However, some found that Asian American women who were more acculturated to the U.S. reported more disordered eating attitudes and behaviors (Cachelin & Regan, 2006; Cachelin, Veisel, Barzegarnazari, Striegel-Moore, 2000; Davis & Katzman, 1999).

One explanation of such mixed findings is that there is substantial variability in how acculturation has been operationalized. Two models of acculturation have been used in the literature: the unilinear and bilinear models (Miller, 2007). The unilinear model suggests that a single continuum represents level of acculturation. Individuals who adapt to the host or mainstream culture would inevitably weaken their ties to their culture of origin (Laroche, Kim, Hui, & Tomiuk, 1998; Ryder, Alden, & Paulhus, 2000). That is, adhering to the norms of the
host culture and the culture of origin are viewed as mutually exclusive – an individual cannot hold both cultural norms simultaneously. As such, the unilinear model represents one outcome of acculturation only, which is assimilation (Flannery, Reise, & Yu, 2001).

In the unilinear model literature, acculturation is often assessed with single variables (e.g., generational status, age at immigration, years lived in the mainstream country) that can be conceived of as proxies for acculturation. For example, with a sample of European, Hispanic, and Asian American adolescent girls, Gowen et al. (1999) investigated the link of acculturation, as measured by language spoken at home and time lived in the U.S., with eating disorder symptoms. In particular, participants who reported both living in the U.S. for more than three years and speaking English as their primary home language were considered more acculturated. On the other hand, participants were considered less acculturated if they lived in the U.S. for less than three years or the primary language spoken in their home was not English. After grouping participants according to these criteria, Gowen et al. (1999) found that Hispanic American adolescent girls who were more acculturated reported higher level of weight concerns than did Hispanic American adolescent girls who were less acculturated. However, acculturation was not associated with weight concerns or body dissatisfaction among Asian American or European American adolescent girls. By contrast, other researchers (e.g., Cachelin et al., 2000; Cachelin & Regan, 2006) found that Asian American women who were more acculturated, as measured by language and parents’ country of origin, reported more eating disorder symptoms than Asian American women who were less acculturated.

Many other studies have used the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) to assess acculturation in the unilinear manner. The SL-ASIA is the most widely used instrument for assessing acculturation among
Asian Americans. The SL-ASIA assesses language, identity, friendship choice, behaviors, generation, geographic history, and attitudes, with higher scores reflecting greater acculturation to the U.S. society. Using the SL-ASIA, many studies yielded no relation between acculturation and eating disorder symptomatology in Asian American women (Akan & Grilo, 1995; Haudek et al., 1999; Iyer & Haslam, 2003; Jackson, Keel, & Lee, 2006; Reddy & Crowther, 2007; Yoshimura, 1995). But, some studies suggested positive associations between acculturation level and eating disorder symptoms. For example, Davis and Katzman (1999) found that Chinese college women (most of whom were born in Hong Kong and lived in the U.S. for less than five years) who were more acculturated reported greater eating disorder symptoms than those who were less acculturated. Similarly, Cachelin, Weiss, and Garbanati (2003) found that acculturation was related to more restraint dieting among Asian American adolescent girls.

In addition to investigating whether adherence to the mainstream U.S. culture is related to eating disorder symptomatology among Asian American women, several scholars examined the links of adherence to aspects of heritage culture with eating disorder symptomatology. For example, Lau, Lum, Chronister, and Forrest (2006) examined the associations among one’s adherence to Asian cultural values (e.g., familial norms), media influence, and body image satisfaction with a sample of 59 Asian American college women. Results showed that Asian American women who identified more strongly with traditional Asian values reported higher levels of body image dissatisfaction. Moreover, Asian American women who reported higher internalization of beauty ideals in media reported greater body dissatisfaction as well.

Another factor that is not synonymous with heritage cultural adoption, but may be associated with it, is ethnic identity (Phinney, 2003). Ethnic identity is defined as one’s identity or sense of self that involves self-labeling, sense of belonging, preference for the ethnic group,
positive evaluation of the ethnic group, ethnic knowledge, and involvement in ethnic group activities (Phinney, 1990, 1996). In their examination of the association between ethnic identity and body image variables in a sample of Asian American women, Phan and Tylka (2006) found that ethnic identity was not related to internalization of the thin ideal, body preoccupation, or eating disorder symptoms. Taken together, such inconsistent findings in the extant literature may reflect the limitations of the unilinear model of acculturation manifested as a focus either on assimilation to U.S. culture or on adherence to heritage cultural values and identity; such a unilinear focus does not account for the simultaneous existence of these two dimensions.

**The Bilinear Model of Acculturation and Enculturation**

The bilinear model was first introduced by Berry (1979) who proposed that it is possible that an individual’s cultural orientation can be toward both the culture of origin and the mainstream culture. That is, one can know, understand, and maintain competence in two different cultures simultaneously. According to Berry (1980), preference for maintenance of one’s own culture and preference for contact and participation with the dominant culture are two independent dimensions. Within Berry’s model, these two dimensions intersect to create four acculturation strategies (Berry, 1979): (a) assimilation (identification mostly with the dominant culture), (b) integration (high identification with both cultures), (c) separation (identification largely with the ethnic culture), and (d) marginalization (low identification with both).

Confirmatory factor analyses comparing the fit of unilinear and bilinear models to acculturation data have found that the bilinear model is more appropriate and consistently outperforms the unilinear model (Abe-Kim, Okazaki, & Goto, 2001; Flannery et al., 2001; Lee, Sobal, & Frongillo, 2003; Lieber, Chin, Nihira, & Mink, 2001; Ryder et al., 2000). Moreover, Ryder et al. (2000) stated that if the assumptions of the bilinear model are correct, continued use of the
unilinear model could provide an incomplete, even misleading picture of the acculturation process. Surprisingly, the majority of eating disorder literature examining acculturation in Asian American women has used a unilinear model and measure of acculturation. Our understanding of Asian American women’s body image and eating problems can be enhanced by measuring acculturation in a bilinear manner.

Within the framework of the bilinear model, the dimensions of adherence to the dominant culture and to the culture of origin are termed as acculturation and enculturation, respectively. Acculturation is the process of adapting to the norms of the dominant group and enculturation is the process of retaining the norms of the heritage group (Kim & Abreu, 2001). Acculturation and enculturation processes are found to be largely orthogonal phenomena (Miller, 2007, 2010). Studies have identified links of enculturation and acculturation with psychological functioning. For example, with a sample of Asian American adolescents, enculturation was positively associated with general self-efficacy and cognitive flexibility and acculturation was negatively associated with the importance-to-identity dimension (Kim & Omizo, 2010). To date, however, there has been a lack of research testing how Asian American women’s acculturation and enculturation experiences relate to body image and eating disorder symptomatology.

However, the links of acculturation and enculturation with body image and eating disorder symptomatology have been examined with Mexican American women and this literature can inform investigations with Asian American women. For example, with a sample of 209 Mexican American college women, Bettendorf and Fischer (2009) found that acculturation and enculturation, as measured by the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuellar, Arnold, & Maldonado, 1995), were associated with eating disorder symptomatology. The ARSMA-II is a bilinear measure that assesses engagement in Western and
Mexican cultural behaviors, consisting of two subscales, the Anglo Orientation Scale (AOS) and the Mexican Orientation Scale (MOS). Bettendorf and Fischer’s (2009) results showed that AOS scores were correlated negatively with body satisfaction, and MOS scores were correlated positively with body satisfaction and correlated negatively with restricted eating.

Relatedly, Cachelin, Monreal, and Juarez (2006) found that both AOS and MOS scores were associated with Mexican American women’s perceptions of Mexican men’s body shape and size preferences. In particular, Mexican American women were asked to report “the female size and shape you feel Mexican men in general find most attractive”, ranging from severe emaciation to severe obesity. Results revealed that AOS scores were associated with perceived preference for thinner figures and MOS scores were associated with a perceived preference for larger figures.

In another study, Cachelin, Phinney, Schug, and Striegel-Moore (2006) investigated the links of acculturation, enculturation, and ethnic identity with eating disorder symptoms in a community sample of 188 Mexican American women. Participants were categorized into two groups, the control group (women who did not meet criteria for an eating disorder or other major mental disorder) and the eating disorder group (women who met diagnostic criteria for an eating disorder). A logistic regression analysis revealed that AOS scores significantly differentiated between the eating disorder and control groups. Specifically, higher adherence to the Western culture increased the probability of having an eating disorder. On the other hand, MOS scores and ethnic identity did not significantly differentiate these two groups. Thus, for Mexican American women, acculturation seemed to be associated with having an eating disorder, but enculturation was not.
Taken together, these studies indicate that, for Mexican American women, stronger acculturation to the mainstream U.S. society may be linked with greater body image and eating problems. Furthermore, greater enculturation may be associated with lower body image and eating problems, although the evidence suggests a weaker and more inconsistent pattern of relations for enculturation than for acculturation. The patterns of findings suggesting that acculturation and enculturation are associated with body image and eating disorder symptomatology among Mexican American women may apply to Asian American women given that women in both ethnic groups are likely to endorse mainstream cultural norms and face similar challenges as do White American women regarding to negative body image (Altabe, 1998; Barnett, Keel, & Conoscenti, 2001; Crandall, & Martinez, 1996). Moreover, like Mexican American women, it is possible that retaining Asian culture may provide ways for Asian American women to minimize their concerns about body image and eating behaviors (Bettendorf and Fischer, 2009).

**Perceived Bicultural Competence**

The bilinear model of acculturation and enculturation highlights the possibility of internalizing two distinct cultural meaning systems (Benet-Martinez, Leu, Lee, & Morris, 2002; Berry, 2003; Miller, 2007, 2010). Thus, an additional potentially relevant construct that is associated with the concepts of acculturation and enculturation is biculturalism. Bicultural individuals may be immigrants, refugees, sojourners (e.g., international students, expatriates), indigenous people, ethnic minorities, those in interethnic relationships, and mix-ethnic individuals (Berry, 2003). Scholars have defined bicultural individuals as those 1) who have been exposed to and have internalized two cultures (Benet-Martinez et al., 2002), 2) who are able to synthesize cultural norms from two groups into one behavioral repertoire (Rotheram-Borus,
1993), or 3) who are able to switch between cultural schemas, norms, and behaviors in response to cultural cues (Hong, Morris, Chiu, & Benet-Martinez, 2000).

As such, bicultural individuals may be able to purposefully decide which cultural components they wish to acquire or retain and which elements they wish to discard or reject (Nguyen, Huynh, & Benet-Martinez, 2009). Indeed, bicultural competence is defined as the ability to initiate and maintain interpersonal relationships, as well as satisfactorily and appropriately behave and function, in both mainstream and heritage cultures (David, Okazaki, & Saw, 2009). LaFromboise, Coleman, and Gerton (1993) conceptualized and developed a theoretical model of bicultural competence that is consisted of six dimensions: (a) knowledge of cultural beliefs and values, involving the degree to which a person is aware of and knowledgeable about the history, institutions, rituals, and everyday practices; (b) positive attitudes toward both majority and minority groups, reflecting the degree to which a person regards both cultural groups positively; (c) bicultural efficacy, which is the belief that a person can function effectively within two cultural groups without compromising one’s cultural identity; (d) communication ability, reflecting the person’s ability to communicate verbally or nonverbally in both cultural groups; (e) role repertoire, which is the range of culturally appropriate behaviors or roles a person possesses or is willing to learn or perform; and (f) a sense of being grounded, involving the degree to which a person has established social networks in both cultural groups. LaFromboise et al. (1993) stated that perceived bicultural competence is a critical component in the psychological well-being of individuals who attempt to function in two or more cultural environments.

David et al. (2009) developed the Bicultural Self-Efficacy Scale (BSES) to operationalize the concept of perceived bicultural competence (LaFromboise et al., 1993). With a sample of 268
ethnic minority college students, David et al. (2009) conducted factor analyses of the BSES and found support for the six proposed dimensions of bicultural competence (LaFromboise et al., 1993). Scores on the BSES subscales were generally correlated negatively with psychological distress (i.e., anxiety and anhedonia) and correlated positively with life satisfaction. With a separate sample of 164 bicultural college students, David et al. (2009) found that the BSES total score was correlated positively with life satisfaction and correlated negatively with depressive symptoms. Similarly, Wei, Liao, Chao, Mallinckrodt, Tsai, and Botell-Zamarron (2010) found that perceived bicultural competence, as measured by BSES total scores, was correlated negatively with depressive symptoms among ethnic minority college students. Moreover, the BSES subscale scores were correlated negatively with depressive symptoms, except that one subscale, knowledge of cultural beliefs and values, was not associated with depressive symptoms.

Overall, the research findings on bicultural competence suggest that higher level of perceived bicultural competence is related to lower psychological symptomatology and greater psychological well-being. These findings may reflect bicultural individuals’ ability to integrate healthy cultural norms and to reject unhealthy norms. In the domain of body image norms, bicultural competence may allow Asian American women to choose healthy and affirming body standards and to reject unhealthy and non-affirming body ideals from both U.S. and Asian cultural norms.

**Objectification Theory**

Among the theoretical models of eating disorder symptomatology, objectification theory (Fredrickson & Roberts, 1997) provides a promising framework for understanding women’s eating disorder symptoms and for integrating culturally relevant variables (e.g., Moradi & Huang, 2008; Moradi, 2010). This model postulates that sexual objectification experiences
permeate women’s life experiences and gender socialization. Bartky (1990) stated that “sexual objectification occurs when a woman’s sexual parts or functions are separated out from her person, reduced to status of mere instruments, or else regarded as if they were capable of representing her (p.35).” Sexual objectification experiences, (e.g., exposure to objectifying gaze, objectifying media representations, unwanted sexual advances), can promote self-objectification or taking on an observer’s perspective upon one’s body.

Self-objectification is manifested as body surveillance and can have negative psychological consequences, such as body shame, appearance anxiety, lowered bodily awareness, and reduced flow experiences. These psychological consequences in turn can lead to disordered eating, sexual dysfunction, and depression. So far, most research on objectification theory has focused on its application to understanding eating disorder symptomatology and supported these tenets with Caucasian women (for review see Moradi & Huang, 2008). Although some studies have been conducted with ethnic or racial minority groups (Altabe, 1998; Buchanan, Fischer, Tokar, & Yoder, 2008; Crago, Shisslak, & Estes, 1996; Grabe & Jackson, 2009; Hebl, King, & Lin, 2004; Mitchell & Mazzeo, 2009), research on objectification theory with Asian American women has not received much attention.

Overview of Objectification Theory among Asian American Women

Frederickson and Roberts (1997) proposed objectification theory as a framework for understanding body image and eating problems among women. This model proposes that girls’ and women’s gender role socialization and exposure to sexual objectification experiences can promote self-objectification or taking on an observer’s perspective upon one’s body. Self-objectification is manifested as body surveillance or persistent monitoring of how the body looks rather than attending to how it feels or functions. Body surveillance might increase women’s
body shame and anxiety and decrease flow experiences and internal bodily awareness.

Specifically, body shame is the emotion that occurs when women evaluate themselves against an internalized or cultural (typically impossible) standard and perceive themselves as failing to meet that standard (Fredrickson & Roberts, 1997). Women may experience anxiety when they anticipate fear or threats about when and how their body will be evaluated. Flow, according to Csikszentmihalyi (1982, 1990), occurs when someone is fully absorbed in a challenging mental or physical activity which is a prime source of optimal experience. Internal bodily awareness is the ability to detect one’s internal physiological sensations, such as stomach contractions and physiological sexual arousal. The consequences of body shame, anxiety, reduce experiences of flow, and diminish awareness of internal bodily states might lead to greater health risks, such as eating disorders, depression, or sexual dysfunction.

Objectification research has focused mostly on relations among sexual objectification experiences, internalization of cultural standards of beauty, body surveillance, and body shame that are posited to promote eating disorder symptoms. In particular, prior research has found that sexual objectification experiences are related to greater internalization of cultural standards of beauty and body surveillance; internalization of cultural standards of beauty is related to greater body surveillance; body surveillance is related to greater body shame; and body shame is associated with greater eating disorder symptoms (e.g., for a review see Moradi & Huang, 2008). Positive relations among these variables have been found for women from diverse backgrounds, including Deaf women (e.g., Moradi & Rottenstein, 2007), lesbian women (e.g., Kozee & Tylka, 2006) and older women (e.g., Augustus-Horvath & Tylka, 2009). Many other studies have supported the associations among body surveillance, body shame, and disordered eating among undergraduate samples of women (e.g., Calogero, Davis, & Thompson, 2005; Greenleaf, 2005;

However, research examining this set of relations among Asian American women is quite limited. In one of the few studies that addresses this gap, Phan and Tylka (2006) investigated a model of disordered eating that included objectification theory variables with a sample of 200 Asian American college women. Using path analysis, the authors found that pressure for thinness, a specific manifestation of sexual objectification experiences, was related positively to internalization of cultural standards of beauty, which was correlated positively with eating disorder symptoms. In another study that tested tenets of objectification theory with an ethnically diverse sample, Hebl et al. (2004) found that experimentally heightened self-objectification (i.e., wearing a swimsuit) increased body-related thoughts, body shame, and eating disorder symptoms among Asian American, African American, Hispanic American, and White American women and men (Hebl et al., 2004). But, the relations that would be expected among the criterion variables based on objectification theory were not examined within the specific ethnic and gender groups.

Grabe and Jackson (2009) investigated self-objectification (operationalized as the difference between participants’ perceived importance of appearance-based versus competence-based body attributes) and depressive symptoms among Asian American and White American women and men. They found that self-objectification and depressive symptoms were correlated positively for White American women, but not for Asian American women and men and White American men. The authors discussed factors that might protect Asian American women from the negative psychological consequences of self-objectification, for instance, that Asian American women’s enculturation to the heritage culture might play a role in the association
between self-objectification and depressive symptoms. The inclusion of other intervening variables grounded in objectification theory (e.g., body surveillance, body shame) may also bring a more complete understanding of Asian American women’s experiences.

Another consideration is that Grabe and Jackson (2009) assessed Asian American women’s self-objectification by measuring the differences between how they perceived the importance of appearance-based versus competence-based body attributes. Moradi (2011) noted that self-objectification has been measured a) as the difference between participants’ perceived importance of appearance-based versus competence-based body attributes (Self-Objectification Questionnaire; Noll & Fredrickson, 1998), b) as body surveillance (Objectified Body Consciousness Scale-Surveillance; McKinley & Hyde, 1996), c) as a separate construct from body surveillance, and d) as a latent construct with body surveillance and internalization of cultural standards of beauty as indicators. To resolve this inconsistency in measuring self-objectification and to offer further conceptual clarification, Moradi (2011) offered a valuable re-conceptualization of the construct, which is “to consider self-objectification as a process rather than as a specific variable (p. 157).” Specifically, Moradi suggested that self-objectification may be viewed as a process that is promoted by sexual objectification experiences and is manifested by internalization of cultural standards of beauty and body surveillance and their links with other objectification theory variables. Following this conceptualization, sexual objectification experiences, internalization of cultural standards of beauty, and body surveillance are measured in this study and their associations with body shame and eating disorder symptoms are examined.

The objectification theory framework also posits several mediated relations. Testing mediation can clarify how external events (e.g., sexual objectification experiences) are associated with psychological symptomatology (e.g., eating disorder symptoms) through intervening
psychological variables (e.g., body shame) (Baron & Kenny, 1986). For example, Noll and Fredrickson (1998) found that body shame partially mediated the link of self-objectification (difference between participants’ perceived importance of appearance-based versus competence-based body attributes) and eating disorder symptoms across two samples of college age women. That is, self-objectification was related to greater body shame, which was related to more eating disorder symptoms. The mediating role of body shame in the links of internalization of cultural standards of beauty, self-objectification, or body surveillance with eating disorder symptoms has been supported with young and adult women (e.g., Calogero, 2009; Calogero & Thompson, 2009; Calogero et al., 2005; Calogero, Pina, Park, & Rahemtulla, 2010; Greenleaf, 2005; Kozee & Tylka, 2006; Mitchell & Mazzeo, 2009; Moradi et al., 2005; Moradi & Rottenstein, 2007; Noll & Fredrickson, 1998; Rolnik, Engeln-Maddox, & Miller, 2010; Slater & Tiggemann, 2002; Tiggemann & Kuring, 2004; Tiggemann & Slater, 2001). Additionally, sexual objectification experiences were related with body surveillance and eating disorder symptoms through the partial mediating role of internalization, and internalization and body surveillance simultaneously mediated the link between sexual objectification experiences and body shame with a sample of racially/ethnically diverse college women (Kozee, Tylka, & Augustus-Horvath, & Denchik, 2007; Moradi et al., 2005).

On the basis of the objectification literature reviewed here, positive relations among sexual objectification experiences, internalization of cultural standards of beauty, body surveillance, body shame, and eating disorder symptoms are generally supported for women from diverse backgrounds. Findings investigating the mediating roles in the framework suggested that (a) body shame partially mediated the links of internalization of cultural standards of beauty and body surveillance with eating disorder symptoms, (b) internalization mediated the
link of sexual objectification experiences with body surveillance, and (c) body surveillance mediated the link of internalization with body shame.

**Purpose of the Study**

Despite a growing body of literature that examines the links of acculturation with body image and eating problems among Asian American women, the mixed findings reflect a need for further investigation beyond the typical unilinear conceptualization of acculturation. Using a bilinear model, both acculturation and enculturation and their relations to eating disorder symptomatology will be explored in this study. Furthermore, theory and research on biculturalism suggest that perceived bicultural competence may be associated with lower psychological symptomatology and greater well-being among racial or ethnic minority individuals. Grounded in objectification theory (Fredrickson & Roberts, 1997), the present study will examine the relations of acculturation, enculturation, and perceived bicultural competence with eating disorder symptomatology among Asian American women. In addition, the proliferating literature on objectification theory has been conducted mostly with White college women. Asian American women have not yet received much attention in the literature. Thus, the present study will also examine the applicability of objectification theory to understanding eating disorder symptomatology among Asian American women. The model examined in the current study is presented in Figure 3-1, and tests the following hypotheses:

1. Consistent with prior research, it is hypothesized that acculturation will be related positively to internalization of cultural standard of beauty, body surveillance, body shame, and eating disorder symptoms (1a), enculturation will be correlated negatively with these objectification theory variables (1b), and perceived bicultural competence will be related negatively to these objectification theory variables (1c).
2. Based on objectification theory, sexual objectification experiences are expected to relate positively with body surveillance through the mediating role of internalization.

3. Internalization is expected to relate positively with body shame through the mediating role of body surveillance.

4. Body surveillance is expected to relate positively with eating disorder symptoms through the mediating role of body shame.

Beyond these indirect relations (Hypotheses 2, 3, and 4), unique direct positive links of sexual objectification experiences with body surveillance, body surveillance with eating disorder symptoms, and internalization with body shame and eating disorder symptoms were supported in previous studies (e.g., Moradi et al., 2005; Moradi & Rottenstein, 2007). These direct links are included in the model. As a result, the hypothesized mediations (Hypotheses 2, 3, and 4) reflect partial mediation. Moreover, a bootstrap procedure will be utilized to test the significance of the indirect effects. Researchers suggested that bootstrapping exhibits greater statistical power to detect mediation effects than other procedures (Mallinckodt, Abraham, Wei, & Russell, 2006).

Studies have identified age and Body Mass Index (BMI) as potential covariates of eating disorder constructs (e.g., Augustus-Horvath & Tylka, 2009; Fredrickson, Robert, Noll, Quinn, Twenge, 1998; Jacobi, Hayward, de Zwan, Kraemer, & Agras, 2004; Morry & Staska, 2001; Noll & Fredrickson, 1998; Stice, 2002). In order to provide a more stringent test of the hypotheses, age and BMI will be considered as a covariate in the path model.
CHAPTER 2
METHODS

Participants

Data from a sample of 303 Asian American women were analyzed in the present study. Participants ranged in age from 18 to 60 years ($M = 25.17$, $SD = 7.87$, $Mdn = 22$), with 50% of participants identifying as undergraduate students, 17% as graduate students, and 33% indicating that they were not students. Thirty-one percent of the sample identified as Chinese, 22% as Taiwanese, 9% as Filipino, 9% as Vietnamese, 7% as more than one racial/ethnic background, 6% as Korean, 5% as Japanese, 4% as Hmong, 3% as Indian, 1% as Cambodian, 1% as Malaysian, < 1% as Pakistani, < 1% as Thai, and 1% as other Asian backgrounds (e.g., Bangladeshi, Tibetan). In terms of generational status, 54% of participants identified as second generation (i.e., participant’s parents were the first to come to the United States), 34% as first generation (i.e., participant came to the United States alone or with their parents/family), 11% as third-generation and beyond (i.e., participant’s grandparents and beyond were the first to come to the United States) (1% missing). Sixty-four percent of participants reported that they were born in the United States and 35% were not born in the United States (1% missing). Fifty-three percent of participants reported that English is not their first language, 45% reported that English is their first language, and approximately 2% reported being bilingual (1% missing). Twenty-seven percent of participants reported that they had some college/technical education, 25% had a bachelor’s degree, 20% had a graduate or professional degree, 16% had a high school degree, and 11% had some graduate or professional education (1% missing). Thirty-nine percent of participants reported that they were not currently employed, 37% were employed part-time, and 22% were employed full-time (2% missing).
Furthermore, 58% of participants reported that they were not financially independent of
the family in which they grew up while 40% were financially independent (2% missing). Thirty
percent of participants reported that their annual household income is between 50,001 and
100,000, 24% between 10,001 and 50,000, 16% between 100,001 and 150,000, 9% between
150,001 and 200,000, 5% below 10,000, 4% between 200,001 and 250,000, and 4% above
250,000 (8% missing). Most participants identified as exclusively (82%) or mostly (13%)
heterosexual, with 3% identifying as bisexual and 1% identifying as mostly lesbian (< 2%
missing). Thirty-eight percent of women reported that they were single, 30% reported that they
were dating, 30% were married or in a committed relationship, less than 1% were divorced or
separated (1% missing). Thirty-eight percent of participants reported that they currently lived in
California and the remaining (59%) participants resided in 26 other states (3% missing).

Procedures

Participants were recruited through advertising on internet listserv, organizations, and
personal contacts. Electronic flyers and attachments were sent to organizations’ listserv geared
toward Asian American membership across the U.S. These online posts and e-mails provided
information about the study, eligibility requirements, and a link to the informed consent and
survey page. In particular, individuals were informed that the study was a survey about Asian
American women’s experiences and well-being. Participants were informed that study was
approved by the Institutional Review Board, that they must be at least 18 years of age, reside in
the U.S., and identify as an Asian American woman to participate, that their responses would be
anonymous, and that they could withdraw without consequence.

A total of 433 individuals accessed the online survey, agreed to participate, and
responded to one or more items. Screening of these data identified no duplicate entries. Two
participants who identified themselves as men and three participants who did not report any demographic information were removed from the data set. Of the remaining respondents, 118 had missing data on more than 20% of the total items, excluding demographic items (94 of these were missing more than 50%); the proportion of these individuals who may have responded to a few items to “check out” the survey and then returned to complete the survey at a later date cannot be determined due to the anonymity of the data. Furthermore, three participants had incorrect responses to more than 2 validity items (7 validity items in total) which asked participants to select a particular response (e.g., “Please check ‘sometimes’ for this item”) in order to verify nonrandom and attentive responding. Given that data were missing at the item level, NORM 2.03 software (Schafer, 2000) was used to impute item-level missing data from expectation maximization parameters, prior to computing subscale and scale scores used in the analyses. Last, data from four participants were removed based on Mahalanobis distance values indicating that they were multivariate outliers (detailed in the results section). As a result, the final data set included data from 303 participants.

**Instruments**

**Culture-based Variables**

**Acculturation and enculturation** was assessed with the *Acculturation Rating Scale for Mexican Americans – Revised (ARSMA – II; Cuellar et al., 1995)* which has been modified and used with Asian American individuals (Lee, Choe, Kim, & Ngo, 2000) The ARSMA-II was identified in the literature as one of the more psychometrically sound bilinear measures of acculturation (Lee, Yoon, & Liu-Tom, 2006). The Asian American version of the ARSMA-II is a bilinear 30-item, measure consisting of two subscales that measure adherence to Asian and Western cultures across domains of language usage, cultural activities involving language, ethnic
identity, and social interaction (Farver, Narang, & Bhadha, 2002; Lee et al., 2000, 2006; Miller, 2007, 2010). The two subscales of the modified ARSMA-II are the 13-item Anglo Orientation Scale (AOS) and the 17-item Asian Orientation Scale (AAOS). Items are rated on a 5-point scale (1 = not at all; 5 = extremely often), and item ratings are averaged with higher scores indicating a higher adherence to the indicated culture. Cronbach’s alphas for responses to these subscales’ items ranged from .74 to .86 with samples of Asian American participants (Lee et al., 2000; Miller, 2007, 2010). The Cronbach’s alpha value with the current sample was .87 for enculturation and .79 for acculturation. Regarding validity, scores on the modified version of ARSMA-II were shown to differentiate Asian Americans by generational status, family conflicts, and psychological adjustment in a manner consistent with acculturation theory (Lee et al., 2006; Miller, 2007, 2010).

**Perceived bicultural competence** was measured with the *Bicultural Self-Efficacy Scale* (BSES; David et al., 2009). The BSES is a 26-item Likert-type measure (1 = strongly disagree to 9 = strongly agree) that assesses participants’ perceived abilities to function competently in their heritage culture and mainstream culture. It consists of six subscales: social groundedness, communication ability, positive attitudes toward both groups, knowledge of cultural beliefs and values, role repertoire, and bicultural beliefs. All items are rated on a 9-point scale (1 = strongly disagree; 9 = strongly agree). Overall scale scores are computed by averaging all items’ ratings and higher score indicating a higher level of perceived bicultural competence. Cronbach’s alphas for responses to all scale items ranged from .92 to .94 in samples of racial ethnic minority students.(David et al., 2009; Wei et al., 2010). A Cronbach’s alpha value of .92 was obtained with the current sample. Regarding validity, BSES overall scale score was correlated positively with collective self-esteem and ethnic identity, and correlated negatively with perceptions of
cultural conflict, separation (low adherence to dominant culture and high adherence to heritage culture), and depressive symptoms (David et al., 2009; Wei et al., 2010).

**Objectification Theory Variables**

**Sexual objectification experiences** were assessed with the 15-item *Interpersonal Sexual Objectification Scale* (ISOS; Kozee et al., 2007). Items are rated on a 5-point scale (1 = never to 5 = almost always), with higher mean scores reflecting greater reported sexual objectification experiences. Kozee et al. (2007) reported a Cronbach’s alpha of .92 with a sample of mostly White American college women. A Cronbach’s alpha value of .92 was obtained with the current sample. Regarding validity, Kozee et al. (2007) found that the ISOS scores were correlated positively with reports of sexist degradation. Furthermore, in order to improve clarity, following a prior study (Tolaymat & Moradi, in press), two items were modified: “How often have you noticed someone leering at your body” was changed to “. . . leering (staring sexually) at your body” and the item “How often have you heard someone make sexual comments or innuendos when noticing your body” was changed to “. . . sexual comments or suggestions when noticing your body.”

**Internalization of sociocultural standards of beauty** was assessed with *Internalization subscale of the Sociocultural Attitudes Toward Appearance Questionnaire* (SATAQ-I; Heinberg, Thompson, & Stormer, 1995). The SATAQ-I is an 8-item measure of the level of adoption of society’s emphasis on appearance in general and on thinness in particular. Items are rated on a 5-point continuum (1 = completely disagree, 5 = completely agree), with higher mean scores indicating greater levels of internalization. Cronbach’s alphas for internalization items have been in the .80s (e.g., α = .88; Heinberg et al., 1995). A Cronbach’s alpha value of .87 was obtained with the current sample. In terms of validity, internalization scores were related positively to
body preoccupation and eating disorder symptomatology in a sample of Asian American college women (Phan & Tylka, 2006).

**Body surveillance** was measured with the *Body Surveillance* subscale of McKinley and Hyde’s (1996) *Objectified Body Consciousness Scale* (OBCS). The subscale contains 8 items that measure how much one thinks of her body in terms of how it looks, versus how it feels. Items are rated on a 7-point scale (1 = strongly disagree, 7 = strongly agree), and a NA (not applicable) option can be selected for items that do not apply to participants. Applicable item ratings are averaged and higher scores indicate greater level of body surveillance. Cronbach’s alphas ranged from .79 to .88 with samples of undergraduate women (McKinley & Hyde, 1998). A Cronbach’s alpha value of .85 was obtained with the current sample. In terms of validity, body surveillance scores were positively correlated with body shame and negatively correlated with body esteem (McKinley, 1999).

**Body shame** was measured by the *Body Shame* subscale of McKinley and Hyde’s (1996) *Objectified Consciousness Scale* (OBCS). It is an 8-item scale that measures the degree to which one feels ashamed for not achieving the cultural ideal body standard. Participants are asked to rate the degree to which they agree with each statement, ranging from 1 (strongly disagree) to 7 (strongly agree) with a NA (not applicable) option for items that do not apply. Applicable item ratings are averaged and higher scores indicate greater body shame. Cronbach’s alphas for body shame items ranged from .73 to .81 with samples of college women (McKinley & Hyde, 1998). A Cronbach’s alpha value of .83 was obtained with the current sample. In terms of validity, body shame scores were positively correlated with body surveillance and negatively correlated with body esteem (McKinley, 1999).
Eating disorder symptomatology was measured by the Eating Attitudes Test – 26 (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982) is a 26-item measure of eating disorder attitudes and behaviors. Items are rated on a 6-point continuum (1 = always, 6 = never), and item ratings are averaged. Such continuous scoring of the EAT-26 is recommended for use with nonclinical samples (Siever, 1994). Cronbach’s alphas have ranged from the .70s to .90s (e.g., Moradi et al., 2005; Morry & Staska, 2001). A Cronbach’s alpha value of .88 was obtained with the current sample. EAT-26 scores were found to be correlated with scores on other measures of disordered eating (Kashubeck-West & Mintz, 2001).

Demographics questionnaire. Participants completed a self-report questionnaire containing items regarding age, race/ethnicity, generational status (e.g., first, second, etc.), place of birth, parents’ place of birth, years lived in the U.S., sexual orientation, education level, socio-economic status, and height and weight. In particular, participants’ reports of current height and weight were used to compute BMI using the following formula: \[ \text{BMI} = \frac{\text{Weight in pounds}}{(\text{height in inches})^2} \times 704.5 \] (Centers for Disease Control and Prevention, n.d.).
CHAPTER 3
RESULTS

Univariate and multivariate normality were explored. Four multivariate outliers were identified by evaluating the Mahalanobis distance value for each participant and comparing the magnitude of that value to the chi-square distribution using a stringent alpha of .001 (Meyers, 2006). Closer examination of data from these four participants revealed that two participants had no variability in responses to several measurements and that the other two participants had notably high BMIs. Thus, these four cases were dropped from further analyses. Next, the sample distribution for each variable was examined for skewness and kurtosis and all of these values were below cutoffs for concern (skewness index ≤ 3.0, kurtosis index ≤ 10.0; Weston & Gore, 2006).

Descriptive statistics and correlations among variables of interest are reported in Table 3-1. Overall, the present sample’s means and standard deviations on the variables of interest were comparable to those obtained with Asian American or ethnic minority participants in prior studies. More specifically, the mean scores and standard deviations obtained with the present sample for enculturation ($M = 3.53, SD = 0.65$) and acculturation ($M = 3.93, SD = 0.47$) were comparable to those reported by Miller (2010) with a sample of Asian American individuals for enculturation ($M = 3.59, SD = 0.57$) and acculturation ($M = 3.95, SD = 0.42$). The present sample’s mean score and standard deviation for perceived bicultural self-efficacy ($M = 6.84, SD = 1.00$) was comparable to that reported by Wei et al. (2010) with a sample of ethnic minority college students ($M = 6.64, SD = 1.02$). In terms of objectification theory constructs, the current sample’s means and standard deviations for sexual objectification experiences ($M = 1.97, SD = 0.56$), internationalization ($M = 2.94, SD = 0.92$), body surveillance ($M = 4.38, SD = 1.17$), body shame ($M = 3.10, SD = 1.30$), and eating disorder symptoms ($M = 2.29, SD = 0.58$) were
comparable to those reported by Tolaymat and Moradi (2011) with a sample of U.S. Muslim women of predominantly Arab or Pakistani ethnic background for sexual objectification experiences ($M = 1.79, SD = .54$) and body shame ($M = 3.19, SD = 1.21$), and to those reported by Phan and Tylka (2006) with a sample of Asian American college women for internalization ($M = 3.12, SD = .86$) and eating disorder symptoms ($M = 2.29, SD = .58$). Moreover, the present sample’s means for sexual objectification experiences ($M = 1.97, SD = .56$) and body surveillance ($M = 4.37, SD = 1.17$) fell between the means reported by Augustus-Horvath and Tylka (2009) for a sample of predominantly White women ages 18-24 (sexual objectification experiences: $M = 2.46, SD = .65$; body surveillance: $M = 4.71, SD = 1.11$) and for women ages 25 years and older (sexual objectification experiences: $M = 1.77, SD = .57$; body surveillance: $M = 4.27, SD = 1.27$).

Based on the criteria used by the Center for Disease Control, participants’ average BMI ($M = 22.05, SD = 3.40$) was in the normal category, with approximately 8% categorized as underweight (BMI < 18.5), 78% as healthy weight, 11% as overweight (BMI of 25 to 30), and 3% as obese (BMI ≥ 30). The relations of BMI and age with variables of interest were explored to determine whether they should be included in subsequent analyses. BMI was correlated with scores on enculturation ($r = -.15, p < .05$) and body shame ($r = .25, p < .001$); age was correlated with scores on sexual objectification experiences ($r = -.18, p < .01$), internalization ($r = -.16, p < .01$), body surveillance ($r = -.30, p < .001$), body shame ($r = -.12, p < .05$), and eating disorder symptoms ($r = -.12, p < .05$). BMI was positively correlated with age ($r = .21, p < .001$). Therefore, these significant links were controlled in subsequent analyses.
Hypothesis 1: Relations of Enculturation, Acculturation, and Perceived Bicultural Competence with Objectification Theory Constructs

Hypothesis 1 predicted that enculturation and perceived bicultural self-efficacy are related negatively with sexual objectification experiences, internalization, body surveillance, body shame, and eating disorder symptoms, and that acculturation is related positively with these variables. As indicated in Table 3-1, the results of zero-order correlations showed that perceived bicultural competence was correlated negatively with internalization \( (r = -.24, p < .001) \), body surveillance \( (r = -.27, p < .001) \), body shame \( (r = -.24, p < .001) \), and eating disorder symptoms \( (r = -.21, p < .001) \). Perceived bicultural competence was not correlated with sexual objectification experiences. Enculturation was not correlated with objectification theory constructs and acculturation was positively correlated with sexual objectification experiences only \( (r = .14, p < .05) \).

The pattern of findings was modified, however, when all the variables were considered simultaneously in the path analysis (see Figure 3-1). In the path model, perceived bicultural competence did not have unique direct links with body shame and eating disorder symptoms but was related negatively and directly with internalization \( (\beta = -.28, p < .001) \) and body surveillance \( (\beta = -.20, p < .001) \). Acculturation was related uniquely and positively to body surveillance \( (\beta = .13, p < .05) \) and was related uniquely and negatively to body shame \( (\beta = -.13, < .05) \). Moreover, sexual objectification experiences was related uniquely and positively to internalization \( (\beta = .15, p < .01) \). Thus, Hypothesis 1 was partially supported.

Overview of Analyses to Test Hypotheses 2 to 4

AMOS 18 (Arbuckle, 2009) and maximum likelihood estimation with the covariance matrix of the variables of interest as input were used to estimate direct and indirect paths involved in Hypotheses 2 to 4 (see Figure 3-1). With regard to sample size, the minimum of five
to ten cases per parameter estimated suggests 200 to 400 cases for the present model and the sample size of 307 fell within that range (Bentler & Chou, 1987; Kline, 2005). West and Gore (2006) recommended a minimum sample size of 200 for any SEM. Furthermore, in a recent publication (Westland, 2010), the author proposed lower bounds for SEM sample adequacy based on consolidation and summarization of the results from previous studies (the minimum sample size > 50r² – 450r + 1100). In particular, r is the ratio of parameters to latent variables. According to Westland (2010), the minimum sample size needed for the study is 100. For the most complex regression model tested in the present study (i.e., seven predictors), the sample size provided a power of .95 for detecting a medium effect. The current sample of 303 participants is acceptable when testing the hypothesized model. Criteria for acceptable model fit have ranged from CFI ≥ .90, RMSEA and SRMR ≤ .10 to more conservative criteria of CFI ≥ .95, RMSEA ≤ .06, and SRMR ≤ .08 (e.g., Weston & Gore, 2006). The hypothesized model fit the data well: χ² (5, N = 303) = 3.29, p = .66; CFI = 1.00; SRMR = .01; RMSEA = 0.00, [90% CI = .00, .06]; AIC = 103.29; BIC = 288.97; these fit index values should be interpreted in the context that the model is nearly saturated. The model accounted for 46% of the variance in eating disorder symptoms, 42% of variance in body shame, 41% of variance in body surveillance, and 12% of variance in internalization.

To test the significance of hypothesized indirect relations (Hypotheses 2, 3, and 4), a bootstrap procedure that involves creating 1,000 samples from the original data set (N = 303) through random sampling and replacement and then deriving 1,000 estimates of each path coefficient was utilized to compute bias-corrected 95% confidence intervals (CI) for indirect effects; if the 95% CI does not include zero, then the indirect link is significant, p < .05 (Mallinckrodt et al., 2006).
Hypothesis 2: Intervening Role of Internalization in the Link of Sexual Objectification Experiences and Body Surveillance

Hypothesis 2 predicted that sexual objectification experiences are related, indirectly through internalization of sociocultural standards of beauty, to greater level of body surveillance. The previously described bootstrap procedure was used to test the significance of these indirect relations. Consistent with Hypothesis 2, sexual objectification experiences had a significant indirect link with body surveillance through the mediating role of internalization ($b = .14$ [95% CI: .031, .268], $\beta = .07$); the additional direct link between sexual objectification experiences and body surveillance was small and nonsignificant. Thus, internalization fully mediated the link of sexual objectification experiences to body surveillance.

Hypothesis 3: Intervening Role of Body Surveillance in the link of Internalization and Body Shame

Hypothesis 3 predicted that internalization is related, indirectly through body surveillance, to greater body shame. Again, a bootstrap procedure was applied to test for the significance of the indirect effect. Consistent with Hypothesis 3, internalization had a significant indirect link with body shame through the mediating role of body surveillance ($b = .15$ [95% CI: .077, .236], $\beta = .11$); the direct link between internalization and body shame was also significant. Therefore, body surveillance partially mediated the link of internalization to body shame.

Hypothesis 4: Intervening Role of Body Shame in the link of Body Surveillance and Eating Disorder Symptoms

Hypothesis 4 predicted that body surveillance is related, indirectly through body shame, to greater eating disorder symptoms. Results of the bootstrap procedure revealed that, consistent with Hypothesis 4, body surveillance had a significant indirect link with eating disorder symptoms through the mediating role of body shame ($b = .04$ [95% CI: .021, .073], $\beta = .09$); the additional direct link between body surveillance and eating disorder symptoms was also
significant. Thus, body shame partially mediated the link of body surveillance to eating disorder symptoms.

Beyond the hypothesized indirect relations described above, the results indicated a number of additional significant total indirect relations involving the primary variables of interest. Specifically, through the multiple paths depicted in Figure 3-1, there were significant total positive indirection relations from acculturation to body surveillance ($b = .16$ [95% CI: .005, .328], $\beta = .06$) and body shame ($b = .27$ [95% CI: .049, .484], $\beta = .10$); total negative indirect relations from perceived bicultural competence to body surveillance ($b = -.16$ [95% CI: -.242, -.088], $\beta = -.14$), body shame ($b = -.25$ [95% CI: -.354, -.156], $\beta = -.20$), and eating disorder symptoms ($b = -.12$ [95% CI: -.179, -.077], $\beta = -.21$); total positive indirect relations from sexual objectification experiences to body shame ($b = .20$ [95% CI: .038, .378], $\beta = .10$) and eating disorder symptoms ($b = .09$ [95% CI: .020, .174], $\beta = .09$); and a total positive indirect relation from internalization to eating disorder symptoms ($b = .17$ [95% CI: .120, .227], $\beta = .27$). Age also yielded significant total negative indirect relations with body surveillance ($b = -.01$ [95% CI: -.015, -.001], $\beta = -.06$), body shame ($b = -.02$ [95% CI: -.026, -.007], $\beta = -.10$), and eating disorder symptoms ($b = -.01$ [95% CI: -.014, -.004], $\beta = -.12$); BMI yielded a significant positive indirect relation with eating disorder symptoms ($b = .02$ [95% CI: .010, .025], $\beta = .10$).

Last, the fit of the fully saturated model was compared to that of a trimmed model that eliminated the nonsignificant direct paths from culture-related variables and sexual objectification experiences to the other variables in the model. The change in the chi-square statistic was not statistically significant, and fit index values for this model were comparable to values for the original model (CFI = 1.0, SRMR = .03, RMSEA = .00, [90% CI = .00, .04]; AIC...
= 91.25; BIC = 236.09. The amount of variance accounted for in each of the criterion variables and the magnitude of the significant paths in the trimmed model were identical to those in the hypothesized model.
Table 3-1. Descriptives and bivariate correlations

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<td>5. Internalization of cultural standards of beauty</td>
<td>-.09</td>
<td>.06</td>
<td>-.24***</td>
<td>.19**</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1-5</td>
<td>2.94</td>
<td>.92</td>
<td>.87</td>
</tr>
<tr>
<td>6. Body surveillance</td>
<td>-.10</td>
<td>.10</td>
<td>-.27***</td>
<td>.20***</td>
<td>.57***</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1-7</td>
<td>4.38</td>
<td>1.17</td>
<td>.85</td>
</tr>
<tr>
<td>7. Body shame</td>
<td>-.10</td>
<td>-.05</td>
<td>-.24***</td>
<td>.15*</td>
<td>.57***</td>
<td>.48***</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td>1-7</td>
<td>3.10</td>
<td>1.30</td>
<td>.83</td>
</tr>
<tr>
<td>8. Eating disorder symptoms</td>
<td>-.09</td>
<td>-.03</td>
<td>-.21***</td>
<td>.16**</td>
<td>.57***</td>
<td>.46***</td>
<td>.62***</td>
<td>---</td>
<td></td>
<td></td>
<td>1-6</td>
<td>2.29</td>
<td>.58</td>
<td>.88</td>
</tr>
<tr>
<td>9. BMI</td>
<td>-.15*</td>
<td>.11</td>
<td>.05</td>
<td>.02</td>
<td>.05</td>
<td>.002</td>
<td>.25***</td>
<td>.09</td>
<td>---</td>
<td></td>
<td>22.05</td>
<td>3.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Age</td>
<td>-.06</td>
<td>-.11</td>
<td>.03</td>
<td>-.18**</td>
<td>-.16**</td>
<td>-.30***</td>
<td>-.12**</td>
<td>-.12**</td>
<td>.21***</td>
<td>---</td>
<td>25.17</td>
<td>7.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. Higher scores reflect higher levels of the construct assessed. * p < .05  ** p < .01  *** p < .001
Figure 3-1. Path model testing direct and indirect relations in the variables of interest. A) Dashed lines indicate nonsignificant paths; all other depicted paths are significant at $p < .05$. B) For the sake of parsimony, correlations among exogenous variables are reported in Table 3-1.
CHAPTER 4
DISCUSSION

The current study responds to call for counseling psychologists to attend to the experiences of women from racially and ethnically diverse backgrounds in body image and eating disorder research (Petrie & Rogers, 2001; Root, 2001). Objectification theory (Fredrickson & Roberts, 1997) has been identified as an influential framework in the literature on body image and eating problems, with particular promise in addressing experiences of women from diverse backgrounds (Moradi, 2010). The present study examined the applicability of objectification theory by integrating culture-related variables (i.e., enculturation, acculturation, perceived bicultural competence) into the framework and examining the framework with Asian American women, a group that has been underrepresented in the literature on body image and eating problems. Overall, the results support the generalizability of key aspects of objectification theory to Asian American women and suggest some relations involving the culture-related variables as well. Therefore, the present findings can inform future research and practice on body image and eating problems among Asian American women. An important caveat to the proceeding discussion is that the present data are cross-sectional and correlational. Thus, although observed associations are described to occur from one variable to another for clarity, the present findings cannot be interpreted in terms of causal or temporal relations.

First, positive and significant zero-order correlations among sexual objectification experiences, internalization of sociocultural standards of beauty, body surveillance, body shame, and eating disorder symptoms in the current sample of Asian American women are consistent with the propositions of objectification theory and prior research findings (Moradi & Huang, 2008). With regard to the links of culture-related variables and objectification theory constructs, as predicted, perceived bicultural competence yielded significant and negative zero-order
correlations with internalization of sociocultural standards of beauty, body surveillance, body
shame, and eating disorder symptoms. However, acculturation and enculturation were not
correlated significantly with these variables and perceived bicultural competence was not
correlated with sexual objectification experiences. Acculturation was correlated significantly and
positively with sexual objectification experiences.

The pattern of findings was modified, however, when BMI and age were included and all
the variables were considered simultaneously in the path analysis. More specifically, consistent
with zero-order correlations, perceived bicultural competence yielded unique negative links with
internalization and body surveillance, but it did not yield unique relations with body shame or
eating disorder symptoms. Furthermore, acculturation yielded a unique positive relation with
body surveillance. Even though acculturation related uniquely and negatively to body shame, the
total effect between acculturation and body shame was small (-.09).

The results of bivariate correlation analyses involving perceived bicultural competence
are generally consistent with previous research that found perceived bicultural competence to be
significantly related to mental health outcomes. In particular, David et al. (2009) found that
perceived bicultural competence was positively correlated with life satisfaction and negatively
correlated with depressive symptoms among bicultural undergraduate women and men. Wei et
al. (2010) also found that perceived bicultural competence was negatively related to depressive
symptoms with a sample of ethnic minority students. These findings are consistent with the
theoretical framework (LaFromboise et al., 1993) that perceived bicultural competence may be
an important resource mitigating mental health concerns, in this case, body image- and eating-
related concerns among Asian American women. Although the cross-sectional nature of the
present data do not allow for causal interpretations, based on the proposition (LaFromboise et al.,
1993), it is possible that Asian American women who have a higher level of perceived bicultural competence have knowledge and skills derived from both cultures that can help them generate strategies to deal effectively with body image and eating-related issues.

The fact that the direct unique links of perceived bicultural competence to internalization and body surveillance remained significant and the direct unique links of perceived bicultural competence to body shame and eating disorder symptoms became nonsignificant suggests that internalization and body surveillance may be key mediators in the links of perceived bicultural competence to body shame and eating disorder symptoms. Indeed, perceived bicultural competence yielded negative relations with body shame and eating disorder symptoms through the series of indirect relations involving internalization and body surveillance. Thus, Asian American women who find it difficult to navigate Asian and American cultures (i.e., low bicultural competence) may be vulnerable to adopting dominant beauty standards and to habitually monitoring their appearance against that standard. These factors, in turn, may place them at a higher risk of experiencing body shame and eating disorder symptomatology.

Contrary to the significant role of perceived bicultural competence, hypothesized direct relations from acculturation and enculturation to the other variables were not supported. Enculturation was expected to correlate negatively with internalization of sociocultural standards of beauty, body surveillance, body shame, and eating disorder symptoms, and acculturation was expected to correlate positively with these variables. These hypotheses were based on prior research conducted with Mexican American women (Bettendorf & Fischer, 2009; Cachelin, Monreal, & Juarez, 2006; Cachelin, Phinney, Schug, & Striegel-Moore, 2006). But, the present findings suggest that the direct relations involving enculturation and acculturation observed in Mexican American women’s eating problems may not apply to Asian American women.
However, when all the variables were considered in the path model, the unique direct links of acculturation to body surveillance and body shame became significant (and the magnitude of the unique link between acculturation and internalization was the same even though this link was not statistically significant). Specifically, Asian American women’s adherence to the dominant cultural behaviors was related negatively to body shame but related positively to body surveillance. In addition to these unique direct relations, acculturation also yielded positive indirect relations with body surveillance and body shame (but not with eating disorder symptoms). Given that the direct effect of acculturation on body shame was negative and that the indirect effect of the link was positive, it can be referred to as inconsistent mediation (MacKinnon, Fairchild, & Fritz, 2007). Inconsistent mediation models are defined as models where at least one mediated effect has a different sign than other mediated or direct effects in a model (Blalock, 1969; Davis, 1985; MacKinnon, Krull, & Lockwood, 2000). It can also be termed as crossover or net suppression which occurs when the beta coefficient of the initial predictor (acculturation) reverses sign, whereas the beta coefficient for the suppressor variable (body surveillance) increases relative to its initial validity coefficient (Paulhus, Robins, Trzesnieski, & Tracy, 2004). In the current study, according to Paulhus and colleagues (2004), once the shared variance between acculturation and body surveillance is removed, acculturation has a negative association with body shame.

The results that enculturation was not correlated with body image variables was similar to those reported by Phan and Tylka (2006) with their sample of Asian American college women. Examining a factor that is not synonymous with heritage cultural adoption (enculturation), but may be associated with it, Phan and Tylka (2006) found that ethnic identity was not correlated with internalization, body preoccupation, and eating disorder symptoms. The replication of this
pattern in the present study suggests that enculturation may be less salient to Asian American women’s body image concerns than are acculturation and perceived bicultural competence. Such a pattern of distinctive relations involving acculturation and enculturation also supports the current bilinear approach to conceptualizing and operationalizing acculturation and enculturation wherein these factors are thought to be separate dimensions rather than opposite points on a single continuum. Beyond the roles of the culture-specific variables, the pattern of relations among objectification theory variables in the present study paralleled relations found in prior research. Specifically, sexual objectification experiences were found to have a positive indirect relation through internalization, to body surveillance; and internalization was found to have a positive indirect relation through body surveillance, to body shame. The former indirect relation suggested full mediation and the latter indirect relation suggested partial mediation. These results are consistent with two previous studies that examined internalization and body surveillance as mediators in the objectification theory framework with samples of women who were predominantly White (Moradi et al., 2005) and Deaf women (Moradi & Rottenstein, 2007). Last, as predicted, body surveillance had a positive indirect relation through body shame, to eating disorder symptoms. The intervening role of body shame in the link between body surveillance and eating disorder symptoms was empirically supported in prior studies with samples of predominantly White and racially/ethnically diverse college women (e.g., Augustus-Horvath & Tylka, 2009; Calogero et al., 2005; Greenleaf, 2005; Moradi & Rottenstein, 2007; Noll & Fredrickson, 1998; Slater & Tiggemann, 2002; Tiggemann & Kuring, 2004; Tiggemann & Slater, 2001).

Taken together, these findings suggest that Asian American women’s perceived experiences of sexual objectification were associated with body surveillance through
internalization, internalization was associated with body shame through body surveillance, and body surveillance was associated with eating disorder symptoms through body shame. This set of relations has been conceptualized as a manifestation of the self-objectification process—that is, the process by which sexual objectification experiences are internalized and translated into body image and eating problems among women (Fredrickson & Roberts, 1997; Moradi, 2011).

**Limitations**

The present findings should be considered in light of a number of study limitations. The high representation of college students and professionals as well as members of cultural organizations may limit generalizability of findings to the broader population of Asian American women. Additional studies are needed to determine the applicability of the present findings with other samples of Asian American women who are not attending college, who are not members of Asian American student organizations, and who are unable to use the Internet. In addition, Asian Americans accounted for 5 percent of the nation’s population (U.S. Census Bureau, 2000). In particular, six groups comprised the vast majority, the Chinese (23% of all Asian Pacific Islanders), Pilipinos (20%), Asian Indians (18%), Vietnamese (11%), Koreans (10%), and Japanese (8%). In the current study, although several Asian subgroups were recruited for this study and numerous subgroups were represented, the predominance of East Asian individuals (especially Chinese and Taiwanese) in the sample may narrow the generalizability of findings to other Asian subgroups as well (e.g., cultural standard of beauty).

A related limitation of the present study was the use of snowball sampling methods to obtain a portion of the data. Even though the main method of collection was via contacts to Asian American student organizations on campus, friends, family, and colleagues of the investigator were encouraged to pass along information about the study to other Asian American
women who are at least 18 years old and reside in the United States. Therefore, it is hard to find out what percentage of the data was obtained through this snowball sampling procedure. However, given that the investigator is a Taiwanese woman who currently resides in Southern California and that 22% of the participants identifying as Taiwanese and 38% of them reported living in California, it is reasonable to speculate that a portion of surveys were collected through snowball sampling procedure.

Another limitation of the current study is that only self-report measures were used to assess the constructs of interest. With self-report data, results are based on individual’s judgments of their experiences. For example, the ISOS measures participants’ recent perceptions of sexual objectification which may or may not correspond to actual level of this variable due to recall accuracy. Also, responses to the measures of some of this study’s variables (e.g., perceived bicultural competence, body surveillance, body shame, eating disorder-related attitudes) might be influenced by social desirability. The data were also correlational in nature and collected at a single point in time. The cross-sectional and correlational nature of the data does not allow for causal inferences from the study’s results. It can be helpful for future research to conduct experimental and longitudinal studies to evaluate changes of the objectification theory constructs and to clarify the direction of causality in the posited relations in the objectification theory framework.

**Clinical Implications**

Despite these limitations, the current study provides useful information for clinical practice. Specifically, the present findings suggest that it may be beneficial to collaborate with clients to understand eating- and body-related concerns in the context of their cultural backgrounds. Attending to perceived bicultural competence as a protective factor may be
beneficial in designing intervention or prevention programs, given the unique direct and indirect negative relations of this variable with each of the body image variables examined in the present study. For example, counselors/therapists can help clients learn how to cultivate and improve their perceived bicultural competence by developing deeper connections with their heritage culture as well as with the mainstream American culture. Such connections could be fostered by learning about both cultures and establishing supportive social networks in both cultural groups. The present findings suggest that helping clients to develop a sense of competence in navigating their heritage and mainstream cultures may be also be helpful in mitigating some body image concerns.

In terms of the significant links of acculturation with body surveillance, findings suggest the importance of attending to within-group differences regarding Asian American women’s body image and eating problems. For example, body image concerns may vary when working with a Chinese woman who has lived in the U.S. for less than a year versus a Chinese American woman who was born and raised in the U.S. Counselors/therapists can help explore the extent to which Asian American women are behaviorally acculturated to better understand their clients’ body image and eating related concerns. It may be helpful to consider that greater levels of acculturation may be associated with greater body surveillance.

The present findings also suggest that internalization of sociocultural standards of beauty, body surveillance, and body shame are key factors for interventions with Asian American women. First, counselors/therapists can help Asian American women identify factors that might promote internalization of the dominant standards of beauty (e.g., family, friends, media) and discuss possible ways to reduce such internalization. Second, Asian American women may benefit from gaining awareness about when and how they engage in body surveillance and its
potential costs (e.g., body shame). Counselors/therapists can encourage clients to pay attention to how their body feels instead of how it looks by engaging in body and mind conscious activities such as yoga and meditation. For instance, Impett, Daubenmeier, and Hirschman (2006) found that body surveillance decreased in a longitudinal data based on a 2-month study with a small group of predominately White women in yoga classes. In a recent study, Dijkstra and Barelds (2011) found that body comparison was related, indirectly through mindfulness, to less body satisfaction with a sample of Dutch women.

**Conclusion**

Results of the current study extend prior findings on the positive roles of perceived bicultural competence in mental health outcomes (David et al., 2009; Wei et al., 2010) to the body image domain. The results also suggest that acculturation may be more salient to Asian American women’s body image concerns than enculturation. Finally, the results replicate the positive relations among sexual objectification experiences, internalization of sociocultural standards of beauty, body surveillance, body shame, and eating disorder symptomatology (see Moradi & Huang, 2008) with Asian American women. Future studies could also examine the replicability of the present results with subgroups of Asian American women that had limited representation in the present study (e.g., Pacific Islander, South Asian women).
APPENDIX A
MODIFIED VERSION OF THE ACCULTURATION RATING SCALE FOR MEXICAN AMERICANS

INSTRUCTIONS: Next to each item, write a number between 1-5 that best applies. Use the following rating scale:

1 = Not at all
2 = Very little or not very often
3 = Moderately
4 = Much or very often
5 = Extremely often or almost always

1. I speak an Asian language.
2. I speak English.
3. I enjoy speaking in Asian language.
4. I associate with Caucasians.
5. I associate with Asians and/or Asian Americans.
6. I enjoy listening to Asian language music.
7. I enjoy listening to English language music.
8. I enjoy Asian language TV.
9. I enjoy English language TV.
10. I enjoy English language movies.
11. I enjoy Asian language movies.
12. I enjoy reading in an Asian language (e.g., books).
13. I enjoy reading in the English language (e.g., books).
14. I write in an Asian language (e.g., letters).
15. I write in the English language (e.g., letters).
16. My thinking is done in the English language.
17. My thinking is done in an Asian language.
18. My contact with an Asian country has been.
19. My contact with the USA has been.
20. My father identifies or identified himself as Asian.
21. My mother identifies or identified herself as Asian.
22. My friends, while I was growing up, were of Asian origin.
23. My friends, while I was growing up, were of Caucasian origin.
24. My family cooks Asian foods.
25. My friends now are of Caucasian origin.
26. My friends now are of Asian origin.
27. I like to identify myself as Caucasian.
28. I like to identify myself as Asian American.
29. I like to identify as Asian.
30. I like to identify myself as an American.
APPENDIX B
PERCEIVED BICULTURAL COMPETENCE

INSTRUCTIONS: Please answer each statement as carefully as possible. Please circle ONE of the numbers to the right of each statement to indicate your degree of agreement or disagreement.

<table>
<thead>
<tr>
<th>Strong Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

1. I can count on both mainstream Americans and people from the same heritage culture as myself.

2. I can communicate my ideas effectively to both mainstream Americans and people from the same heritage culture as myself.

3. I have generally positive feelings about both my heritage culture and mainstream American culture.

4. I am knowledgeable about the history of both mainstream America and my cultural group.

5. I can develop new relationships with both mainstream Americans as well as people from the same heritage culture as myself.

6. It is acceptable for an individual from my heritage culture to participate in two different cultures.

7. I can communicate my feelings effectively to both mainstream Americans and people from the same heritage culture as myself.

8. I am knowledgeable about the values important to mainstream American as well as to my cultural group.

9. I feel comfortable attending a gathering of mostly mainstream Americans as well as a gathering of mostly people from the same heritage culture as myself.

10. An individual can alter his or her behavior to fit a particular social context.

11. I have a generally positive attitude about both my heritage culture and mainstream American culture.

12. It is acceptable for a mainstream American individual to participate in two different cultures.

13. I have strong ties with mainstream Americans as well as people from the same heritage culture as myself.

14. I am proficient in both standard English and the language of my heritage culture (e.g., urban street talk, Spanish, etc.).
15. I can choose the degree and manner by which I affiliate with each culture.

16. I am knowledgeable about the gender roles and expectations of both mainstream Americans and my cultural group.

17. I feel at ease around both mainstream Americans and people from the same heritage culture as myself.

18. I have respect for both mainstream American culture and my heritage culture.

19. Being bicultural does not mean I have to compromise my sense of cultural identity.

20. I can switch easily between standard English and the language of my heritage culture.

21. I have an extensive network of mainstream Americans as well as an extensive network of people from the same heritage culture as myself.

22. I take pride in both the mainstream American culture and my heritage culture.

23. I am confident that I can learn new aspects of both the mainstream American culture and my heritage culture.

24. It is possible for an individual to have a sense of belonging in two cultures without compromising his or her sense of cultural identity.

25. I am knowledgeable about the holidays celebrated both by mainstream Americans and by my cultural group.

26. I feel like I fit in when I am with mainstream Americans as well as people from the same heritage culture as myself.
APPENDIX C
INTERPERSONAL SEXUAL OBJECTIFICATION SCALE

INSTRUCTIONS: 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?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Almost Always</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Almost Always</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Almost Always</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Almost Always</td>
<td>5</td>
</tr>
</tbody>
</table>

5. How often have you noticed someone leering (staring sexually) at your body?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Almost Always</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Almost Always</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Almost Always</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>3</td>
</tr>
<tr>
<td>Frequently</td>
<td>4</td>
</tr>
<tr>
<td>Almost Always</td>
<td>5</td>
</tr>
</tbody>
</table>
9. How often have you been honked at when you were walking down the street?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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?

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX D
THE SOCIOCULTURAL ATTITUDES TOWARD APPEARANCE INTERNALIZATION SCALE

INSTRUCTIONS: Please read each of the following items and select the number that best reflects your agreement with the statement.

1 = completely disagree
2 = somewhat disagree
3 = neither agree nor disagree
4 = somewhat agree
5 = completely agree

1. Women who appear in TV shows and movies project the type of appearance that I see as my goal. [1 2 3 4 5]
2. I believe that clothes look better on thin models. [1 2 3 4 5]
3. Music videos that show thin women make me wish that I were thin. [1 2 3 4 5]
4. I do not wish to look like the models in the magazines. [1 2 3 4 5]
5. I tend to compare my body to people in magazines and on TV. [1 2 3 4 5]
6. Photographs of thin women make me wish that I were thin. [1 2 3 4 5]
7. I wish I looked like a swimsuit model. [1 2 3 4 5]
8. I often read magazines like Cosmopolitan, Vogue, and Glamour and compare my appearance to the models. [1 2 3 4 5]
APPENDIX E
BODY SURVEILLANCE SCALE

INSTRUCTIONS: Please read each of the following items and select the number that best reflects your agreement with the statement. Circle NA only if the statement does not apply to you. Do not circle NA if you don’t agree with the statement. For example, if the statement says “When I am happy, I feel like singing” and you don’t feel like singing when you are happy, then you would circle one if the disagree choices. You would only circle NA if you were never happy.

1 = Strongly Disagree
2 = Moderately Disagree
3 = Slightly Disagree
4 = Neither Disagree nor Agree
5 = Slightly Agree
6 = Moderately Agree
7 = Strongly Agree
NA = Item does not apply

1 I rarely think about how I look. 1 2 3 4 5 6 7 NA
2 I think it is more important that my clothes are comfortable than whether they look good on me. 1 2 3 4 5 6 7 NA
3 I think more about how my body feels than how my body looks. 1 2 3 4 5 6 7 NA
4 I rarely compare how I look with how other people look. 1 2 3 4 5 6 7 NA
5 During the day, I think about how I look many times. 1 2 3 4 5 6 7 NA
6 I often worry about whether the clothes I am wearing make me look good. 1 2 3 4 5 6 7 NA
7 I rarely worry about how I look to other people. 1 2 3 4 5 6 7 NA
8 I am more concerned with what my body can do than how it looks. 1 2 3 4 5 6 7 NA
APPENDIX F
BODY SHAME SCALE

INSTRUCTIONS: Please read each of the following items and select the number that best reflects your agreement with the statement. Circle NA only if the statement does not apply to you. Do not circle NA if you don’t agree with the statement. For example, if the statement says “When I am happy, I feel like singing” and you don’t feel like singing when you are happy, then you would circle one if the disagree choices. You would only circle NA if you were never happy.

1 = Strongly Disagree
2 = Moderately Disagree
3 = Slightly Disagree
4 = Neither Disagree nor Agree
5 = Slightly Agree
6 = Moderately Agree
7 = Strongly Agree
NA = Item does not apply

1. When I can’t control my weight, I feel like something must be wrong with me. 1 2 3 4 5 6 7 NA
2. I feel ashamed of myself when I haven’t made the effort to look my best. 1 2 3 4 5 6 7 NA
3. I feel like I must be a bad person when I don’t look as good as I could. 1 2 3 4 5 6 7 NA
4. I would be ashamed for people to know what I really weigh. 1 2 3 4 5 6 7 NA
5. Even when I can’t control my weight, I think I am an okay person. 1 2 3 4 5 6 7 NA
6. I never worry that something is wrong with me when I am not exercising as much as I should. 1 2 3 4 5 6 7 NA
7. When I’m not exercising enough, I question whether I am a good enough person. 1 2 3 4 5 6 7 NA
8. When I’m not the size I think I should be, I feel ashamed. 1 2 3 4 5 6 7 NA
APPENDIX G
EATING ATTITUDES TEST

INSTRUCTIONS: For each of the following questions, please select the response that best describes you.

1 = Never
2 = Rarely
3 = Sometimes
4 = Often
5 = Usually
6 = Always

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Am terrified about being overweight.</td>
</tr>
<tr>
<td>2</td>
<td>Avoid eating when I am hungry.</td>
</tr>
<tr>
<td>3</td>
<td>Find myself preoccupied with food.</td>
</tr>
<tr>
<td>4</td>
<td>Having gone on eating binges where I feel that I may not be able to stop.</td>
</tr>
<tr>
<td>5</td>
<td>Cut my food into small pieces.</td>
</tr>
<tr>
<td>6</td>
<td>Aware of the calorie content of foods that I eat.</td>
</tr>
<tr>
<td>7</td>
<td>Particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc.)</td>
</tr>
<tr>
<td>8</td>
<td>Feel that others would prefer if I ate more.</td>
</tr>
<tr>
<td>9</td>
<td>Vomit after I have eaten.</td>
</tr>
<tr>
<td>10</td>
<td>Feel extremely guilty after eating.</td>
</tr>
<tr>
<td>11</td>
<td>Am preoccupied with a desire to be thinner.</td>
</tr>
<tr>
<td>12</td>
<td>Think about burning up calories when I exercise.</td>
</tr>
<tr>
<td>13</td>
<td>Other people think that I am too thin.</td>
</tr>
<tr>
<td>14</td>
<td>Am preoccupied with the thought of having fat on my body.</td>
</tr>
<tr>
<td>15</td>
<td>Take longer than others to eat my meals.</td>
</tr>
<tr>
<td>16</td>
<td>Avoid foods with sugar in them.</td>
</tr>
<tr>
<td>17</td>
<td>Eat diet foods.</td>
</tr>
<tr>
<td>18</td>
<td>Feel that food controls my life.</td>
</tr>
<tr>
<td>19</td>
<td>Display self-control around food.</td>
</tr>
<tr>
<td>20</td>
<td>Feel that others pressure me to eat.</td>
</tr>
<tr>
<td>21</td>
<td>Give too much time and thought to food.</td>
</tr>
<tr>
<td>22</td>
<td>Feel uncomfortable after eating sweets.</td>
</tr>
<tr>
<td>23</td>
<td>Engage in dieting behavior.</td>
</tr>
<tr>
<td>24</td>
<td>Like my stomach to be empty.</td>
</tr>
<tr>
<td>25</td>
<td>Enjoy trying new rich foods.</td>
</tr>
<tr>
<td>26</td>
<td>Have the impulse to vomit after meals.</td>
</tr>
</tbody>
</table>
APPENDIX H
DEMOGRAPHIC QUESTIONNAIRE

INSTRUCTIONS: Please tell us a little about yourself. This information will be used only to describe the sample as a group.

1. Age ________

2. Sex/Gender ________

3. Your current height: _____feet _____inches

4. Your current weight in pounds: _______

5. Please indicate your racial/ethnic group:
   ___ Chinese
   ___ Filipino
   ___ Hmong
   ___ Indian
   ___ Japanese
   ___ Korean
   ___ Laotian
   ___ Pacific Islander
   ___ Taiwanese
   ___ Vietnamese
   ___ Other (please specify): __________

6. How would you describe your generational status:
   ___ First generation
   ___ 1.5 generation
   ___ Second generation
   ___ Third generation
   ___ Fourth generation
   ___ Fifth generation
   ___ Unknown
   ___ Other (please specify): __________

7. How many years have you lived in the United States: __________

8. In what country were you born: ____________

9. In what country were your parents born: ____________

10. With what language(s) are you fluent: ____________
11. Yearly household income (income of those on whom you rely financially):

___ Below $10,000
___ $10,001 to $20,000
___ $20,001 to $30,000
___ $30,001 to $40,000
___ $40,001 to $50,000
___ $50,001 to $60,000
___ $60,001 to $70,000
___ $70,001 to $80,000
___ $80,001 to $90,000
___ $90,001 to $100,000
___ $10,001 to $110,000
___ above $110,000

12. Your current social class (please select the one best descriptor):

___ lower class
___ working class
___ middle class
___ upper middle class
___ upper class

13. Your sexual orientation (please check the one best descriptor):

___ Exclusively gay
___ Mostly gay
___ Bisexual
___ Mostly Heterosexual
___ Exclusively Heterosexual
LIST OF REFERENCES


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BIOGRAPHICAL SKETCH

Yu-Ping Huang was born and grew up in Taoyuan City, Taiwan. She earned her Bachelor of Arts in educational psychology and counseling from National Taiwan Normal University in 2002. She received a Master of Arts in educational psychology and counseling from the University of Missouri-Columbia in 2005. She completed her pre-doctoral clinical internship at the University of Southern California in 2010 and obtained her PhD in counseling psychology from the University of Florida in 2011. Her research focuses on 1) women's eating problems, particularly related to self-objectification; and 2) multicultural issues (including race/ethnicity, gender, and international students).