ABSTRACT

Dissertation Title:	THE ROLE OF RACIAL OBJECTIFICATION ON ASIAN AMERICAN WOMEN'S DISORDERED EATING AND DEPRESSION: A PERSON-CENTERED APPROACH
	Jennifer Brady, Doctor of Philosophy, May 2020
Dissertation directed by:	Derek K. Iwamoto, Ph.D., Department of Psychology

Objectification theory has enhanced understanding of disordered eating and depression among college women, yet the experiences of Asian American women (AAW) have comparably received limited empirical attention. Investigating AAW is important because emerging evidence suggests that AAW, compared to other racial groups, report similar, if not elevated, rates of eating disorder symptoms and depression, yet do not seek out or receive the services they need. Additionally, AAW experience distinct forms of both sexual and racial objectification that can increase evaluation of not only general body shape and size, but also racialized features (e.g., face, skin-tone, and eye-size). The present study tested a culture-specific extension of objectification theory using a person-centered approach. The aims of this study were to a) identify subgroups (e.g., latent classes) of AAW ($N = 554$) based upon their general and group-specific self-objectification processes, b) examine the racial objectification predictors (e.g., general racism, gendered racial microaggressions and racial identity) of latent class membership,

and c) examine the extent to which these latent classes are related to disordered eating and depressive symptomatology. Using latent class analysis, four classes were identified: a) High Self-Objectification class (37.2%), reported highest levels across all indicators, b) Moderate Self-Objectification class (40.1%), reported mid-range levels of self-objectification across all indicators, c) Body Conscious class (7.3%), reported high levels of body consciousness and body shame, and d) Appearance Acceptance class (15.5%), reported lowest levels across all indicators. The High Self-Objectification class reported significantly higher rates of disordered eating and depression. Women were more likely to be in the High Self-Objectification class if they experienced higher levels of gendered racial microaggressions and racial dissonance. Results can advance the literature by demonstrating significant with-in group variability in self-objectification processes among AAW and offer valuable clinical implications for targeting high-risk groups.

THE ROLE OF RACIAL OBJECTIFICATION ON ASIAN AMERICAN WOMEN'S DISORDERED EATING AND DEPRESSION: A PERSON-CENTERED APPROACH

By

Jennifer Brady

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2020

Advisory Committee:
Dr. Derek K. Iwamoto, Chair
Dr. Clara Hill
Dr. Matthew Miller
Dr. Nazish Salahuddin
Dr. Jennifer Wessel
Dr. Richard Shin, Dean's Representative

Acknowledgements

My sincerest gratitude to my committee members for their wisdom, encouragement, and unwavering commitment to not only my professional growth, but also my personal growth. Each of you embodied the true spirit of a great mentor. With your modeling, I hope to pay this same caliber of mentorship forward to my future students. Derek, thank you for challenging me to think boldly and bravely; without your support, this project would not be the same. Jeanette, thank you for your openness, support, and trust; without your support, this project would not have been possible. To my parents, words cannot truly capture how grateful I am to be your daughter. You both taught me the values of hard-work, perseverance, self-assurance, and faith; these were my lifelines throughout this project, and more importantly, this program. And finally, a very special thank you to my husband, Joe. You are my rock and my best friend. Without you, none of this matters.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

Disordered eating and depression are significant public health problems, especially on college campuses, and have been linked to many deleterious health outcomes, including substance use, anxiety, and death (Preti, Camboni, & Miotto, 2011; Wade, Keski-Rahkonen, & Hudson, 2011). College women in particular experience disproportionally higher rates of disordered eating and depression compared to college men (Kessler, 2003; Marques et al., 2011). Although there are many factors that might explain these health disparities, objectification theory adds to our understanding by examining the contextual and intrapersonal factors that exacerbate risk (Fredrickson & Roberts, 1997, McKinley & Hyde, 1996; Moradi, Dirks, & Matteson, 2005; Moradi & Huang, 2008). Objectification theory posits that women are routinely subject to experiences of sexual objectification, wherein women's body or body parts are separated from their personhood and they are treated as objects of sexual desire (Frederickson & Roberts, 1997). In response to recurrent experiences of objectification, women may learn to self-objectify such that they adopt a third-person perspective on their bodies and value their bodies for how they look, rather than how they feel or what their bodies can do (Frederickson & Roberts, 1997; McKinley & Hyde, 1996; Tylka & Hill, 2004). Self-objectification predominately manifests through body surveillance, or the habitual monitoring of one's physical appearance, yet can also manifest through feelings of body shame that arise when women fall short of idealized standards of beauty. To the extent these unrealistic beauty standards are internalized, women might engage in disordered eating as a way to achieve beauty ideals.

Research has consistently supported the importance of understanding self-objectification processes influence on women's well-being. Daily diary studies confirm that relative to men, women report more sexual objectification experiences and are more negatively impacted following these incidents (Swim et al., 2001). Additionally, some components of self-objectification, such as body surveillance and internalized sociocultural standards of beauty, have been repeatedly linked to increases in disordered eating (Grabe, Hyde, & Lindberg, 2007; Moradi, Dirks, & Matteson, 2005; Tiggemann & Williams, 2012; Tylka & Hill, 2004). Prior studies also found that self-objectification is uniquely related to depressive symptoms beyond other constructs, perhaps by increasing feelings of inadequacy, hopelessness, or body shame (Muehlenkamp & Saris-Baglama, 2002). Even though researchers have examined the role of self-objectification on disordered eating and depression among diverse groups of women, the experiences of Asian American women (AAW) have comparably received limited empirical attention. Investigating AAW is important because emerging evidence suggests that AAW, compared to other racial groups, report similar, if not elevated, rates of eating disorder symptoms (Franko et al., 2007) and depression (Lam et al., 2004, Yeung et al., 2004), yet do not seek out or receive the services they need (Sue et al., 2012). Additionally, AAW experience distinct forms of both sexual and racial objectification (e.g., racial discrimination) that may hinder well-being. The way in which these objectification experiences become internalized might contribute to individual differences in how self-objectification manifests.

Accordingly, we aim to advance Cheng and colleagues' (2017) racially expanded model of objectification theory among AAW by using a person-centered approach. Current

studies on objectification theory tend to focus on AAW as a broad racial group and examine general self-objectification processes, such as general body surveillance, that might occur across racial/ethnic groups (Cheng, 2014; Cheng, Tran, Miyake, & Kim, 2017). Although these studies have made significant advancements to the literature, they limit our ability to examine meaningful within-group differences in self-objectification processes and overlook group-specific manifestations of self-objectification, such as skin-tone monitoring or eye-size/shape surveillance, that are unique to AAW (Moradi, 2010). A person-centered approach that identifies the group-specific self-objectification processes salient for AAW, and the distinct forms of racial objectification directed toward AAW, is imperative to advance literature on AAW and their mental and physical health. The purpose of this study is to a) identify subgroups (e.g., latent classes) of AAW based upon their general and group-specific self-objectification processes, b) examine the racial objectification predictors (e.g., general racism, gendered racial microaggressions, and racial identity) of latent class membership, and c) examine the extent to which these latent classes are related to disordered eating and depressive symptomatology.

Sexual Objectification and Self-Objectification

Objectification theory has been highly influential for understanding the shared mechanisms that elevate women's risk for experiencing negative mental health outcomes, including disordered eating and depression. Living in a culture that repeatedly sexually objectifies women's bodies may lead women to internalize sociocultural messages about attractiveness (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). Internalization, in turn, can trigger a cascade of self-objectification processes, wherein women treat themselves as objects to be looked at and evaluated, which can then increase risk for

disordered eating and depression. Many of the theoretical tenets of objectification theory have been tested and supported (for a review see Moradi & Huang, 2008), yet most of the research uses samples of European American women, which limits the generalizability of this theory to racial ethnic minority women.

Racial Objectification and Self-Objectification

Although women have some degree of shared social experience, women's other identities, such as race or ethnicity, may give rise to distinct experiences of oppression that influence self-objectification processes. In order to expand the utility of objectification theory to diverse subgroups of women, it is important to examine how other forms of prejudice, such as racial discrimination, intersect with sexual objectification experiences. This is relevant for AAW because they experience both sexual objectification, through sexually objectifying media images and pressures to be thin, and also racial objectification (i.e., racial discrimination), through degrading stereotypes and invalidations about their Asian identities (i.e., exotic, submissive, doll-like objects). Racial objectification can also communicate messages to AAW that their appearance and personhood are unacceptable and devalued (Armenta et al., 2013; Vaes, Paladino, & Puvia, 2011; Yokoyama, 2007). When confronted with experiences of rejection and marginalization, AAW may be motivated to internalize societal standards of beauty and habitually monitor their bodies and race-related features in an effort to gain inclusion (Hall, 1995). Given AAW have unique racialized and gendered body image experiences, more research is needed to understand how contexts of sexual and racial objectification might impact AAW's risk for disordered eating and depression.

Cheng and colleagues (2017) created a racially-expanded model of objectification theory to examine how racial stressors and sexual objectification intertwine to influence AAW's disordered eating. Building upon Moradi's (2010) extension, they examined the role of perceived discrimination, racial teasing, and perpetual foreigner racism on AAW's self-objectification processes and disordered eating. They found that the three racial stressors were indirectly associated to disordered eating through the self-objectification processes of media internalization, body surveillance, and body shame. Despite the significant strengths and contributions of this study, it is limited in several ways. Foremost, the examined racial stressors do not explicitly account for intersectional experiences of racism and sexism among AAW and thus may not capture specific racist and gendered stereotypes directed toward them (e.g., being depicted as submissive and exotic). Second, the measures of body surveillance do not account for group-specific manifestations of self-objectification that may be especially salient for AAW. Last, AAW were treated as a broad homogenous group which neglects to consider important within-group distinctions that could be used to identify subgroups that are most at risk. In an effort to extend and improve the specificity of Cheng and colleagues (2017) racially-expanded model, we examined three pertinent, yet understudied, contexts of racial objectification applicable to AAW: namely general discrimination, gendered racial microaggressions, and racial identity, as predictors of distinct classes of self-objectification. We also examined how distinct classes of self-objectification are related to disordered eating and depressive symptomatology. In the following sections, we review the literature on each racial objectification experience.

Racial discrimination. A growing body of literature has demonstrated the harmful effects of racial discrimination on AAW's disordered eating and depressive symptomatology. Perceived discrimination, as a form of racial objectification, can undermine AAW's uniqueness and sense of humanity, which might contribute to the devaluation of their appearance and self-denigration of race-related features (Moradi, 2010, 2013). A few studies suggest discriminatory experiences can directly predict disordered eating (Cheng, 2014) because behaviors like restricting food or purging may serve to as a coping mechanism to reduce tension or divert attention (Smart et al., 2011). Other studies document the indirect effects of perceived discrimination on disordered eating (Cheng et al., 2017) and theorize that perceived discrimination may heighten awareness of one's minority status, which might motivate AAW to protect themselves by monitoring their appearance in anticipation for how others will evaluate them (Kawamura, 2011). Additionally, Tran and colleagues (2017) examined how skin color (e.g., light to dark) might moderate the associations between perceived prejudice and psychological functioning, including depression. They found that prejudice was linked to greater levels of depression symptoms among AAW with darker, but not lighter, self-reported skin color. These results underscore not only the salience of skin color in predicting AAW's psychological distress, but also the importance of understanding how skin color may intersect with other self-objectification constructs, such as media internalization, to exacerbate risk.

Gendered racial microaggressions. While it is important to examine overt forms of racial discrimination, it is imperative to exclusively capture more subtle, everyday forms of discrimination, also known as microaggressions (Sue et al., 2010).

Microaggressions are brief verbal, behavioral, or environmental slights that communicate hostile or derogatory messages toward non-dominant groups (Sue, Capodilupo, et al., 2007). Although multiple studies have documented the relation between racial microaggressions and disordered eating or depression, the current measures often focus on a singular identity (e.g., being a person of color), rather than understanding how a person's multiple, intersecting identities (e.g., being an Asian American woman), might influence their experience with microaggressions (Nadal et al., 2015). Given that traditional conceptualizations of oppression (e.g., racism and sexism) do not act independently, it is critical to understand how interlocking forms of oppression prompt self-objectification and, in turn, promote disordered eating and depression. Keum and colleagues (2018) created the Gendered Racial Microaggressions Scale for Asian American Women (GRMSAAW) to examine AAW's experience with microaggressions at the intersections of gender and race. They found that the frequency of gendered racial microaggressions among AAW accounted for additional unique variance in depressive symptoms above and beyond perceived racial microaggressions and sexist events. As with perceived discrimination, gendered racial microaggressions are also theorized to trigger body surveillance, media internalization, and body shame by promoting a sense of "othering," denying individual's uniqueness, and reinforcing Whiteness as desirable. This could increase AAW's scrutiny of both their body and specific race-related features, such as eye-size/shape or face size/shape, which might motivate unhealthy attempts, like disordered eating, to change one's appearance (Yokoyama, 2007).

Racial identity. In addition to perceived discrimination and gendered racial microaggressions, racial identity is another theoretically important factor related to

AAW's internalized racism and psychological adjustment (Iwamoto & Lui, 2010; Tan & Alvarez, 2004). Racial identity helps explain individual's awareness of racism and how individuals adjust to and negotiate contexts of oppression (Helms, 1995). Individuals with less complex racial identity schemas are theorized to have poorer outcomes (Alvarez & Helms, 2001), such as increases in racism-related stress (Chen et al., 2006). Despite the importance of understanding Asian Americans' racial identity experiences (Alvarez, Juang, & Liang, 2006), no studies to date have investigated how racial identity influences AAW's appearance evaluation in contexts of racism. Research conducted with African American women suggests that a positive and affirming racial identity can buffer against the effects of sexism and racism and can promote more body satisfaction and less disordered eating (Hesse-Biber, Livingstone, Ramirez, Barko, & Johnson, 2010; Rogers Wood & Petrie, 2010). Conversely, Watson and colleagues (2013) found that when women experienced high levels of sexual objectification, but low levels of an accepting and affirming Black identity, they were more likely to internalize dominant standards of beauty, which was then associated with increased body surveillance, body shame and disordered eating. Investigating racial identity could aid in elucidating how racial objectification experiences are interpreted and incorporated into AAW's identities, which might attenuate or heighten risk for self-objectification.

Value of Person-Centered Approach

In addition to examining how multiple contexts of oppression give rise to distinct objectification experiences across groups of women, it is essential to examine within-group differences in how objectification experiences become internalized. Frederickson and Roberts (1997) proposed that objectification experiences do not affect all women

equally and thus women will vary on the extent to which they self-objectify their own bodies. Furthermore, they asserted that women's social identities, personal histories, and physical attributes can contribute to individual differences in the *degree* and *type* of self-objectification women engage in. Yet despite the theorized intraindividual variability in women's experiences, all prior research examining self-objectification has traditionally used a variable-centered approach, wherein exposure to contexts of sexual objectification has been consistently linked to deleterious outcomes (Moradi, 2010; Stice, 2002). Using a person-centered approach, such as Latent Class Analysis (LCA), that focuses on individuals as the unit of analysis rather than the relations between variables, can capture the heterogeneity in self-objectification processes. Furthermore, a person-centered approach can be used to clarify whether current conceptualizations of self-objectification adequately capture the experiences of AAW. Given prior studies suggest AAW evaluate their appearance based upon skin tone, face shape and size, and eye size and shape, in addition to body shape/size, it is important to examine both general and group-specific manifestations of self-objectification (Frederick et al., 2016, Kim, Seo, & Baek, 2014, Tran et al., 2017). A person-centered approach can aid in elucidating subgroups of women based upon the type (i.e., general vs group-specific) and degree (i.e., high vs low frequency) of self-objectification, and also the racial objectification correlates of these subgroups. Importantly, this approach also allows for the identification of high-risk subgroups, which could aid in targeted prevention interventions. Through this novel method, this study can provide a more nuanced and meaningful understanding of how racial objectification experiences may become internalized by AAW.

Present Study

The primary goal of the present study was to test a racially-expanded model of objectification theory among AAW using a person-centered approach. In addition to measuring general body surveillance, this study extended prior research by including additional measures on group-specific forms of surveillance. Specifically, we identified distinct classes of AAW based upon their general and group-specific self-objectification processes and then investigated salient racial objectification contexts associated with these classes. Moreover, we examined how these distinct classes correlate with eating disorder and depressive symptomatology. Based on previous studies investigating disordered eating and dieting among Asian women (Kalchi, 2010; Thomas et al., 2015), we hypothesize there will be 3-4 distinct classes that might differ in type of objectification and frequency. Additionally, we hypothesize more frequent experiences of perceived discrimination and gendered racial microaggressions would result in distinct high-risk classes of women who engage in more frequent group-specific surveillance (Cheng et al., 2017). These high-risk classes, compared to low-risk classes, would be associated with higher levels of disordered eating and depression. Further, drawing upon Watson and colleagues' (2013) study, we hypothesize that women with a more affirmed or accepting Asian American racial identity, characterized by awareness of racism and cognitive flexibility around race and racial issues, might engage in less frequent group-specific surveillance and internalization of sociocultural standards of beauty. Last, prior qualitative work suggests that AAW who genuinely accepted and appreciated their bodies in spite of flaws were better able to challenge unrealistic beauty ideals (Brady et al., 2017). Thus, we hypothesized that AAW whom were in a lower risk class, with lower

endorsement of media internalization specifically, would have higher levels of body appreciation. To avoid possible confounding associations among racial objectification contexts, self-objectification, and the outcome variables, we controlled for Body Mass Index (BMI) and generational status (e.g., yourself or your sibling were the first born in the United States). Previous studies have found that BMI covaries positively with disordered eating (Cheng, 2014) and that second-generation AAW reported significantly more disordered eating than their first and third-generation and above individuals (Tsong & Smart, 2015).

Chapter 2: Method

Participants

Participants were recruited from two large public universities in the United States, namely the University of Maryland, College Park and the University of California, Irvine. The University of California, Irvine, was selected because it has a high prevalence of AAW. We were also interested in determining if regional differences existed in the study variables given some research has shown that in regions with large Asian American populations, such as Southern California, AAW reported lower evaluations of their appearance than White women (Forbes & Frederick, 2008). The online survey was accessed by 713 people. Prior to completing the survey, all participants had to complete a pre-screen that asked if they identified as an Asian American woman, are between the ages of 18-25, and currently live in the U.S. The final sample (N = 554) excluded participants who did not complete any of the measures after the pre-screen (n = 92), who did not answer two validity check items correctly (n = 66), or who identified as men (n = 1). Ages ranged from 18-25 years old (M = 19.92, SD = 1.56). The majority of participants identified as women (98.2%, n = 544), and the remainder identified as gender non-conforming or androgynous. About 20.8% (n = 115) were Freshman, 25.1% (n = 139) were Sophomores, 27.1% (n = 139) were Juniors, 24.5 % (n = 150) were Seniors, .5% (n =3) were Graduate students, and .9% (n = 5) were Other. The sample was diverse in ethnicity: Chinese (33%, n = 183), Vietnamese (21.7%, n = 120), Filipino (15.5%, n = 86), Korean (15.2%, n = 84), Indian (6.5%, n = 36), multiracial/multiethnic (6.1%, n = 33), Taiwanese (5.1% n = 28), Japanese (2.9% n = 16) and the remaining 8.8 % of the sample collectively identified as Bangladeshi, Cambodian, Hmong, Indonesian, Laotian,

Malaysian, Native Hawaiian, Pakistani, Thai, and Other. In terms of sexual orientation, about 80.5% (n = 446) identified as heterosexual, 9.4% (n = 52) as bisexual, 2.8% (n = 16) as uncertain or questioning, and the remainder identified as asexual, queer, lesbian, or other. Majority of the sample (62.6%, n = 347) identified as second generation (born in the U.S.), followed by 20.4% (n = 113) first generation (born outside U.S.), 9.4% (n = 51) 1.5 generation (immigrated to U.S. between 6-12 years old), 5.6% (n = 31) third generation (born in U.S. and at least both parents born in U.S.), and the remaining 1.1% were adopted or reported other. In terms of annual household income, 16.2% (n = 90) reported earning less than $24,999 per year, 22.6% (n = 125) reported earning between $24,999 and $49,999 per year, 21.8% (n = 121) reported earning between $50,000 and $99,999 per year, 23.1% (n = 128) reported earning $100,000 or more. The rest preferred not to report their annual household income. About 9.0% of women were in a sorority and about 63.7% of women reported their closest friends were most Asian Americans.

Procedure

The study was approved by the two University's Institutional Review Boards. At both institutions, multiple recruitment strategies were used to increase participation. The study was advertised through both universities' SONA systems, university email listservs, and recruitment fliers posted in public spaces on campus. Additionally, participants were recruited via email from various Asian American and Pacific Islander Student Involvement Organizations on each campus, such as alpha Kappa Delta Phi, as well as from various undergraduate courses in the Department of Psychology and the Asian American Studies program (See Appendix B). Across universities, participants were asked to complete an online survey comprised of study variables, demographic

items, and an informed consent administered via Qualtrics. Participants recruited via SONA at both universities received one point of extra credit for participation. Participants who were not recruited via SONA could elect to share their email address at the end of the survey to enter a raffle for a chance to win one of forty $25 Amazon gift cards. The survey took approximately 30-35 minutes to complete and included two validity check items (e.g., "Please choose '3' for this item."). At the end of the survey, all participants were given a referral sheet listing the names, phone numbers, websites and addresses (if applicable) for clinics/practitioners near College Park, MD and Irvine, CA that offer general mental health services to all patients, as well as services offered to UMD students (UMD Counseling center and Mental Health Services) and UCI students (UCI Counseling Center and Student Health Center). Last, affirming online resources specific to the Asian American community, such as those discussing body positivity and resiliency, were included as well (See Appendices M-N).

Measures

Demographics. Participants were asked to complete a series of demographic measures including their age, ethnicity, college status, sorority status (e.g., yes/no), class background, BMI, generational status, and close friend group. Participant's BMI was calculated using a self-report measure of weight and height (kg/m^2). Participants' BMI ranged from 12.43 to 42.51 (M = 22.11, SD = 3.7). According to the Expert Panel on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults (1998), BMI of 18.5 or less = underweight, 18.5 to 24.9 = normal weight, 25.0 to 29.9 = overweight, 30.0 or above = obese. This BMI standard is applicable to all U.S. population groups. Generational status was assessed through self-reporting into categories of first-

generation (born in another country and moved to the United States after the age of 12 years), 1.5 (were born in another country and moved to the United States before the age of 12 years), second (born in the United States and at least one parent was born in another country), and third generation and above (born in the United States and parents born in the United States) (Tsong & Smart, 2015).

Racial discrimination. The eight-item Subtle and Blatant Racism Scale for Asian American College Students (SABR-AA, Yoo et al., 2010) was used to measure racial discrimination. The SABR-AA measures experiences of discrimination attributable to implicit or explicit racial bias or stereotypes using a five-point scale (1=*Almost never*, 5=*Almost always*). Higher scores indicate higher levels of racial discrimination. A sample item includes "In America, I am called names such as "chink, gook, etc because I am Asian." The SABR-AA demonstrated adequate two-week test-retest reliability estimates of .71. Convergent validity was demonstrated through significant positive relationships between measures of depression, anxiety, stress, and racial discrimination (r =.32-.73) and discriminant validity was demonstrated through non-significant relationships with color-blind attitudes. Good internal consistency has been reported for college students (α =.82-.88; Cheng et al., 2017; Yoo et al., 2010). Cronbach's alpha in the present study was .85.

Gendered racial microaggressions. The 22-item Gendered Racial Microaggressions Scale for Asian American Women (GRMSAAW; Keum et al., 2018) was used to measure the distinct intersectional microaggressions that are specific to AAW based upon their Asian and female identities, rather than examining general racial microaggressions experienced by both Asian American women and men (e.g., "You

speak English well"). For this study, only the frequency of perceived gendered racial microaggressions was assessed. The GRMSAAW consists of four subscales (a) Ascription of Submissiveness ("Others expect me to be submissive"), (b) Assumption of Universal Appearance ("Others have suggested that all Asian American women look alike"), (c) Asian Fetishism ("Others express sexual interest in me because of my Asian appearance), and (d) Media Invalidation ("I rarely see Asian American women in the media"). Frequency was assessed by asking participants how often they generally experienced the events throughout their lifetime (0= *Never* to 5=*Always*). Convergent validity was demonstrated through significant positive correlations (r = .29 -.60) between the GRMSAAW total score and scores of perceived racial microaggression and sexist events. The GRMSAAW total score for frequency scale uniquely predicted depressive symptoms above and beyond measures of perceived racial microaggressions or sexist events (Keum et al., 2018). In the current study, the total scale score was used. Scores showed good reliability (α = .93).

Racial identity. The 12-item People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995; Miller at al., 2016) scale was used to assess the manner in which individuals identify with their racial group in the context of racial oppression. The PRIAS consists of four subscales (a) Conformity ("I limit myself to White activities"), (b) Dissonance ("I'm not sure where I really belong"), (c), Immersion-Emersion ("When people of my race act like Whites I feel angry") , and (d) Internalization ("Every racial group has some good people and some bad people"). PRIAS items are rated on a five-point scale (1=*Strongly disagree* to 5= *Strongly agree*), with higher scores reflecting a stronger endorsement of that respective identity status. PRIAS scores have been linked to

Asian American's psychological well-being (Iwamoto & Lui, 2010) and awareness of racism (Alvarez & Helms, 2001). Findings demonstrate that the 12-item 4-factor PRIAS measurement model operates in an equivalent manner across generational status, ethnicity, and gender (Miller et al., 2016). In a sample of Asian American and Asian international college students, the internal consistency estimate for the Conformity scale was .71, Dissonance was .70, Immersion Emersion was .82, and Internalization was .76 (Iwamoto & Lui, 2010). In the current study, the estimates were as follows: Conformity (α = .62), Dissonance (α = .82), Immersion Emersion (α = .60), and Internalization (α = .58).

Media Internalization. The nine-item Internalization-General subscale of the Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ-3; Thompson et al., 2004) assesses the tendency to internalize beauty ideals portrayed in the media (e.g., "I would like my body to look like the models who appearance in magazines"). Items are rated on a five-point scale (1=*Definitely disagree* to 5= *Definitely agree*) with higher scores indicating higher levels of media internalization. Convergent validity has been established through positive associations between measures of body dissatisfaction and eating disorders (Thompson et al., 2004). Strong internal consistency estimates have been reported in samples of Asian American college women (α =.92-.95; Cheng, 2014; Cheng et al., 2017). Similarly, good reliability was found in the present study (α = .93).

General body surveillance. The eight-item Body Surveillance subscale of the Objectified Body Consciousness Scale (OBCS-Surv, McKinley & Hyde, 1996) was used to measure general body surveillance. The OBCS-Surv assesses women's tendency to view their bodies as an outside observer using a seven-point scale (1=*Strongly disagree*

to 7=*Strongly agree*), with higher scores indicating higher levels of habitual body monitoring. Sample items include "During the day, I think about how I look many times" and "I think more about how my body feels than how my body looks" (reverse coded). Body surveillance has been negatively correlated with body esteem (r = -.26; McKinley & Hyde, 1996) and positively correlated with body shame and eating disorder symptoms among U.S. Muslim women (Tolaymat & Moradi, 2011). Sufficient internal consistency has been found in samples of Asian American college women (α =.82; Cheng et al., 2017) and South Korean college women (α = .80; Kim, Seo, & Baek, 2014). In the current study, Cronbach's alpha was .81.

Group-specific surveillance. To assess the culturally-specific forms of surveillance for AAW, we measured monitoring of skin tone, face shape and size, and eye shape and size.

First, to assess skin-tone monitoring, we used the Buchanan and colleagues (2008) eight-item Skin-Tone-Specific Surveillance scale. Previous research has highlighted that skin tone is a pertinent factor related to AAW's mental health (Tran et al., 2017). Items included (a) "I often worry about how my skin color looks to other people"; (b) "I often compare my skin color with that of other people"; (c) "I rarely think about how my skin color looks"; (d) "I often think about how much lighter or darker my skin is than other people's"; (e) "I often wonder whether or not my skin color is attractive to other people"; (f) "I often think about how my skin color affects my looks"; (g) "I often feel conscious of how my skin color looks to other people"; and (h) "I often worry that my skin color is unattractive to other people." Items are rated on a seven-point scale (1=*Strongly disagree* to 7=*Strongly agree*), with higher scores indicating higher

levels of skin tone monitoring. Skin tone monitoring was positively correlated to general shame regarding body shape and size (Buchanan et al., 2008). An alpha of .95 was observed in the current study.

Second, to assess monitoring of face shape and size, we used, and added three additional items, to Kim and colleagues (2014) eight-item Face-Surveillance scale. Items included (a) "I often worry about how my face size and shape looks to other people"; (b) "I often compare my face size and shape with that of other people"; (c) "I rarely think about how my face size and shape looks"; (d) "I often think about how much smaller or larger my face is than other people's"; (e) "I often wonder whether or not my face size and shape is attractive to other people"; (f) "I often think about how my face size and shape affects my looks"; (g) "I often feel conscious of how my face size and shape looks to other people"; (h) "I often worry that my face size and shape is unattractive to other people." Three items were added to assess for overall facial surveillance: (i) "I often wonder about how my face looks to other people"; (j) "I often compare my face to other people's"; (k) "I often worry that my face is unattractive to other people." Items are rated on a seven-point scale (1=*Strongly disagree* to 7=*Strongly agree*), with higher scores indicating higher levels of face shape and size monitoring. In Kim and colleagues (2014) study, face size and shape surveillance scores correlated positively eating disorder symptoms (r =.37) and Cronbach's alpha was .94. In the current study, Cronbach's alpha was .95.

Third, to assess surveillance of eye shape and size, we created eight additional items modeled off of the aforementioned group-specific surveillance scales. Items included (a) "I often worry about how my eyes look to other people"; (b) "I often

compare my eye size and shape with that of other people"; (c) "I rarely think about how my eyes look"; (d) "I often think about how much smaller or larger my eyes are than other people's"; (e) "I often wonder whether or not my eye size and shape are attractive to other people"; (f) "I often think about how my eye size and shape affects my looks"; (g) "I often feel conscious of how my eye size and shape looks to other people"; (h) "I often worry that my eye size and shape is unattractive to other people." The first author generated the item pool and then all three authors screened and refined the items for how well they reflected habitual monitoring of eye size and shape. Items are rated on a seven-point scale (1 = *Strongly disagree* to 7 = *Strongly agree*), with higher scores indicating greater surveillance on eye size and shape. The eight items were subjected to an exploratory factor analysis using principal axis factoring with an oblimin rotation. The eight items loaded onto one factor (eigenvalue = 6.13), and all eight items had factor loadings greater than .40, accounting for 73.49% of the variance. Strong internal consistency estimates were found in the current study $\alpha = .96$.

Body shame. The eight-item Body Shame subscale of the Objectified Body Consciousness Scale (OBSC-Shame; McKinley & Hyde, 1996) assesses the feeling of shame that arises when the body does not conform to cultural beauty standards. A sample item is "I feel like I must be a bad person when I don't look as good as I could" rated on a seven-point scale (1=*Strongly disagree* to 7=*Strongly agree*), with higher scores indicating higher levels of body shame. Body shame scores showed a strong negative correlation with body esteem ($r = -.46$) and accounted for significant variance in dieting and restricted eating (McKinley & Hyde, 1996). Cronbach's alphas for body shame items ranged from .70 to .84 across samples of college women (Kim et al., 2006; McKinley &

Hyde, 1996) and .80 to .81 in samples of South Korean and Asian American college women (Cheng et al., 2017; Kim, Seo & Baek, 2014). Cronbach's alpha in the current study was .87.

Eating disorder symptomatology. The Eating Attitudes Test-26 (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982) is one of the most widely used measures assessing symptoms and characteristics of disordered eating. It is a 26-item measure that evaluates the frequency of engaging in disordered eating behaviors such as, "I vomit after I have eaten" or "I Am preoccupied with the thought of having fat on my body" (1= *Never* to 6= *Always)*. The EAT-26 has been positively correlated with internalization of the thin ideal, body surveillance, and body shame in samples of Asian American college women (Cheng et al.,2017; Phan & Tylka, 2006). Strong internal consistency estimates have been found in samples of Asian American college women (α =.91; Cheng, 2014; Cheng et al., 2017). Similarly, good reliability was found in the current sample (α = .90).

Depressive symptomatology. The nine-item Patient Health Questionnaire (PHQ-9; Kroenke & Spitzer, 2002) was used to assess depressive symptomatology. Participants are asked to assess the frequency over the past two weeks (0= *Not at all* to 3= *Nearly every day*) to which they have experienced symptoms like "feeling down, depressed, or hopeless" or "little interest or pleasure in doing things." Scores range from 0 to 27 with higher scores indicating more severe depression. PHQ-9 scores have demonstrated strong criterion validity against an independent structured mental health professional (MHP) interview (Kroenke & Spitzer, 2002). Validity and measurement invariance of PHQ-9 with Asian American college students has been supported (Keum, Miller, & Inkelas, in press). Cronbach's alpha in the current study was .90.

Body appreciation. The 10-item Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015) was used to assess individual's positive attitudes toward their bodies, including acceptance and respect for their bodies. Participants are asked to rate whether the item is true for them 1 = *Never*, 2 = *Seldom*, 3 = *Sometimes*, 4 = *Often*, or 5 = *Always*. A sample item is "I appreciate the different and unique characteristics of my body." Higher scores indicate more appreciation for one's body. The BAS-2 has been strongly and inversely related to internalization of media appearance ideals and body surveillance for women (Tylka & Wood-Barcalow, 2015). Cronbach's alpha in the current study was .97

Data Analytic Plan

Data Screening

Before conducting Latent Class Analysis (LCA), we screened the data for missing values and normality. Missing value at the item level ranged from 0 to 3.4% and at the scale level ranged from .9 to 5.2%. Missing value analysis indicated the data were completely missing at random, $\chi 2$ (538) = 587.09, p = 0.70. The results suggest the appropriateness of using full information maximum likelihood estimation (FIML). FIML is a model-based method for estimating parameters when missing data are present (Arbuckle, 1996; Olinksky, Chen, & Harlow, 2003; Schlomer, Bauman, & Card, 2010). Compared to other imputation techniques, FIML produces approximately unbiased results across a variety of parameter estimates (Enders & Bandalos, 2001), making it one of the preferred methods for handling missing data. To test the assumption of normality, we examined the skewness and kurtosis values. All assumptions were met. The variable means, standard deviations, reliabilities, and ranges were then conducted. Last, we

compared participants recruited from the University of Maryland, College Park and the University of California, Irvine to determine if there were any differences on the study variables of interest. Specifically, 15 ANOVA's were conducted using a Type I error rate of .01 to adjust for the number of significance tests examined. Results indicated no significant differences between the two locations on any of the study variables (*p*s > .01).

Descriptive statistics. Table 1 summarizes variable means, standard deviations, intercorrelations, and internal consistency estimates. Gendered racism and general racism were significantly and positively correlated with all of the objectification theory variables and disordered eating and depression. Only the racial identity status dissonance was significantly and positively correlated with the objectification theory variables. The covariate BMI had a moderate and positive correlation to body shame and a small and positive correlation to disordered eating and depression.

Primary analyses

The primary analyses included three steps. First, latent class analysis was conducted in M*plus6* (Muthèn & Muthèn, 2013). Latent class analysis was used to examine unobserved differences, or homogenous clusters of AAW, who exhibit similar patterns of self-objectification. To form the latent classes of self-objectification, we used six indicators: a) media internalization, b) body surveillance, c) body shame, d) skin tone surveillance, e) eye-size and shape surveillance, and f) face size and shape surveillance.

Several well-established model selection procedures were used to determine the number of classes to retain. We used the Akaike's Information Criterion, (AIC, Akaike, 1987), the Bayesian Information Criterion (BIC, Schwartz, 1978), and the Bootstrap Likelihood Ratio Test (BLRT; McCutcheon, 1987). BIC has been shown to be a good

enumerator of classes and lower AIC and BIC values indicate a better model fit (Nylund et al., 2007). The BLRT uses bootstrap samples to estimate the difference distribution and can be used to test whether a given model fits the data better than the model with one class less. The BLRT performs well in terms of Type 1 error and has been identified as the most consistent indicator for identifying the correct number of classes (Nylund et al., 2007). As recommended by Nylund and colleagues (2007), we first ran AIC and BIC analyses and then once a few plausible models were identified, we reanalyzed the data with BLRT. In addition to correctly identifying the correct number of classes, it is also important to correctly place individuals into their respective classes with a high degree of confidence. To do this, entropy values were considered. Entropy estimates range from 0.00 to 1.0 with higher entropy values (> .70) indicating how well the classes are separated and the confidence in classifying individuals into groups (Berlin et al., 2014). We also examined class homogeneity to ensure that individuals within a given class are similar to each other with respect to item responses. Probability values above .70 or below .30 indicate high homogeneity. Moreover, we examined percentages of individuals per class and did not retain a class if it had less than 5% of the total sample (Jung & Wickrama, 2008). After the classes are established, we then decided labels of the number of classes by looking at mean differences across self-objectification scores across the classes.

Second, following the identification of the classes, depression, eating disorder symptomatology, and body appreciation were plotted by the self-objectification latent classes to evaluate the validity of these classes. ANOVA's were conducted to examine the differences between the latent classes on disordered eating, depression, and body

appreciation. Last, we conducted multinomial logistic regression to examine the differential predictive values of the three racial objectification variables (e.g., general racism, gendered racial microaggressions, and racial identity) in relation to the identified latent classes. Additionally, all of the covariates, including sorority status, ethnicity, generational status, class background, and BMI, were included in the model. Given the unequal sample sizes, ethnicity was grouped into the following categories: East Asian (e.g., Chinese, Japanese, Korean, and Taiwanese), Southeast Asian (e.g., Burmese, Cambodian, Filipino, Hmong, Indonesian, Laotian, Malaysian, Singaporean, Thai, Vietnamese), South Asian (e.g., Bangladeshi, Indian, Nepali, Pakistani, Sri Lankan), Native Hawaiian and Other Pacific Islander (NHOPI, e.g., Hawaiian), Multiracial, and Other ("Census Data and API Identities," 2017). Participants who were grouped into the category NHOPI were excluded due to their low prevalence. Participants were who identified as "multiracial," or "other," were also excluded from analysis. Based upon prior research that suggests 2nd generation women reported more disordered eating than other generational statuses (Tsong & Smart, 2015), generational status was coded as born in the U.S. (1) and other (0).

Chapter 3: Results

Number of Classes

We tested models with two to five latent classes. See Table 2. The final number of classes retained was determined by theoretical justification, parsimony, and interpretability (Muthèn, 2003). The two-class model yielded a BIC estimate of 10028.14 with an entropy value of .77. The three-class model yielded a BIC estimate of 9887.44 with an entropy value of .77. The BIC for the four-class model was 9849.38 with an entropy value of .81. The BIC for the five-class model was 9822.37 with an entropy value of .81. The BLRT test comparing the five-class to the four-class model suggested that the five-class model was better than the four-class model. Yet the Vuong-Lo-Mendell-Rubin test was not significant suggesting that perhaps a four-class model is sufficient and five classes are not needed. Furthermore, the five class model yielded two classes with small sample sizes (7% and 9% of the total sample respectively), which hindered interpretability and parsimony. Thus the four class model was selected. For the four-class model, posterior probabilities of class membership ranged from .83-.92. The four classes were labeled as follows: a) High Self-Objectification (37.2%), those who endorsed the highest levels of self-objectification across all indicators, b) Moderate Self-Objectification (40.1%), those who endorsed mid-level ranges of self-objectification across all indicators, c) Body Conscious (7.3%), those who endorsed high levels of body surveillance and body shame and, d) Appearance Acceptance (15.5%), those who endorsed the lowest levels of self-objectification across all indicators. Figure 1 illustrates the latent classes.

Validating Classes

To validate the classes, ANOVA was used to compare the four classes on disordered eating, depression, and body appreciation. The results suggest a significant effect of class on disordered eating ($F(3, 532) = 51.25$, $p = .000$) (Figure 2). The High Self-Objectification class reported significantly higher levels of disordered eating compared to the other classes. Similar significant effects were found for depression ($F(3, 535) = 17.23$, $p = .000$) and body appreciation $F(3, 546) = 79.48$, $p = .000$). See Figures 3-4. The High Self-Objectification class had higher levels of depression compared to the other classes whereas the Appearance Acceptance class had higher levels of body appreciation compared to the other classes.

Covariates and Class Contrasts

Next, a series of regression analyses were used to examine how the covariates (e.g., gendered racial microaggressions, racial discrimination, racial identity statuses, sorority status, generational status, ethnicity, class background, and BMI) predicted latent class membership. Table 3 depicts a few class contrasts that were of interest.

Appearance Acceptance vs. High S.O. Using the Appearance Acceptance class as the reference class, the logistic regression results suggest that women who reported higher levels of racial discrimination (OR = 1.138, $p < .001$), higher levels of gendered racial microaggressions (OR = 1.027, $p < .01$), and higher BMI's (OR = 1.098, $p < .05$) were more likely to belong to the High Self-Objectification class. Additionally, women in the High Self-Objectification class were more likely to report being in a state of racial dissonance (OR = 1.509, $p < .01$).

Appearance Acceptance vs. Moderate S.O. Using the Appearance Acceptance class as the reference class, women in the Moderate Self-Objectification class were more likely to report higher levels of racial discrimination (OR = 1.140, $p < .001$).

Body Conscious vs High S.O. Using the Body Conscious class as the reference class, women who were in a state of racial dissonance (OR = 1.772, $p < .01$) were more likely to be in the High Self-Objectification class. Women who identified as East Asian (OR = 4.379, $p < .05$) and women whose family income was between $50,00 and $99,000 (OR = 4.293, $p < .05$) were more likely to be in the High Self-Objectification class.

Body Conscious vs. Appearance Acceptance. Using the Body Conscious class as the reference class, women who endorsed lower levels of racial discrimination (OR = .856, $p < .01$) were more likely to be members of the Appearance Acceptance class. Additionally, women in the Appearance Acceptance class had higher likelihood of identifying as South East Asian (OR = 3.90, $p < .05$) or East Asian (OR = 5.45, $p < .01$).

Body Conscious vs. Moderate S.O. Using the Body Conscious class as the reference class, women in the Moderate Self-Objectification class had higher likelihood of identifying as East Asian (OR = 3.91, $p < .05$)

Moderate S.O. vs. High S.O. Using the Moderate Self-Objectification class as the reference class, women who were in a state of racial dissonance (OR = 1.374, $p < .01$) and who endorsed higher levels of gendered racial microaggressions (OR = 1.032, $p < .001$) were more likely to belong to the High Self-Objectification class.

Chapter 4: Discussion

Extensions of objectification theory have greatly enhanced understanding of how systems of oppression, such as racism and heterosexism, can elevate eating disorder risk among marginalized groups (Cheng et al., 2017; Watson et al., 2015). Yet there is still a dearth of research on the experiences of U.S. women of Asian descent. Further, prior studies investigating AAW have been limited to examining general forms of racism directed toward Asian Americans as a broad racial category and general forms of self-objectification common amongst all women. This study contributed to the literature by examining how gendered racism, or the intersection of racism and sexism, can influence both general and group-specific forms of self-objectification (e.g., face surveillance, eye surveillance, skin-tone surveillance) among this understudied group. Our study is the first to use a person-centered approach to examine distinct classes of AAW based upon their self-objectification processes and the racial objectification predictors (e.g., gendered racial microaggressions, racial discrimination, and racial identity) of class membership. Results advance the theory by demonstrating significant with-in group variability in self-objectification processes among AAW and offer valuable clinical implications for targeting high-risk groups.

Importantly, 37.2% of AAW were classified into the High Self-Objectification group, wherein they scored the highest across all indicators self-objectification. Mean scores for the self-objectification processes among women in this class were higher than reported in other studies of Asian American women (Cheng et al., 2017), South Korean women (Kim et al., 2014), and Muslim women (Tolaymat & Moradi, 2011). This reiterates the potential of person-centered analyses to identify high-risk subgroups,

especially among a group that is often misperceived as collectively low-risk. Relative to the other three classes, this class also reported the highest levels of disordered eating and depression, with depression scores falling into the range of moderate depression. Although studies have found that Asian Americans collectively have lower suicide rates compared to other racial/ethnic groups (Hedegaard, Curtin & Warner, 2018), other studies suggest that particular subgroups may be at higher risk. For example, research has found that Asian American college students have higher levels of contemplating and attempting suicide compared to their White counterparts (Kisch, Leino, & Silverman, 2005; Muehlenkamp, Gutierrez, Osman, & Barrios, 2005). Further, one study using multi-campus, national data found that Asian American college women, in particular, had higher levels of morbid thoughts (e.g., "I wish I was dead") compared to their male counterparts (Wong, Brownson & Schwing, 2011). Given Asian Americans tend to have low help-seeking rates (Sue, 2012), it is imperative to continue to investigate how self-objectification predicts not just disordered eating but also depression.

This was the first study to collectively capture surveillance of three pertinent, yet understudied, aspects of appearance evaluation for AAW, namely face, eye-size and shape, and skin-tone surveillance. AAW in the High-Self Objectification class had higher levels of face and eye surveillance compared to the two commonly measured forms of general self-objectification, specifically internalization of media beauty ideals and body shame. This could suggest that monitoring of these specific racialized features play a distinct role in predicting disordered eating and depression risk. Given these physical features are not easily amenable, AAW may rely on disordered eating behaviors, such as restriction, to regain acceptance and alter aspects of their appearance they can control

(Hall, 1995; Iyer & Haslam, 2003). Our findings are supported by other studies that suggest AAW are dissatisfied with their facial features and eye appearance, particularly if these features do not conform to either Eurocentric or Asian beauty ideals (Brady et al., 2017; Forbes & Frederick, 2008; Frederick et al., 2016; Kim et al., 2014). Less is known about the relationship between AAW's skin-tone surveillance and disordered eating and depression, yet a few studies have theorized that AAW may compensate for experiences of marginalization and exclusion by pursuing Eurocentric beauty norms, such as lighter skin (Brady et al., 2017; Cheng et al., 2017). Given darker shades of skin-tone are linked to discrimination (Rondilla & Spickard, 2007), future research should continue to investigate the intersection of gendered racism and skin-tone surveillance among AAW.

In contrast to those with higher levels of racialized forms of surveillance, a distinct subgroup of women emerged in our Body Conscious class. Women in this class reported high levels of body surveillance, media internalization, and body shame, and minimal levels of surveillance of racialized features. Only a small percentage of women comprised this class (7.3%), perhaps suggesting that AAW are less likely to only feel self-conscious about their general body shape and size. Prior studies do suggest that AAW face unique pressures to be thin (Forbes & Frederick, 2008), which might promote heightened scrutiny of one's body shape and size to gain a sense of control or achieve beauty ideals. However, it is also possible that AAW in this class possessed more acceptance of their racial identities, as indicated by their lower likelihood of being in a state of racial dissonance compared to those in the High Self-Objectification class. Feeling positively about one's race might result in lower levels of surveillance of racialized features. Given the limited research on racial identity and AAW's appearance

evaluation, these interpretations are speculative. More research is therefore needed to explore salient racial objectification predictors that may explain membership in this distinct class.

As expected, higher levels of gendered racial microaggressions and racial discrimination predicted membership in the High Self-Objectification class, above and beyond the effects of other well-established correlates, including BMI. This aligns with other studies that suggest that experiences of racial objectification, including perceived discrimination, racial/ethnic teasing, and perpetual foreigner racism, may make AAW especially vulnerable to internalizing Eurocentric standards of beauty, self-objectifying, and engaging in disordered eating (Cheng, 2014; Cheng et al., 2017; Iyer & Haslam, 2003). Surprisingly, only gendered racial microaggressions, and not racial discrimination, differentiated the High Self-Objectification and Moderate Self-Objectification class. It is possible that joint experiences of racism and sexism directed toward AAW (e.g., sexual fetishization, assumptions of universal appearance) result in a higher degree of surveillance and denigration of racialized features. An alternative explanation is that gendered racial microaggressions capture more nuanced forms of sexism and racism and thus may be more relevant to the daily lived experiences of AAW (Keum et al., 2018). Gendered racial microaggressions may then prompt more personalized feelings of rejection, exclusion, and devaluation that can then trigger multiple forms of appearance-based self-consciousness. Further, gendered racial microaggressions may directly relate to disordered eating and depression, which mirrors other studies that suggest gendered racial microaggressions among Black women predict higher levels of depression

(Williams & Lewis, 2019), body dissatisfaction, (Capodilupo et al., 2014) and psychological distress (Lewis & Neville, 2015).

Results of this study also suggest that racial identity, or the manner in which individuals relate to their racial group in contexts of racial oppression, may impact AAW's self-objectification processes. Although racial identity has been significantly linked to many psychological outcomes among Asian Americans (Shek & McEwen, 2012; Tan & Alvarez, 2004), no prior quantitative studies have examined how racial identity development influences appearance evaluation among AAW. This study found that racial dissonance, which is characterized by anxiety and confusion about race and racial issues, predicted membership in the High Self-Objectification class. Further, racial dissonance, was significantly and moderately associated with disordered and depression (*r*'s= .28 -.38). This mirrors findings that suggest that racial dissonance is related to lower levels of psychological well-being (Iwamoto & Liu, 2010). It is possible that individuals in this status, compared to those in the conformity status, could be just beginning to develop an awareness racism while also lacking a clear racial identity, which might lessen their self-acceptance and ability to navigate daily race-related stressors. In a qualitative study of Black women who attended predominately White colleges, Hesse-Biber and colleagues (2016) found that being a "floater," categorized as not Black or White enough, was often associated with mixed feelings about appearance. These authors speculated that these women vacillated between conflicting cultural standards of beauty and often could not satisfactorily achieve either standard, which contributed to body dissatisfaction. Additionally, in a qualitative study of AAW, Brady and colleagues (2017) found that those who had difficulty integrating their identities as AAW discussed feeling

like outsiders and not belonging. They also described heightened self-criticism of racialized features, preoccupation with appearance, and a desire to alter their appearance to fit in. In contrast to our hypotheses, no other racial identity statuses differentiated class membership, which could be reflective of the low internal consistency estimates. Given other research has found that Black women who are more aware of racism and more affirming of their own race are less likely to internalize sexually and racially objectifying messages (Bradford & Petrie, 2008; Watson et al., 2013), it is important to continue to investigate the role of racial identity on AAW's body image.

Limitations

Despite the strong contributions of this study, there are several limitations. Foremost, results are based on college student samples of AAW at two public universities: one in California and one in the Mid-Atlantic region. Although we found no regional differences in the study variables, these findings may not generalize to AAW in other locations in the U.S. Given research has suggested that Asian cultural influences and appearance pressures may be higher in regions where Asian Americans comprise a large proportion of the population (Frederick et al., 2007), future studies should continue to explore the role of social networks and appearance-based comparisons on self-objectification processes. Second, we had a higher prevalence of East Asian and Southeast Asian women and thus our findings may not generalize to other ethnic subgroups. In particular, eye-size and shape and facial surveillance may be more applicable of the experiences of East Asian women. This is reflected in East Asian women's increased odds of belonging to the Moderate Self-Objectification class, which is comprised of women who endorse higher rates of racialized forms of surveillance,

relative to the Body Conscious class. Future studies should continue to investigate body image features that are salient to the experiences of diverse ethnic subgroups of AAW, such as skin-tone or breast size (Forbes & Frederick, 2008). Third, a majority of AAW in our sample identified as second-generation and thus little is known about potential generational differences in perceived levels of racism and gendered racial microaggressions. Studies suggest second-generation individuals may be more aware of racism (Hwang & Goto, 2009) and may experience heightened levels of conflict in attempting to balance and integrate multiple cultural beliefs (Tsong & Smart, 2015). Given these sociocultural stressors have been linked to disordered eating (Reddy & Crowther, 2007), more research is needed to understand how generational status relates to self-objectification specifically. Fourth, about 10% of our sample identified as bisexual. Sexual minority women may face additional forms of prejudice and discrimination, such as internalized heterosexism and heterosexist discrimination, that may contribute to heightened body surveillance and body shame (Watson et al., 2015). Our study centralized AAW's gender and racial identities and interlocking experiences of oppression at the intersection of these identities. Thus, we did not capture potential meaningful within-group differences across other identity locations (e.g., sexual orientation, age etc). It would be important for future studies to examine how other forms of oppression intersect with gendered racial microaggressions and their influence on self-objectification. Fifth, as with many other studies in the eating disorder literature (e.g., Cheng et al., 2017), we used BMI as a covariate. It is important to note that BMI it is not a reliable measurement of body composition in individuals and has contributed to increased marginalization toward those with larger body sizes (Nuttall, 2015).

Additionally, BMI may generally be lower among AAW, and may be less indicative of disordered eating in and of itself (Yu, Pope, & Perez, 2019). Therefore, future studies might consider if using BMI is appropriate for their population. Sixth, our study had low internal consistency estimates for racial identity compared to other studies using samples of Asian Americans (see Miller et al., 2016). Last, our study was cross-sectional, therefore causality or sequence of the variables cannot be inferred.

Implications for Practice

Our study has a number of important implications for clinical practice. Our person-centered approach can facilitate the development of targeted interventions both across and within classes of AAW. For example, across groups of AAW, clinicians can assess for surveillance of racialized features, in addition to traditional self-objectification processes, to determine potential risk for disordered eating and depression. For those who exhibit higher levels of surveillance of racialized features, such as those in the High and Moderate Self-Objectification classes, acceptance and commitment therapy strategies might be especially useful given these features are not easily amenable. Clinicians can incorporate mindfulness techniques to help AAW acknowledge negative thoughts about their appearance (e.g., I think my face is unattractive to other people) and then promote more flexibility and acceptance. In this sense, the goal is to not simply produce satisfaction with racialized features, but rather to help AAW place less importance on their appearance in order to live more meaningfully (Pearson, Follette, & Hayes, 2012). Furthermore, self-compassion exercises and facilitating social connectedness may be especially helpful for AAW who experience racial discrimination. These interventions may help AAW engage in less rumination, while giving themselves care and tenderness,

which can help reduce feelings of inadequacy and shame (Yarnell & Neff, 2013). Additionally, this can help AAW feel less alone and more willing to seek social support, which can protect against depression (Liu et al., 2019). In addition to approaches, clinicians can partner with AAW to help them explore, and critique, sexist and racist stereotypes (e.g., assumptions that all AAW look the same), experiences of discrimination (e.g., bullying about racialized features), and rigid beauty ideals. In doing so, clinicians can help raise critical consciousness about how sociocultural factors influence beliefs about themselves and their bodies, which can help reduce self-blame and promote agency (Enns, 2012). For those in the lower risk groups, continuing to elucidate protective factors, such as racial socialization messages that promote diversity (Atkin, Yoo, & Yeh, 2017), or body appreciation (Winter, Gillen, Cahill, Jones, & Ward, 2019) is especially important. Clinicians can also help AAW understand the ways in which they affirm their identities and can connect them to supportive communities who can reinforce strengths (Miller et al., 2018). Last, as social justice advocates, clinicians are urged to take action to prevent and reduce experiences of discrimination at individual, institutional, and structural levels (Moradi 2013). This might entail providing training to school and university administrators regarding the link between gendered racism and health disparities, delivering anti-racism workshops, or initiating intergroup dialogues to broach conversations about race (Miller et al., 2018).

Implications for Research

Our study also offers many contributions that can guide future research. As our study demonstrates, gendered racial microaggressions are linked to elevated rates of surveying not only general body shape and size, but also racialized features. Future

research should continue to explore forms of discrimination germane to AAW at the intersections of gender and race, as opposed to examining racist or sexist discrimination separately as that may overlook salient, and distinct, stressors for this group. Although our study found meaningful within-group differences among AAW based upon their self-objectification processes, future research should continue to examine how these processes may vary based upon other person-level factors, such as skin-tone. For example, prior research has shown that experiences of colorism can shape Black women's assumptions of attractiveness (Tribble et al., 2019). Although the culture-based meanings attached to perceptions about skin-tone, and the impact of colorism, may differ between AAW and Black women, it could be helpful to understand how skin-tone preferences intersect with AAW's experiences of racial and sexual objectification. Furthermore, future studies could extend our model by examining the underlining mechanisms and moderators pertinent to AAW. It would be helpful to examine how coping strategies may mediate the relations between gendered racial microaggressions and disordered eating and depression among AAW. Williams and Lewis (2019) found that disengagement coping strategies, such as self-blame or denial, partially mediated the relationship between gendered racism and depression among Black women. A similar relationship might emerge among AAW. Additionally, examining moderators, such as racial socialization messages, would be important as prior research suggests that higher frequencies of particular messages, such as promotion of mistrust, might increase risk for psychological distress when experiencing discrimination (Atkin, Yoo, & Yeh, 2019). Consistent, with a feminist framework (Enns, 2012), focusing on women's strengths, both at an individual and community level, is essential. Future studies could continue to investigate the protective

role of womanist identity (Chadwick & DeBlaere, 2019), or collective action (Sherperd & Evans, 2019), in mitigating the harmful effects of gendered racism on disordered eating and depression. Finally, more research is needed to clarify the nature and directionality of the relation between gendered racism and self-objectification. Future studies could replicate, and extend the current promising model, by using longitudinal data or daily-diary studies.

In conclusion, this study makes a significant contribution to the literature as it is the first to test a culture-specific extension of objectification theory using a novel, person-centered approach. Among a large, ethnically diverse sample of AAW, we found there is significant within-group variability among AAW's self-objectification processes, with a substantial proportion of women (37.2%) in the High Self-Objectification class. AAW in this class endorsed the highest levels of disordered eating and depression, suggesting that surveillance of racialized features and general consciousness about body size might be important precursors of risk. Further, our study suggests that gendered racial microaggressions and racial identity appear to be promising factors that can predict within-in group differences in self-objectification processes. Our data supports using an intersectional, person-centered approach to better capture the complexity and diversity embedded within AAW's self-objectification experiences, and the salient racial objectification factors that can differentiate risk. By attending to AAW's multiple social identities, and their distinct self-objectification processes, we can design more culturally-sensitive, and targeted interventions to improve AAW's well-being.

Appendices

Appendix A

Literature Review

Epidemiological studies suggest disordered eating attitudes and depression are pervasive among college women and occur among women of diverse racial and ethnic groups (Marques et al., 2011). In particular, Asian American women (AAW) are one group that warrant further investigation because emerging evidence suggests they may have similar rates of eating disorder symptoms and depression compared to White women (Frank et al., 2007; Lam, Pepper, & Ryabchenko, 2004). Given eating disorders are linked to a host of negative mental and physical health outcomes, including substance use, depression, and death (Preti, Camboni, & Miotto, 2011; Wade, Keski-Rahkonen, & Hudson, 2011), it is essential to understand the contextual and intrapersonal factors that exacerbate risk. *Objectification theory* has been an influential framework for understanding the etiology of eating disorders and depression among college women (Fredrickson & Roberts, 1997, McKinley & Hyde, 1996; Moradi, Dirks, & Matteson, 2005; Moradi & Huang, 2008), yet little is known about the generalizability of this theory to AAW (Moradi, 2010). More empirical research is needed to understand how contexts of racial and sexual objectification might impact AAW's risk for disordered eating and depression.

Accordingly, we aimed to advance Cheng and colleagues (2017) racially expanded model of objectification theory among AAW by using a person-centered approach. The purpose of this study is to a) identify subgroups (e.g., latent classes) of AAW based upon their general and group-specific self-objectification processes, b) examine the racial objectification predictors (e.g., gendered racial microaggressions,

perceived discrimination, and racial identity) of latent class membership, c) examine the relationship between latent classes and well-established outcome measures, including disordered eating and depression. This study was informed by the vast literature on objectification theory, which positions women's mental and physical health problems as consequences of living in a culture that sexually objectifies the female body. In order to better capture the complexity and diversity of women's experiences, this study also drew on more recent extensions of objectification theory and examined the role of racial objectification in prompting self-objectification and, in turn, disordered eating and depression. The literature on three salient, yet often under-studied contexts of racial objectification for AAW (e.g., perceived discrimination, gendered racial microaggressions, and racial identity) was then reviewed. In the following sections, we present a comprehensive overview of these broad literatures and conclude with providing a detailed rationale of the importance of using a person-centered approach to investigate typologies of self-objectification.

Sexual Objectification and Self-Objectification

Objectification theory offers an integrative framework for understanding how sexual objectification experiences may contribute to negative psychological health outcomes that disproportionately affect women (Frederickson & Roberts, 1997). *Objectification theory* posits that women's life experiences and gender socialization routinely include experiences of sexual objectification wherein women's bodies are looked at, sexualized, and evaluated (Frederickson & Roberts, 1997). Sexual objectification occurs when a woman's body or body parts are separated from her personhood, thereby reducing her value to her appearance and ability to please men. In

this sense, women are reduced to a body, or a collection of body parts, that exist for use or consumption by others (Frederickson & Roberts, 1997; Moradi, 2011). Sexual objectification is pervasive in U.S. culture and can exist in many forms, including cat-calling, sexualized media depictions, sexual harassment, and the male gaze. Even though not all men sexually objectify women, experiences of sexual objectification are often beyond women's control and therefore may be unavoidable (Kaschak, 1992).

One prominent consequence of sexual objectification is that women are triggered to adopt a particular view of the self (Frederickson & Roberts, 1997). The ubiquitous and cumulative experiences of sexual objectification communicate messages to women that they are valued solely for their appearance. In response to recurrent experiences of objectification, women may internalize dominant cultural messages about appearance and begin to view their own bodies as sexual objects; this process is known as self-objectification, whereby women adopt a third-person perspective on their bodies and value their bodies for how they look, rather than how they feel or what their bodies can do (Frederickson & Roberts, 1997; McKinley & Hyde, 1996; Tylka & Hill, 2004). In other words, women begin to treat themselves as objects to be looked at and evaluated (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). Self-objectification predominately manifests behaviorally through body surveillance, or the habitual monitoring of one's physical appearance. While it may seem counter-intuitive, women are often repeatedly pressured and socialized to be preoccupied with their physical appearance. It is well-known that having an "attractive" physical appearance is a powerful form of currency for women in that it can increase their social and economic success (Unger, 1979). Conversely, women who do not meet idealized societal beauty

standards may be more likely to receive negative sanctions, such as lower educational and economic attainment (Wooley & Wooley, 1980), job discrimination (Fiske, Bersoff, Borgida, Deaux, & Heilamn, 1991), and lower popularity ratings (Bal-Tal & Saxe, 1976). In this sense, it can be protective for women to be attentive to their physical appearance and to anticipate how others will evaluate and treat them based upon their appearance.

Frederickson and Roberts (1997) proposed that sexual objectification can lead to detrimental mental health consequences through four negative psychological and experiential outcomes. Foremost, self-objectification can increase women's anxiety about their physical appearance and safety because they will not know when and how their bodies will be looked at and evaluated. This can result in an almost chronic tendency to be hypervigilant about one's physical appearance, such as by persistent self-monitoring, checking or adjusting one's appearance. Additionally, victim blaming in cases of sexual violence also contributes to women's persistent monitoring of their own physical safety. Second, sexual objectification experiences are also theorized to prevent or reduce peak motivational states or "flow", which is an optimal state where an individual is fully immersed in a task, uncontrolled by others, creative, and joyful. When attention is only focused on women's appearance, their activities become interrupted and self-consciousness increases. This can limit women's chances for initiating and maintaining peak motivational states. Similarly to a sense of "flow," living in a culture that objectifies females can also diminish awareness of internally bodily states, such as hunger or sexual arousal, because women are pre-occupied with their appearance. In other words, because women are so vigilantly aware of their outward appearance, they may be less attuned to their internal bodily states and experiences. Last, objectification can increase women's

sense of body shame wherein women evaluate their bodies relative to some cultural standard or ideal and come up short, thereby generating feelings of worthlessness and powerlessness. Body shame encompasses not only a feeling of being a "bad person" but also the negative emotional states that arise when others evaluate one's physical "deficiencies." Aside from the original four consequences proposed by Frederickson and Roberts (1997), more recent research has also emphasized the importance of investigating internalized sociocultural standards of beauty as an intervening variable in the relation of sexual objectification and disordered eating (Moradi & Huang, 2008; Moradi, 2011). To the extent these unrealistic beauty standards are internalized, women might engage in disordered eating as a way to regain control and achieve beauty ideals.

Self-Objectification and Proposed Consequences

Research has consistently supported the public health significance of understanding the influence of self-objectification processes on women's well-being. Daily diary studies confirm that relative to men, women report more sexual objectification experiences, such as unwanted flirting, staring, or touching, and are more often subjected to offensive comments about their body parts or clothing (Swim et al., 2001). Because of their frequent nature, women were more likely to be negatively impacted following these incidents and exhibited increased levels of anger, depression and lower levels of comfort and state self-esteem (Swim et al., 2001). Other studies also confirm the pervasiveness of sexual objectification experiences for women (Kozee & Tylka, 2006; Moradi, Dirks, & Matteson, 2005) and note that gender differences in levels of body surveillance and body shame persist up until middle age, whereby it is theorized that women might experience less sexual objectification (McKinley, 2006). Furthermore,

some research suggests that White and non-White women report similar levels of sexual objectification experiences, self-objectification, and body shame (Harrison & Frederickson, 2003). Yet racial and ethnic group comparisons including samples of AAW are scarce. One study found that White women, compared to White men and AAW, exhibited higher levels of self-objectification (Grabe & Jackson, 2009). Given this study utilized a small sample size and did not specifically measure body surveillance, which has been shown to be a unique predictor above general trait self-objectification (Tiggeman & Kuring, 2004), the generalizability of these findings may be limited.

Most commonly, research has examined the relation between self-objectification and disordered eating and body dissatisfaction. A number of experimental studies have been conducted by manipulating the salience of self-objectification by either having some women try on a swimsuit and others a sweater, and then stand in front of a full-length mirror. These studies have found that heightened self-objectification (e.g., trying on a swimsuit) increased women's levels of body-related thoughts, body shame, and reporting of unpleasant emotions (Hebl et al., 2004; Quinn, Kallen, & Cathey, 2006). Moreover, Quin and colleagues (2006) found similar results when women re-dressed, suggesting that the effects of heightened self-objectification extend beyond the immediate situation. Generally, these findings have been consistent across samples of White and racial/ethnically diverse college women.

Correlational studies are the most prevalent study design when examining the links between self-objectification variables and eating concerns. Correlational studies have found that self-objectification generally is associated with more dysfunctional exercise (Strelan, Mehaffrey, & Tiggemann, 2003), and a desire to change weight

(Forbes, Jobe, & Revak, 2005), while body shame specifically has been associated with an interest in cosmetic surgery (Henderson-King & Henderson-King, 2005). Additionally, Piran and Comier (2005), using a sample of racial/ethnically diverse Canadian women, found that a composite variable comprised of body surveillance, body shame, and the belief that one can control their body shape/size, accounted for unique variance in eating pathology beyond suppressing negative affect. Recent research on mediated relations also lends support to the idea of self-objectification as a process, rather than a specific variable to be measured (Moradi, 2010). Research confirms the unique roles of body surveillance and internalization of sociocultural standards of beauty on women's disordered eating (see Moradi & Huang, 2008 for a review). As such, experiences of sexual objectification may prompt internalization of sociocultural standards of beauty and body surveillance, which in turn increases body shame, and risk for disordered eating (Grabe, Hyde, & Lindberg, 2007; Moradi, Dirks, & Matteson, 2005; Tiggemann & Williams, 2012; Tylka & Hill, 2004). Across these studies, empirical support has been established verifying the detrimental, and sometimes sustained, consequences of self-objectification on women's body image.

In the objectification theory framework, less research has been devoted to understanding how contexts of self-objectification relate to depression among women. The lack of research examining the links between objectification and depression is alarming given that epidemiological studies across the world have consistently found that women experience depression at nearly twice the rate than men (Kessler, 2003). Depression rates have also been shown to be a leading cause of disease burden (Ferrari et al., 2013). While there are many etiological frameworks for understanding women's

increased susceptibility to experience depression, objectification theory adds to our understanding of this phenomenon.

According to Frederickson and Roberts (1997), living in a culture that sexually objectifies women's' bodies increases risk for anxiety and shame, as well as a loss of self, such that women try to alter themselves to fit the expectations of others. Given physical appearance can only be altered to a certain extent, women may feel a sense of helplessness to meet idealized beauty standards and also a sense of powerlessness to control other people's reactions to their physical appearance. This may lead to a form of worry or rumination that can predispose risk for depressive episodes. Additionally, objectification may reduce opportunities for peak motivational states, wherein people feel they are truly living, uncontrolled by others, and joyful (Csikszentmihalyi, 1982). Thus having fewer peak motivational states may reduce pleasure, quality of life, and increase depression. Last, it is possible that experiences of sexual harassment and victimization, which women experience at much higher rates than men, may directly relate to depression (Nolen-Hoeksema & Girgus, 1994).

Almost all of the studies examining the links between self-objectification and depression found significant relationships (see Jones & Griffiths, 2015 for a review). Many studies found that the relationship between self-objectification/body surveillance and depression was mediated by body shame (Carr & Szymanski, 2011, Chen & Russo, 2010, Evans, 2011, Hurt et al., 2007). Szymanski and Henning (2006) examined additional self-objectification constructs and found that self-objectification led to habitual body monitoring, which in turn led to a reduced sense of flow and greater body shame and appearance anxiety. Reduced flow, greater body shame, and greater appearance

anxiety, in turn, predicted depression. While these authors did not find that self-objectification directly predicted depression, other studies have found evidence for these direct effects. For example, Muehlenkamp and Saris-Baglama (2002) found a significant direct path from self-objectification to depression among a sample of college women. Other studies suggest that self-objectification can also directly relate to lower self-esteem (Choma et al., 2010) and low self-worth (Sinclair & Myers, 2004). These results have been extended to women of diverse racial ethnic backgrounds, yet AAW are often under-represented. Grabe and Jackson (2009) found that self-objectification and depression were correlated, yet only significant correlations were found among White women and not AAW. The authors speculate that depression among AAW might be related to experiences of marginalization due to their race, which underscores the importance of investigating racial discrimination and how this might relate to the meaning and consequences of self-objectification.

Taken together, these studies underscore that self-objectification processes can undermine the mental and physical health of women. Specifically, this theory offers a comprehensive and integrative framework for understanding the shared underlying mechanisms that give rise to both depression and eating disorder symptomology among women. This would suggest the potential for co-morbidity, wherein eating disorders are likely to co-occur with depression because they are both theorized as potential outcomes of the same underlying factors that result from living in a culture that sexually objectifies women. Researchers have found that self-objectification and its proposed consequences predicted both eating disorders and depression among women (Tiggemann & Kuring, 2004). Yet a majority of studies examine eating disorders and depression separately,

which limits objectification theory's applicability and clinical utility. Several researchers have indicated that depressive disorders, compared to other co-morbid psychiatric concerns, most commonly co-occur with eating disorders and are highly associated with suicidal gestures and attempts (Godart et al., 2007; O'Brien & Vincent, 2003). The need for comprehensive understanding of how self-objectification constructs influence risk for both depression and eating disorder symptoms is therefore imperative. A majority of studies also used primarily White samples, which limits our ability to understand how other forms of prejudice, such as racism, might influence women's experience with objectification. In order to expand the utility of this theory to diverse groups of women, it is essential to examine group-specific manifestations of objectification theory constructs and other forms of discrimination.

Racial Objectification and Self-Objectification

Objectification theory, as rooted in women's experiences of sexual objectification, has often been examined in relation to sexist discrimination. Although women have a shared experience of living in a patriarchal society that objectifies their bodies, counseling psychologists have been increasingly called upon to examine the variability in women's experiences. As such, women's other social identities, such as race or ethnicity, may give rise to distinct experiences of oppression that influence self-objectification processes. Moradi (2010) offered an extension of objectification theory that considers how multiple forms of oppressive treatment, such as experiences of heterosexism, racism, or gender or cultural identity conflict, might trigger internalization of societal standards of beauty and general and group-specific body surveillance. Internalization of societal standards of beauty and general and group-specific body

surveillance in turn would predict greater body shame, greater appearance anxiety, reduced flow experiences, and lower internal bodily awareness, which in turn would predict negative outcomes, such as depression or eating disorder symptomology. By accounting for a broader range of socialization experiences, this extension allows for the detection of unique appearance-related constructs based upon the confluence of gender with race, sexual orientation, and other diverse cultural identities (Moradi, 2010). This better accommodates salient experiences for diverse groups and can extend the generalizability of this theory to often under-represented groups (Moradi & Huang, 2008).

A few studies have illustrated the promise of this extension for addressing gender and cultural diversity. For example, in testing a culture-specific extension of objectification theory among African American women, Buchanan and colleagues (2008) measured skin-tone surveillance and skin-tone dissatisfaction, in addition to general body surveillance and body shame. The authors argue that skin-tone is a salient body-image variable for African American women that is often an indicator of attractiveness and may affect access to social and economic rewards. They found that skin-tone monitoring and general body surveillance were associated with increased body shame and higher levels of skin-tone monitoring specifically was associated with higher levels of skin-tone dissatisfaction. In another example, Tolaymat and Moradi (2011) explored the role of the hijab in body image and eating disorder symptoms among a sample of U.S. Muslim women. The authors measured hijab frequency (e.g., never to always wearing), conservativeness (e.g., loose head scarf to full body burqa), and women's choices regarding the hijab (e.g., to show modesty, in response to pressures from family, to

prevent male harassment etc). They examined the relation between wearing a hijab and sexual objectification experiences, as well as the relations between wearing a hijab on women's self-objectification processes and eating disorder symptoms. They found that wearing the hijab was associated with lower reports of sexual objectification experiences, whereas sexual objectification experiences had positive indirect relations to body surveillance, body shame, and eating disorders through the mediating role of internalization. Taken together, these studies extend the cross-cultural applicability of objectification theory. Yet neither of these studies explicitly examined other salient forms of oppression outside of sexual objectification that might further exacerbate risk for disordered eating and depression. By integrating objectification theory constructs with theory and research on racial discrimination, we can better account for the complexity of women's experiences and gain a more nuanced understanding of the power structures that shape these experiences.

Cheng and colleagues (2017) built upon Moradi's (2010) extension and created a racially-expanded model of objectification theory applicable for AAW. Investigating AAW is essential for a few reasons. In reference to eating disorder symptomology, recent work suggests AAW have similar rates of eating disorder symptoms compared to White women (Frank et al., 2007). Prior work also suggests AAW are more likely than other racial groups to be dissatisfied with specific body image features, such as eye-shape (Mintz & Kashubeck, 1999) and breast size (Forbes & Frederick, 2008). Furthermore, as a result of upward social comparison processes and idealization of White features (Brady et al, 2017), AAW may be at heightened risk to internalize societal standards of beauty and habitually monitor their bodies and race-related features. Notably, AAW are often

under-represented in the body image literature (Talleyrand, 2012) and are less likely to be referred for evaluation of eating disorders (Frank et al., 2007). This might be attributed to false misconceptions that AAW are somehow protected from eating concerns due to their smaller physique and BMI. Similar under-representation has been found in empirical studies examining depression among AAW. Some research suggests that AAW have comparable rates of depressive symptoms compared to White women (Lam et al., 2004), and that these rates may be even more elevated among those individuals who were born in the U.S (Sue et al., 2012). Given some studies have found that Asians in general tend to have a middle response style and avoid answering in the extremes on a rating scale (Harzing, 2006), it is possible that prior studies may under-estimate their level of distress. Importantly, despite AAW's susceptibility for risk, they are less likely to seek out or receive the services they need (Sue et al., 2012). Compared to other racial groups, Asian Americans are less likely to utilize mental health services and these results have been consistent each year for the past decade (SAMHSA, 2012). It is therefore imperative to more thoroughly understand the sociocultural contexts, and distinct forms of self-objectification, that might give rise to both disordered eating and depression among AAW. This might enable the developmental of more culturally-sensitive and targeted interventions to reduce mental health disparities.

Cheng and colleagues (2017) racially-expanded model underscored that harmful role of racism in influencing AAW's eating disorder symptomology. Using a large sample of AAW ($N = 516$), they found that the three contexts of racial objectification, namely perceived discrimination, perpetual foreigner racism, and racial/ethnic teasing, were indirectly associated to disordered eating through body surveillance, internalization

of media beauty ideals, and body shame. These results confirmed the importance of understanding how salient racial stressors might trigger self-objectification, which in turn can promote disordered eating. Despite the significant strengths and contributions of this study, it is limited in several ways. Foremost, the latent racial factors do not explicitly account for intersectional experiences of racism and sexism among AAW and thus may not capture specific racist and gendered stereotypes directed toward them (e.g., being depicted as submissive, exotic, mysterious). Second, the sampling region from the Midwest may skew the relevance of racist events and might not be generalizable to other regions where racial stressors may be more prominent. Third, the measures of body surveillance and body shame do not account for culture-specific beauty standards that may be especially salient for AAW. Last, AAW were treated as a broad homogenous group which neglects to consider important within-group distinctions that could be useful to identify subgroups that are most at risk. In an effort to extend and improve the specificity of Cheng and colleagues (2017) racially-expanded model, we will examine three pertinent, yet understudied, contexts of racial objectification among AAW: namely perceived discrimination, gendered racial microaggressions, and racial identity, as predictors of distinct classes of self-objectification. We will also examine how distinct classes of self-objectification were related to disordered eating and depression. In the following sections, we review the literature on each racial objectification experience.

Perceived discrimination. A growing body of literature has demonstrated the deleterious effects of racial discrimination on AAW's disordered eating. Media depictions often reduce AAW to stereotypical, racist images and do not portray them as unique individuals (Yokoyama, 2007). Perceived discrimination, as a form of racial

objectification, contributes to the fragmentation of AAW's identities wherein people perceive them as a homogenous group that is less than human (Moradi, 2010, 2013). A few studies suggest discriminatory experiences can directly predict disordered eating (Cheng, 2014) because behaviors such as restricting food or purging may serve as a coping mechanism to reduce tension or divert attention (Smart et al., 2011). Other studies document the indirect effects of perceived discrimination on disordered eating (Cheng et al., 2017) and theorize that perceived discrimination may heighten awareness of one's minority status, which in turn can contribute to the internalization of dominant standards of beauty as a way to achieve success or gain inclusion (Kawamura, 2011). Notably, perceived discrimination may contribute to self-denigration of race-related features, which may promote feelings of powerlessness and body shame given the biological limitations of altering these features (Cummins & Lehman, 2007, Grabe, Ward, & Hyde, 2008).

Research has also shown that perceived discrimination can increase risk for depression among Asian Americans. According to the 2002–2003 National Latino and Asian-American Study (NLAAS), nearly 74% of Asian Americans reported experiencing some form of routine unfair treatment in their lifetime. This is problematic given that Asian Americans are at higher odds for being diagnosed with any depressive disorder if they experience discrimination just a few times a year (Gee et al., 2007). Yet very few studies solely investigate AAW's experiences with perceived discrimination and the impact of this on their mental health and well-being. Research suggests that AAW not only experience distinct forms of discrimination that exacerbate health risk, but also have some of the highest female suicide rates across all racial/ ethnic groups (National Center

for Health Statistics, 2003), underscoring the public health significance of further understanding how perceived discrimination may heighten self-objectification, and in turn, disordered eating and depression.

Gendered racial microaggressions. In addition to examining more overt forms of racial discrimination, it is also imperative to exclusively capture more subtle, everyday forms of discrimination, also known as microaggressions (Sue et al., 2010). Microaggressions are brief verbal, behavioral, or environmental slights that communicate hostile or derogatory messages toward non-dominant groups (Sue, Capodilupo, et al., 2007). Although multiple studies have documented the relation between perceived discrimination and disordered eating or depression, the current measures lack specificity by not capturing distinct forms of prejudice directed toward AAW. For example, advertisements often depict AAW as either "Dragon Ladies," whom are belligerent, untrustworthy, and cunning, or as "Lotus Blossom Babies," whom are exotic, submissive, virginal and yet sensual (Kim & Chung, 2005). Not only are AAW hypersexualized as the objects of White men's sexual fantasies, they are also portrayed as lusting after White men's approval, presumably as a "ticket to be accepted" (Villapanda, 1989). Importantly, these stereotypical and degrading images may communicate messages to AAW that their personhood and appearance are devalued, which might motivate self-monitoring as a protective strategy to attempt to regain control and inclusion.

Aside from current racism measures lacking in specificity to AAW's unique forms of discrimination, these measures also often focus on a singular identity (e.g., being a person of color), rather than understanding how a person's multiple, intersecting identities (e.g., being an Asian American woman), might influence their experience with

microaggressions (Nadal et al., 2015). Given that traditional conceptualizations of oppression (e.g., racism and sexism) do not act independently, it is critical to understand how interlocking forms of oppression prompt self-objectification and, in turn, promote disordered eating and depression. Keum and colleagues (revise and resubmit) created the Gendered Racial Microaggressions Scale for Asian American Women (GRMSAAW) to measure the unique microaggressions directed toward AAW based upon the confluence of gender on race. In this sense, the authors were able to capture gendered racial microaggressions distinctly salient to AAW, rather than microaggressions salient across groups of women (e.g., stereotypes that women are bad at math) or salient across both Asian women and men (e.g., Asian Americans as foreigners). They found that the frequency of gendered racial microaggressions among AAW accounted for additional unique variance in depressive symptoms above and beyond perceived racial microaggressions and sexist events. As with perceived discrimination, gendered racial microaggressions are also theorized to trigger body surveillance, media internalization, and body shame by promoting a sense of "othering," denying individual's uniqueness, and reinforcing "Whiteness" as desirable. This could increase AAW's scrutiny of both their body and specific race-related features, which might increase risk for body shame and motivate unhealthy attempts, like disordered eating, to change one's appearance (Yokoyama, 2007).

Racial identity. Racial identity is another theoretically important factor related to psychological adjustment (Tan & Alvarez, 2004) and well-being (Iwamoto & Lui, 2010) among AAW. Racial identity helps explain how individuals internalize the consequences of being socialized in a racially oppressive environment and also includes how

individuals adjust to and negotiate contexts of oppression (Helms, 1995). While this theory was originally developed to capture the experiences of Black individuals, it has since been extended to capture the experiences of other racial groups given they might experience similar responses to systematic marginalization. Helms (1995) developed several different stages or identity statuses that encompass how people interpret experiences of racism and incorporate race-related experiences into their identities. Helms' racial identity statuses are: a) *contact*: wherein individuals possess a "colorblind" worldview and may trivialize racial or cultural differences, b): *dissonance*: wherein individuals question where they belong and experience conflict or confusion about race and race-related issues, c): *immersion-emersion*: wherein individuals immerse themselves solely into their own racial group and may exhibit feelings of resentment or mistrust toward White individuals and White culture, d): *internalization*: wherein individuals possess an acceptance and appreciation of one's own culture and others' culture, and e): *integrative awareness*: wherein individuals develop a secure and self-confident identity and possess flexibility around race and race-related issues (Alvarez & Helms, 2001; Helms, 1995). Individuals do not necessarily progress through these statuses in a linear way such that they may recycle or move from one status to another, especially when triggered by experiences of racial discrimination (Quintana, 2007).

Research has generally shown that individuals with more "advanced" racial identity statuses may be protected from the adverse effects of discrimination. For example, is it theorized that individuals who strongly identify with their racial group and who recognize that racism exists, may be more likely to focus on the positive attributes of

their racial group or may be more prepared to activate coping resources when a racist encounter occurs (Sellers & Sheldon, 2003).

Yet despite the increased importance of understanding Asian American's racial identity experiences (Alvarez, Juang, & Liang, 2006, Iwamoto & Lui, 2010), no studies to date have investigated how racial identity influences AAW's body image experiences in contexts of racism. A few studies conducted with African American women suggest that racial identity can act as a moderator of race-related stress on body dissatisfaction. Researchers have found that a positive and affirming racial identity can buffer against the effects of sexism and racism and can promote more body satisfaction and less disordered eating (Hesse-Biber, Livingstone, Ramirez, Barko, & Johnson, 2010). Similarly, Watson and colleagues (2013) examined multiculturally inclusive racial identity attitudes among a sample of undergraduate African American women. Women with high multiculturally inclusive racial identity attitudes were more understanding of the different forms of oppression, valued inclusivity, and possessed more affirming attitudes toward their racial group compared to individuals who scored lower. They found that when women experienced high levels of sexual objectification, but low levels of multiculturally inclusive racial identity attitudes, they were more likely to internalize dominant standards of beauty. Internalization of dominant standards of beauty was then in turn associated with increased body surveillance, body shame and disordered eating. Collectively, these studies reiterate the importance of investigating racial identity and suggest that this could aid in elucidating how racial objectification experiences are interpreted and incorporated into AAW's identities, which might attenuate or heighten risk for self-objectification.

Value of Person-Centered Approach

Empirical research examining self-objectification has traditionally used a variable-centered approach, wherein exposure to contexts of sexual and racial objectification has been consistently linked to deleterious outcomes (Moradi, 2010; Stice, 2002). This approach is well-suited for examining the differences between people yet assumes that the population is relatively homogenous with respect to how the predictors operate on outcome variables. Variable centered approaches therefore typically rely on statistical techniques that examine the importance of particular predictor variables in explaining variance in outcome variables, such as correlations, regressions, and structural equation models. In contrast, person-centered approaches describe differences among individuals in how variables relate to one another. This approach rejects the assumption of homogeneity and instead assumes that the population is relatively heterogeneous with respect to how the predictors operate on outcome variables. Methods that treat the person, rather than the variable, as the unit of analysis may be especially well-suited for research questions related to objectification theory because you can better distinguish those who are susceptible to disordered eating and depression and those who are not (Muthèn & Muthèn, 2000).

Within the objectification theory literature, no current studies to date have used a person-centered approach. Yet there are numerous theoretical and clinical advantages to using a person- centered approach, such as Latent Class Analysis (LCA), to better detect within-group variability in AAW's self-objectification processes. Foremost, objectification theory proposes that women's social identities, personal histories, and physical attributes contribute to individual differences in the degree and type of self-objectification women engage in (Frederickson & Roberts, 1997). AAW in particular are

a vastly heterogeneous group in terms of country of origin, cultural values, and immigration histories and thus treating AAW as a homogenous group might obscure important within-group differences in the type (i.e., general vs group-specific) and degree (i.e., high vs low frequency) of self-objectification. Additionally, qualitative studies with AAW provide preliminary evidence for the existence of subgroups on key objectification theory outcome variables, such that some women experience either really high or low levels of body dissatisfaction or disordered eating (Brady et al., 2017; Smart & Tsong, 2014). To the extent that self-objectification constructs contribute to individual differences in both depression and eating disorders, it is also likely that distinct patterns of self-objectification exist. Importantly, detecting high-risk subgroups among a group often collectively perceived as low-risk could aid in effective prevention interventions. Consistent with Moradi's (2010) recommendation to revisit the conceptualization and operationalization of self-objectification, a person-centered approach can also be used to elucidate the group-specific manifestations of self-objectification that are salient to AAW. For example, some AAW exposed to high levels of racial objectification might experience high levels of group-specific surveillance (e.g., monitoring eye-size, skin tone), but not high levels of general body surveillance. Through this novel method, this study can provide a more nuanced and meaningful understanding of how racial objectification experiences may become internalized by AAW and then used to self-evaluate.

Present Study

The primary goal of the present study is to test a racially-expanded model of objectification theory among AAW using a person-centered approach. We will seek to

identify distinct classes of AAW based upon their general and group-specific self-objectification processes as well as examine salient racial objectification contexts associated with these classes. Moreover, we will examine how these distinct classes correlate with eating disorder symptomology and depression.

Research Hypotheses.

We have several research hypotheses based upon the extant literature.

1. We hypothesize there will be 3-4 distinct classes of self-objectification that differ in type of objectification and frequency (Kalchi, 2010; Thomas et al., 2015). Specifically, we anticipate there to be a high-risk class, comprised of women with the highest levels of self-objectification across measures of general body surveillance, group-specific body surveillance, internalized beauty norms, and body shame. We anticipate there to be a moderate-risk class, comprised of women with high levels on some self-objectification measures but not others. Within the moderate-risk class, we expect there to be differences in class structure based on levels of general body surveillance and group-specific surveillance. Last, we anticipate there to be a low-risk class, comprised of women with low levels of self-objectification across measures of general body surveillance, group-specific body surveillance, internalized beauty norms, and body shame.
2. The high-risk class will have higher rates of disordered eating attitudes and depression compared to women in the low-risk class.
3. Women who report more frequent experiences of perceived discrimination and gendered racial microaggressions will be more likely to fall into the high-risk class.

a. Women who report more frequent experiences of perceived discrimination and gendered racial microaggressions will be more likely to exhibit higher levels of group-specific surveillance.
b. Women with a more affirmed or accepting Asian identity, characterized by cognitive flexibility around race and racial issues, will fall into the moderate or low-risk classes.

Appendix B

Recruitment Email Template

Hi! My name is Jennifer Brady and I am a counseling psychology doctoral student at the University of Maryland working under the advisement of Dr. Derek Iwamoto. Our research team is inviting you to participate in a study! We are conducting a study to better understand the different factors that influence Asian American women's disordered eating and depression.

If you are between the ages of 18-25, self-identify as an Asian American woman, and currently live in the U.S., you are invited to participate in a 30 minute online survey.

Eligible participants can earn 1 SONA credit or can elect to enter into a raffle to win one $25.00 Amazon Gift Card! **A total of 40 winners will be chosen in all!**

This study has received IRB approval. Participation is completely voluntary and your decision regarding participation will not in any way affect your employment status, academic standing or grades at your University. You are free to skip any questions that you prefer not to answer.

If you have any questions related to this research study please contact the study's principle investigator, Jennifer Brady, at jbrady19@umd.edu.

If you are interested in participating please click the link below:

https://umdsurvey.umd.edu/jfe/form/SV_9zbzOCKmkTDMa21

Thank you for considering this research request. Please feel free to distribute this survey to anyone who might be interested and eligible.

Appendix C

Subtle and Blatant Racism Scale for Asian American College Students (SABR-A2, Yoo et al., 2010)

Directions: Please think about your experience as an Asian American. Please indicate how often you have experienced the following events.

	Almost Never (1)	Rarely (2)	Some-times (3)	Very Often (4)	Always (5)
1. In America, I am treated differently because I'm Asian.					
2. In America, I am viewed with suspicion because I'm Asian.					
3. In America, I am overlooked because I'm Asian.					
4. In America, I am faced with barriers in society because I'm Asian.					
5. In America, I am called names such as, "chink, gook, etc." because I'm Asian					
6. In America, I am made fun of because I'm Asian.					
7. In America, I am told "you speak English so well" because I'm Asian					
8. In America, I have been physically assaulted because I'm Asian.					

Appendix D

Gendered Racial Microaggressions Scale for Asian American Women (GRMSAAW; Keum et al., 2018)

Directions: Please think about your experience as an Asian American woman. For each of the items, please rate how often you have encountered these experiences as an Asian American woman

	Never (0)	Rarely (1)	Some-times (3)	Often (4)	Very Freq. (5)	Always (6)
1. Others expect me to be submissive.						
2. Others have been surprised when I disagree with them.						
3. Others take my silence as a sign of compliance.						
4. Others have been surprised when I do things independent of my family.						
5. Others have implied that Asian American women seem content for being a subordinate.						
6. Others treat me as if I will always comply with their requests.						
7. Others expect me to sacrifice my own needs to take care of others (e.g., family, partner) because I am an Asian American woman.						
8. Others have hinted that Asian American women are not assertive enough to be leaders.						
9. Others have hinted that Asian American women seem to have no desire for leadership.						
10. Others express sexual interest in me because of my Asian appearance.						
11. Others take sexual interest in Asian American women to fulfill their fantasy.						
12. Others take romantic interest in Asian American women just because they never had sex with an Asian American woman before.						
13. Others have treated me as if I am always open to sexual advances.						
14. I see non-Asian women being casted to play female Asian characters.						
15. I rarely see Asian American women playing the lead role in the media.						
16. I rarely see Asian American women in the media.						

17. I see Asian American women playing the same type of characters (e.g., Kung Fu woman, sidekick, mistress, tiger mom) in the media.						
18. I see Asian American women characters being portrayed as emotionally distant (e.g., cold-hearted, lack of empathy) in the media.						
19. Others have talked about Asian American women as if they all have the same facial features (e.g., eye shape, skin tone).						
20. Others have suggested that all Asian American women look alike.						
21. Others have talked about Asian American women as if they all have the same body type (e.g., petite, tiny, small-chested).						
22. Others have pointed out physical traits in Asian American women that do not look "Asian."						

Appendix E

People of Color Racial Identity Attitudes Scale (PRIAS, Helms, 1995, Miller et al., 2016)

Directions: This questionnaire is designed to measure people's social and political attitudes concerning race and ethnicity. Different people have different opinions so there are no right or wrong answers. Use the scale below to respond to each statement according to the way you see things. Be as honest as you can.

	Strongly Disagree (1)	Disagree (2)	Neither Agree/ Disagree (3)	Agree (4)	Strongly Agree (5)
Factor 1: Conformity					
1. Whites are more attractive than people of my race					
2. People of my race should learn to think and act like Whites					
3. I limit myself to White activities					
Factor 2: Immersion/ Emersion					
4. I feel unable to involve myself in Whites' experiences, and am increasing my involvement in experiences involving people of my race					
5. When both White people and people of my race are present in a social situation, I prefer to be with my own racial group					
6. When people of my race act like Whites I feel angry					
Factor 3: Internalization					
7. People of my culture and White culture have much to learn from each other					
8. Whites have some customs that I enjoy					
9. Every racial group has some good people and some bad people					
Factor 4: Dissonance					
10. I'm not sure where I really belong					
11. I have begun to question my beliefs					
12. I'm not sure how I feel about myself					

Appendix F

Sociocultural Attitudes Toward Appearance Scale-3; Internalization- General Subscale
(SATAQ-3; Thompson et al., 2004)

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

	Definitely Disagree (1)	Disagree (2)	Neither Agree/ Disagree (3)	Agree (4)	Definitely Agree (5)
1. I would like my body to look like the people who are on TV.					
2. I compare my body to the bodies of TV and movie stars.					
3. I would like my body to look like the models who appear in magazines.					
4. I compare my appearance to the appearance of TV and movie stars.					
5. I would like my body to look like the people who are in the movies.					
6. I compare my body to the bodies of people who appear in magazines.					
7. I wish I looked like the models in music videos.					
8. I compare my appearance to the appearance of people in magazines.					
9. I try to look like the people on TV.					

Appendix G

Objectified Body Consciousness Scale (OBCS, McKinley and Hyde, 1996)
Body Surveillance and Body Shame Subscales

Directions: For the following items, please indicate your extent of agreement

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree/ Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
1. I rarely think about how I look.*							
2. I think it is more important that my clothes are comfortable than whether they look good on me*							
3. I think more about how my body feels than how my body looks.*							
4. I rarely compare how I look with how other people look.*							
5. During the day, I think about how I look many times.							
6. I often worry about whether the clothes I am wearing make me look good							
7. I rarely worry about how I look to other people*							
8. I am more concerned with what my body can do than how it looks.*							
9. When I can't control my weight, I feel like something must be wrong with me							
10. I feel ashamed of myself when I haven't made the effort to look my best.							

11. I feel like I must be a bad person when I don't look as good as I could.							
12. I would be ashamed for people to know what I really weigh.							
13. I never worry that something is wrong with me when I am not exercising as much as I should.*							
14. When I'm not exercising enough, I question whether I am a good enough person.							
15. Even when I can't control my weight, I think I'm an okay person*							
16. When I'm not the size I think I should be, I feel ashamed.							

Note. *Reverse score item. Items 1-8 represent the Body Surveillance subscale and items 9-16 represent the Body Shame subscale.

Appendix H

Group-Specific Surveillance; Skin-Tone Surveillance scale (Buchanan et al., 2008); Amended Face Surveillance scale (Kim et al., 2014); Eye-Surveillance Scale Self-Created

Directions: For the following items, please indicate your extent of agreement

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree/ Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
1. I often worry about how my face size and shape looks to other people							
2. I often compare my face size and shape with that of other people							
3. I rarely think about how my face size and shape looks*							
4. I often think about how much smaller or larger my face is than other people's							
5. I often wonder whether or not my face size and shape is attractive to other people							
6. I often think about how my face size and shape affects my looks							
7. I often feel conscious of how my face size and shape looks to other people							
8. I often worry that my face size and shape is unattractive to other people.							
9. I often wonder about how my face looks to other people							
10. I often compare my face to other people's							

11. I often worry that my face is unattractive to other people							
12. I often worry about how my eyes look to other people							
13. I often compare my eye size and shape with that of other people							
14. I rarely think about how my eyes look*							
15. I often think about how much smaller or larger my eyes are than other people's							
16. I often wonder whether or not my eye size and shape are attractive to other people							
17. I often think about how my eye size and shape affects my looks							
18. I often feel conscious of how my eye size and shape looks to other people							
19. I often worry that my eye size and shape is unattractive to other people.							
20. I often worry about how my skin color looks to other people							
21. I often compare my skin color with that of other people.							
22. I rarely think about how my skin color looks.*							
23. I often think about how much lighter or darker my skin is than other people's							
24. I often wonder whether or not my skin color is attractive to other people							
25. I often think about how my skin color affects my looks.							

26. I often feel conscious of how my skin color looks to other people							
27. I often worry that my skin color is unattractive to other people							

Note. *Reverse scored items. Items 1-11 represent the Face-Surveillance subscale; items 12-19 represent the Eye-Surveillance subscale; items 20-27 represent the Skin-Tone Surveillance Scale

Appendix I

Eating Attitudes Test (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982)

Directions: Please answer the questions below as accurately, honestly and completely as possible. There are no right or wrong answers. All of your responses are confidential.

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Usually (5)	Always (6)
1. I am terrified about being overweight.						
2. I avoid eating when I am hungry.						
3. I find myself pre-occupied with food						
4. I have gone on eating binges where I feel that I may not be able to stop.						
5. I cut my food into small pieces.						
6. I'm aware of the calorie content of foods that I eat.						
7. I particularly avoid food with a high carbohydrate content (i.e. bread, rice, potatoes, etc.)						
8. I feel that others would prefer if I ate more.						
9. I vomit after I have eaten						
10. I feel extremely guilty after eating.						
11. I am occupied with a desire to be thinner.						
12. I think about burning up calories when I exercise.						
13. I other people think that I am too thin.						
14. I am preoccupied with the thought of having fat on my body.						
15. I take longer than others to eat my meals.						
16. I avoid foods with sugar in them.						

17. I eat diet foods.						
18. I feel that food controls my life.						
19. I display self-control around food.						
20. I feel that others pressure me to eat.						
21. I give too much time and thought to food.						
22. I feel uncomfortable after eating sweets.						
23. I engage in dieting behavior.						
24. I like my stomach to be empty.						
25. I have the impulse to vomit after meals.						
26. I enjoy trying new rich foods.*						

Note. * Reverse score item.

Appendix J

Patient Health Questionnaire (PHQ-9; Kroenke & Spitzer, 2002)

Directions: Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all (0)	Several Days (1)	More than Half the days (2)	Nearly Every Day (3)
1. Little interest or pleasure in doing things				
2. Feeling down, depressed, or hopeless				
3. Trouble falling or staying asleep, or sleeping too much				
4. Feeling tired or having little energy				
5. Poor appetite or overeating				
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down				
7. Trouble concentrating on things, such as reading the newspaper or watching television				
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual				
9. Thoughts that you would be better off dead or of hurting yourself in some way				

Appendix K

Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015)

Directions: Over the last two weeks, how often have you been bothered by any of the following problems?

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
1. I respect my body.					
2. I feel good about my body.					
3. I feel that my body has at least some good qualities.					
4. I take a positive attitude towards my body.					
5. I am attentive to my body's needs.					
6. I feel love for my body.					
7. I appreciate the different and unique characteristics of my body.					
8. My behavior reveals my positive attitude toward my body; for example, I hold my head high and smile.					
9. I am comfortable in my body.					
10. I feel like I am beautiful even if I am different from media images of attractive people (e.g., models, actresses/actors).					

Appendix L

Demographics

Screening Questions included after consent form to determine eligibility:

1. Are you between the ages of 18-25 years old?
   - Yes
   - No

2. Do you identify as an Asian American woman?
   - Yes
   - No

3. Do you live in the United States?
   - Yes
   - No

Demographic Questions included at end of survey:

1. What is your age? _____

2. What is your ethnic background?

- ○ Bangladeshi
- ○ Cambodian
- ○ Chinese
- ○ Filipino
- ○ Hmong
- ○ Indian
- ○ Indonesian
- ○ Japanese
- ○ Korean
- ○ Laotian
- ○ Malaysian
- ○ Native Hawaiian or Pacific Islander
- ○ Pakistani

- ○ Singaporean
- ○ Taiwanese
- ○ Thai
- ○ Vietnamese
- ○ Multiracial and/or Multiethnic (please specify)

_____

- ○ Other (please specify)

_____

3. Please select your generational status.

- ○ 1st Generation (i.e., born outside of U.S.)
- ○ 1.5 Generation (i.e., immigrated between 6 to 12 years of age)
- ○ 2nd Generation (i.e., born in the U.S. and at least one parent is an immigrant)
- ○ 3rd Generation and beyond (i.e., born in the U.S. and at least both parents also born in the U.S.)
- ○ Adoptee
- ○ Other _____

4. What sex were you assigned at birth?

- ○ Female
- ○ Male

5. What is your gender?

- ○ Female
- ○ Male
- ○ Genderfluid
- ○ Gender non-conforming
- ○ Agender
- ○ Other (please specify)

_____

6. What is your sexual orientation?

- ○ Bisexual
- ○ Lesbian
- ○ Gay
- ○ Uncertain
- ○ Heterosexual
- ○ Questioning
- ○ Queer
- ○ Asexual
- ○ Other (please specify)

_____

7. Please select your current year in school.

- ○ Freshman
- ○ Sophomore
- ○ Junior
- ○ Senior
- ○ Graduate student
- ○ Other (please specify) _____

8. Are you in a sorority?

- ○ Yes
- ○ No

9. My *closest* friends are:

- ○ Mostly White
- ○ Mostly Black
- ○ Mostly Asian Americans
- ○ Mostly Latinos/Latinas

- ○ Racially mixed
- ○ Other (please specify) _____

10. What category best describes your household income?
    - ○ Less than $24,999
    - ○ $25,000 to $49,999
    - ○ $50,000 to $99,999
    - ○ $100,000 or more
    - ○ Prefer not to answer
11. Please indicate your geographic location:
    - ○ City: _____
    - ○ State/Province/Region: _____
12. What is your current height: _____feet _____inches
13. What is your current weight: _____lbs

Appendix M

Mental Health Resources University of Maryland, College Park

On Campus

UMD Counseling Center
Shoemaker Building
(301) 314-7651
http://counseling.umd.edu/Services/csservices.htm

My Body My Self
Group Therapy
Shoemaker Building
Contact: Dr. Erica Merson, merson12@umd.edu

Surviving and Thriving in a Confusing World
Group Therapy
Shoemaker Building
Contact: Dr. Chandni Shah, chandni@umd.edu

UMD Mental Health Services
Health Center
(301) 314-8106
http://www.health.umd.edu/mentalhealth

Asian American & Pacific Islander Student Involvement
1120 Adele H. Stamp Student Union

Off Campus

DC Department of Mental Health's Mobile Crisis Unit
202-673-9300 (9am – 1am)

DC Department of Mental Heath's 24-hour Help Line
1-888-793-4357

The Center for Eating Disorders
Sheppard Pratt
6535 N Charles St #300, Towson, MD 21204
(410) 938-5252

The Body Image Therapy Center
2639 Connecticut Ave NW suite 251,
Washington, DC 20008
(877) 674-2843

National Eating Disorder Association
Find Treatment
1-800-931-2237

Asian American Women Specific Resources

Thick Dumpling Skin: Vibrant AAPI online community Tumblr focused on body image
"Asian Bodies that Proudly Defy an Archetype" Article
"**How Asia's Female Bodybuilders Are Smashing Gender Stereotypes About Body Image"** Article
"Body Positivity in Asia"-Podcast by body confidence coach and activist, Michelle Elman

Appendix N

Mental Health Resources University of California, Irvine

On Campus

UCI Counseling Center
203 Student Services 1
949-824-6457

Making Peace with my Body
Group Therapy
Contact: Dr. Jessica Ortega

UCI Student Health Center
501 Student Health Center Drive
(949) 824-5301
https://shc.uci.edu/

Multicultural Campus Organizations
https://campusorgs.uci.edu/search/searchresults.php

Off Campus

Rebecca's House
Eating Disorder Treatment Program
23792 Rockfield Blvd #100
(800) 711-2062

Shoreline Center for Eating Disorder Treatment
191 Argonne Ave, Long Beach, CA
(562) 434-6007

Counseling Center Village
Information on mental health resources
http://ccvillage.buffalo.edu/

National Suicide Prevention Lifeline
1-800-273-8255

National Eating Disorder Association
Find Treatment
1-800-931-2237

Asian American Women Specific Resources

Thick Dumpling Skin: Vibrant AAPI online community Tumblr focused on body image
"Asian Bodies that Proudly Defy an Archetype" Article
"**How Asia's Female Bodybuilders Are Smashing Gender Stereotypes About Body Image**" Article
"Body Positivity in Asia"-Podcast by body confidence coach and activist, Michelle Elman

Table 1. Means, Standard Deviations, and Reliability Estimates of Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Media Intern	--														
2. Body Surv.	.54**	--													
3. Body Shame	.46**	.47**	--												
4. Face Surv.	.51**	.53**	.49**	--											
5. Eye Surv.	.32**	.30**	.32**	.51**	--										
6. Skin Surv.	.30**	.23**	.36**	.41**	.37**	--									
7. Conformity	.13**	.07	.07	.08	.17**	.14**	--								
8. Dissonance	.19**	.17**	.31**	.26**	.25**	.26**	.19**	--							
9. Immersion	.04	.01	.13**	.12**	.09*	.14**	-.05	.13**	--						
10. Internalization	.05	.09*	-.08	.00	-.05	-.08	-.01	-.01	-.05	--					
11. Gendered racism	.25**	.19**	.27**	.28**	.23**	.19**	-.11*	.26**	.24**	-.03	--				
12. Racism	.22**	.09*	.28**	.24**	.31**	.24**	.70	.16**	.30**	-.15**	.57**	--			
13. Disordered eating	.42**	.39**	.61**	.38**	.30**	.29**	.15**	.28**	.07	-.04	.29**	.24**	--		
14. Depression	.26**	.23**	.35**	.30**	.18**	.19**	.01	.38**	.20**	-.04	.34**	.24**	.39**	--	
15. BMI	.08	.06	.30**	.10*	-.09*	.06	-.03	.13**	.04	-.05	.14**	.07	.10*	.13**	--
α	0.93	0.81	0.87	0.95	0.96	0.95	0.62	0.82	0.60	0.58	0.93	0.85	0.90	0.90	--
M	3.63	4.77	3.74	4.78	3.79	3.51	1.79	2.59	2.96	4.22	55.60	18.54	64.57	8.88	22.05
SD	0.85	0.91	1.24	1.41	1.64	1.54	0.75	1.1	0.9	0.61	19.6	5.69	18.52	6.34	3.9

*$p < .05$ ** $p < .01$
Intern = Internalization, Surv = Surveillance

Table 2. Latent Class Models of Self-Objectification

Model	AIC	BIC	BLRT	Entropy	Posterior Probability Range
Two-class	9946.11	10028.14	p = .0000	.77	.92-.93
Three-class	9775.19	9887.44	p = .0000	.77	.83-.92
Four-class*	9706.91	9849.38	p = .0000	.81	.88-.91
Five-class	9649.683	9822.37	p = .0000	.81	.83-.92

AIC = Akaike information criterion; BIC = Bayesian information criterion; BLRT = Bootstrap likelihood ratio test

*Four-class model was deemed most parsimonious as evidenced by fit indices and interpretability.

Table 3. Logistic Regression Results for Associations Between Latent Classes and Covariates

	Appearance Accept. (ref) vs. High S.O.			Mod. S.O. (ref) vs High S.O.			Body Conscious (ref) vs Mod S.O.		
Predictor	OR	OR 95% CI	*p*-value	OR	OR 95% CI	*p*-value	OR	OR 95% CI	*p*-value
Gendered Racism	1.027	1.008-1.046	.006**	1.031	1.018-1.046	.000***	.998	.969-1.027	.875
Racial Discrimination	1.138	1.057-1.227	.001**	.999	.951-1.047	.927	.976	.898-1.060	.567
Conformity	1.574	.986-2.514	.057	1.258	.935-1.636	.105	1.005	.605-1.670	.986
Dissonance	1.500	1.132-1.989	.005**	1.374	1.128-1.673	.002**	1.297	.900-1.870	.164
Immersion-Emersion	1.083	.776-1.511	.639	.876	.681-1.126	.301	1.515	.997-2.3103	.051
Internalization	1.107	.689-1.778	.674	1.352	.954-1.921	.090	.602	.316-1.146	.122
2nd gen	1.035	.570-1.878	.911	.839	.539-1.309	.438	.888	.416-1.873	.745
East Asian	.804	.283-2.283	.682	1.119	.498-2.191	.764	3.912	1.36-11.271	.012*
Southeast Asian	.463	.165-1.294	.142	.782	.353-1.536	.513	2.309	.819-6.511	.114
South Asian	.549	.167-1.809	.325	1.412	.523-3.489	.478	1.851	.440-7.782	.400
≤ $24,999	1.497	.573-3.912	.411	1.185	.567-2.429	.645	2.030	.551-7.486	.295
$25,000 - $49,999	1.204	.514-2.819	.669	1.368	.672-2.676	.369	.867	.287-2.618	.797
$50,000 - $99,999	1.540	.637-3.720	.338	1.104	.567-2.148	.770	3.889	.96-15.715	.057
≥ $100,000	1.521	.631-3.669	.350	.972	.465-1.833	.934	1.091	.391-3.046	.943
Sorority status	1.852	.679-5.052	.229	1.496	.720-2.951	.257	1.133	.305-4.210	.852
BMI	1.096	1.003-1.196	.042*	1.026	.962-1.101	.450	1.025	.913-1.151	.680

*$p < 0.05$, ** $p < 0.01$, ***$p < 0.001$

S.O. = Self-Objectification; Accept. = Acceptance, Mod = Moderate; Ref = Reference Group; Generational status = Second Generation Status coded "1", All other Generational Statuses coded "0"

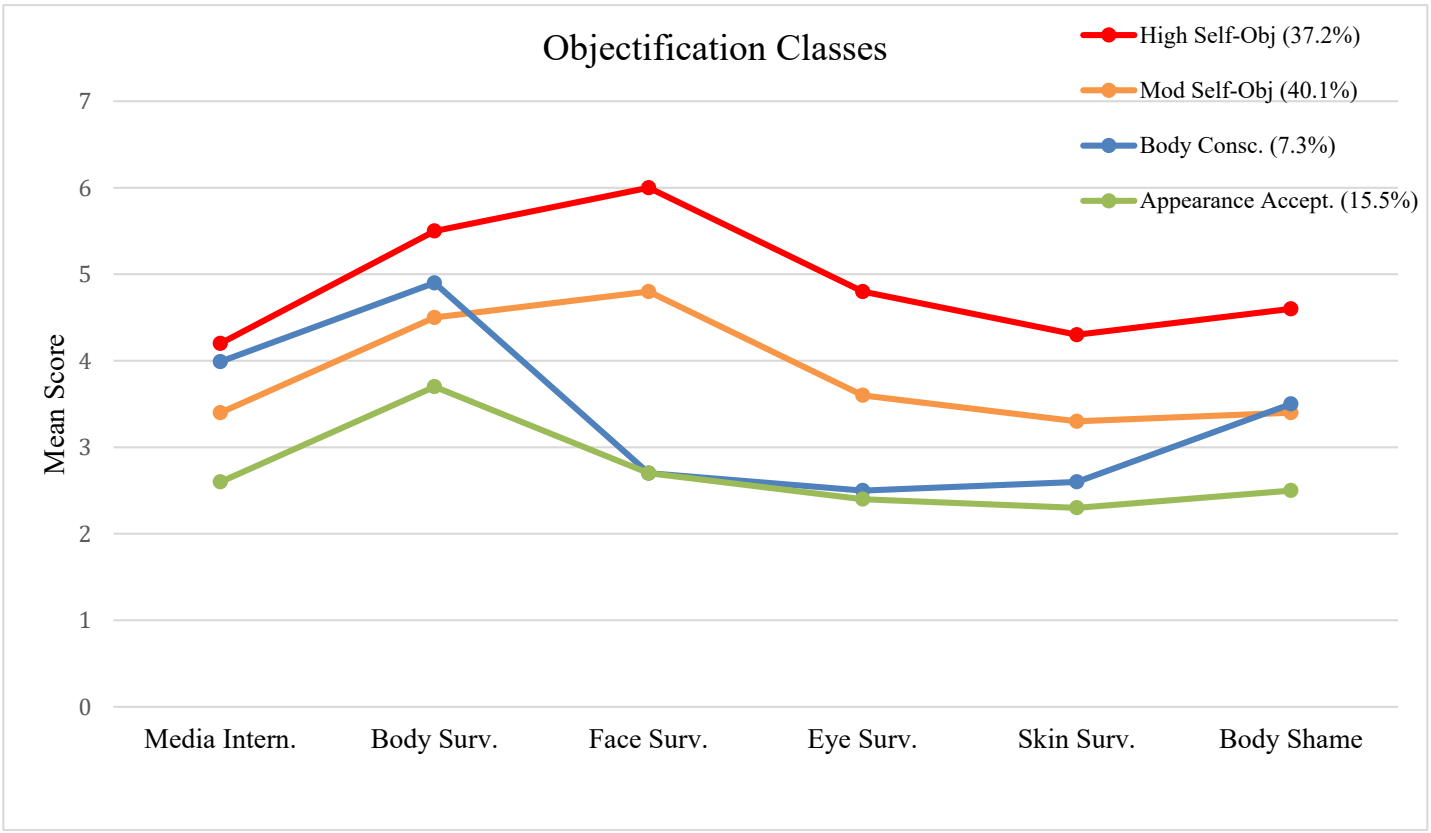

Figure 1. Self-objectification classes
Accept. = Acceptance, Mod. = Moderate, Intern. = Internalization, Surv. = Surveillance, Consc. = Conscious, Obj = Objectification

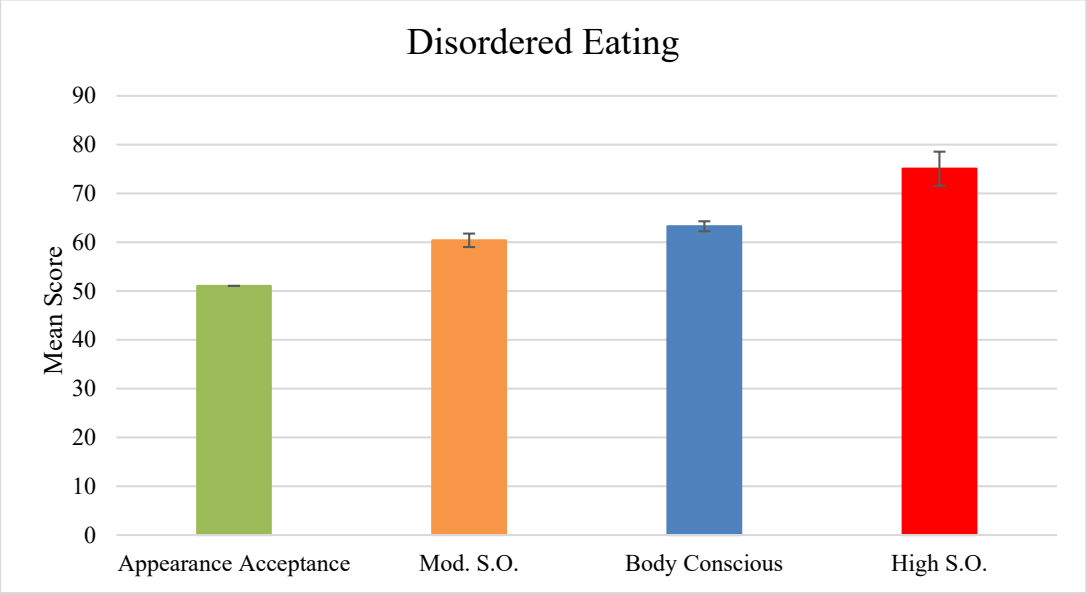

Figure 2. Statistically significant differences in eating disorder symptomology were found between the four classes. Only the Body Conscious class and the Moderate Self-Objectification class were not statistically significantly different. Note: Mod. = Moderate; S.O. = Self-Objectification.

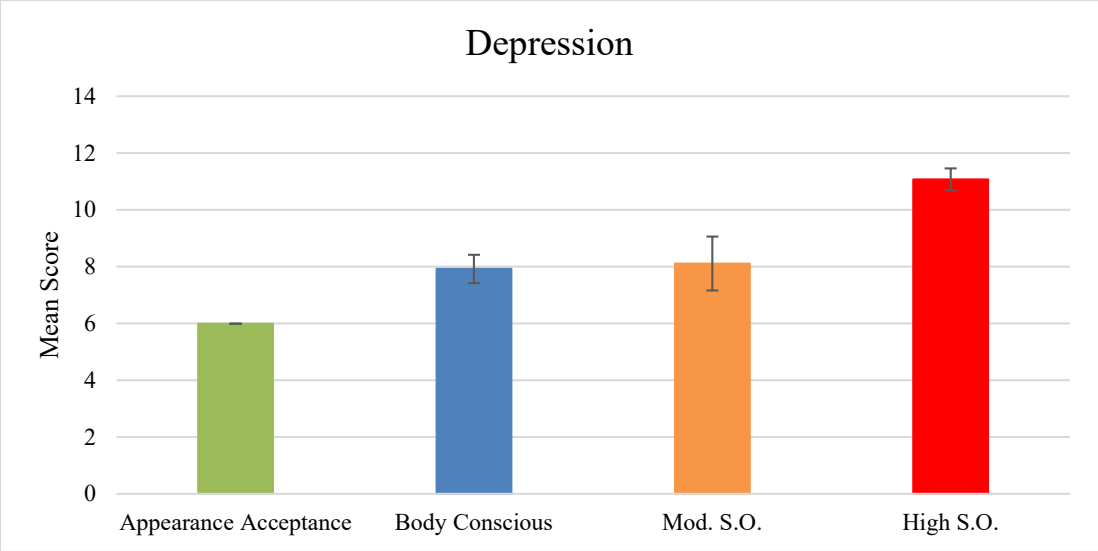

Figure 3. Statistically significant differences in depression symptomology were found between the four classes. The Body Conscious class and the Moderate Self-Objectification class were not statistically significantly different. The Body Conscious class and the Low S.O. class were not statistically significantly different. Note: Mod = Moderate, S.O. = Self-Objectification.

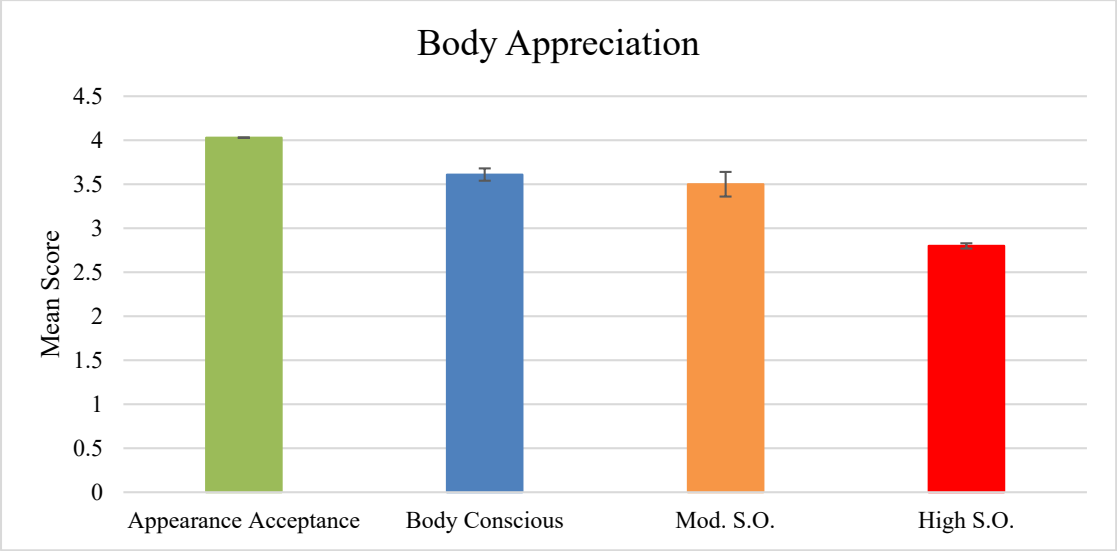

Figure 4. Statistically significant differences in body appreciation were found between the four classes. Only the Body Conscious class and the Moderate Self-Objectification class were not statistically significantly different. Note: Mod = Moderate; S.O. = Self-Objectification.

Bibliography

Akaike, H. (1987). Factor analysis and AIC. *Psychometrika, 52,* 317–332.

Alvarez, A. N., & Helms, J. E. (2001). Racial identity and reflected appraisals as influences on Asian Americans' racial adjustment. *Cultural Diversity and Ethnic Minority Psychology*, *7*(3), 217-231. doi:10.1037/1099-9809.7.3.217

Alvarez, A. N., Juang, L., & Liang, C. T. H. (2006). Asian Americans and racism: When bad things happen to "model minorities." *Cultural Diversity and Ethnic Minority Psychology, 12,* 477–492. doi:10.1037/1099-9809.12.3.477

Armenta, B. E., Lee, R. M., Pituc, S. T., Jung, K. R., Park, I. J., Soto, J. A., . . . Schwartz, S. J. (2013). Where are you from? A validation of the Foreigner Objectification Scale and the psychological correlates of foreigner objectification among Asian Americans and Latinos. *Cultural Diversity and Ethnic Minority Psychology, 19,* 131–142. doi: 10.1037/a0031547

Asian Pacific Institute and Gender-Based Violence (2017). *Census Data and API Identities.* Retrieved from: https://www.api-gbv.org/resources/census-data-api-identities/

Atkin, A. L., Yoo, H. C., & Yeh, C. J. (2019). What types of racial messages protect Asian American adolescents from discrimination? A latent interaction model. *Journal of Counseling Psychology, 66*(2), 247–254. Doi: 10.1037/cou0000297.supp (Supplemental)

Bar-Tai, D., & Saxe, L. (1976). Physical attractiveness and its relationship to sex role stereotyping. *Sex Roles, 2*, 123-133.

Bradford, J. W., & Petrie, T. A. (2008). Sociocultural factors and the development of disordered eating: A longitudinal analysis of competing hypotheses. *Journal of Counseling Psychology, 55*, 246–262. doi: 10.1037/0022-0167.55.2.246

Brady, J. L., Kaya, A., Iwamoto, D., Park, A., Fox, L., & Moorhead, M. (2017). Asian American women's body image experiences: A qualitative intersectionality study. *Psychology of Women Quarterly*, *41*(4), 479-496. doi:10.1177/0361684317725311

Buchanan, T.S., Fischer, A. R., Tokar, D.M., & Yoder, J.D. (2008). Testing a culture-specific extension of objectification theory regarding African American women's body image. *The Counseling Psychologist, 36*, 699–718.

Carr, E.R., & Szymanski, D.M., (2011). Sexual objectification and substance abuse in young adult women. *The Counseling Psychologist, 39*, 39–66.

Chadwick, C., & DeBlaere, C. (2019). The power of sisterhood: The moderating role of womanism in the discrimination-distress link among women of color in the United States. *Sex Roles: A Journal of Research, 81*(5–6), 326–337. doi:10.1007/s11199-018-0991-8

Chae, D.H., Takeuchi, D.T., Barbeau, E.M., et al….(2008). Unfair treatment, racial/ethnic discrimination, ethnic identification, and smoking among Asian Americans in the National Latino and Asian American Study. *American Journal of Public Health, 98*(3), 485–492.

Chen, G. A., LePhuoc, P., Guzmán, M. R., Rude, S. S., & Dodd, B. G. (2006). Exploring Asian American racial identity. *Cultural Diversity and Ethnic Minority Psychology*, *12*(3), 461-476. doi:10.1037/1099-9809.12.3.461

Chen, F.F., & Russo, N.F., (2010). Measurement invariance and the role of body consciousness in depressive symptoms. *Psychology of Women Quarterly, 34,* 405–417.

Cheng, H., Tran, A. T., Miyake, E. R., & Kim, H. Y. (2017). Disordered eating among Asian American college women: A racially expanded model of objectification theory. *Journal of Counseling Psychology*, *64*(2), 179-191. doi:10.1037/cou0000195

Choma, B. L., Visser, B. A., Pozzebon, J. A., Bogaert, A. F., Busseri, M. A., & Sadava, S. W. (2010). Self-objectification, self-esteem, and gender: Testing a moderated mediation model. *Sex Roles*, *63*(9-10), 645-656. doi:10.1007/s11199-010-9829-8

Csikszentmihalyi, M. (1982). *Toward a psychology of optimal experience*. In L. Wheeler (Ed.), Review of personality and social psychology. Beverly Hills, CA: Sage

Cummins, L. H., & Lehman, J. (2007). Eating disorders and body image concerns in Asian American women: Assessment and treatment from a multicultural and feminist perspective. *Eating Disorders, 15*, 217–230. doi:10.1080/10640260701323474

Enns, C. Z. (2012). Feminist approaches to counseling. In E. M. Altmaier & J.-I. C. Hansen (Eds.), *The Oxford handbook of counseling psychology*. (pp. 434–459). New York, NY: Oxford University Press. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2012-04472-016&site=ehost-live

Expert Panel on the Identification, Evaluation, and Treatment of Over-weight and Obesity in Adults. (1998). Executive summary of the clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults. *Archives of Internal Medicine, 158,* 1855–1867. doi:10.1001/archinte.158.17.1855

Evans, M.A., (2011). *Unattainable beauty: an analysis of the role of body shame and self-objectification in hopelessness depression among college-age women*. Dissertation Abstracts International: Section B: The Sciences and Engineering, 72; p. 1163.

Fiske, S. T., Bersoff, D. N., Borgida, E., Deaux, K., & Heilman, M. E. (1991). Social science research on trial: Use of sex stereotyping research in Price Waterhouse v. Hopkins. *American Psychologist, 46,* 1049-1060.

Forbes, G. B., & Frederick, D. A. (2008). The UCLA Body Project II: Breast and body dissatisfaction among African, Asian, European, and Hispanic American college women. *Sex Roles, 58,* 449-457. doi: 10.1007/s11199-007-9362-6

Forbes, G. B., Jobe, R. L., & Revak, J. A. (2006). Relationships between dissatisfaction with specific body characteristics and the Sociocultural Attitudes Toward Appearance Questionnaire-3 and Objectified Body Consciousness Scale. *Body Image, 3,* 295–300.

Franko, D. L., Becker, A. E., Thomas, J. J., & Herzog, D. B. (2007). Cross-ethnic differences in eating disorder symptoms and related distress. *International Journal of Eating Disorders, 40,* 156–164. http://dx .doi.org/10.1002/eat.20341

Frederick, D. A., Kelly, M. C., Latner, J. D., Sandhu, G., & Tsong, Y. (2016). Body image and face image in Asian American and White women: Examining associations with surveillance, construal of self, perfectionism, and sociocultural pressures. *Body Image, 16,* 113–125. doi:10.1016/j.bodyim.2015.12.002

Fredrickson, B. L., & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21*, 173-206. doi:10.1111/j.1471-6402.1997.tb00108.x

Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The eating attitudes test: Psychometric features and clinical correlates. *Psychological Medicine, 12,* 871– 878. Doi:10.1017/S0033291700049163

Gee, G. C., Spencer, M., Chen, J., Yip, T., & Takeuchi, D. T. (2007). The association between self-reported racial discrimination and 12-month DSM-IV mental disorders among Asian Americans nationwide. *Social Science & Medicine*, *64*(10), 1984-1996. doi:10.1016/j.socscimed.2007.02.013

Godart, N. T., Perdereau, F., Rein, Z., Berthoz, S., Wallier, J., Jeammet, P., & Flament, M. F. (2007). Comorbidity studies of eating disorders and mood disorders. Critical review of the literature. *Journal of Affective Disorders, 97,* 37–49.

Grabe, S., Hyde, J. S., & Lindberg, S. M. (2007). Body objectification and depression in adolescents: The role of gender, shame, and rumination. *Psychology of Women Quarterly*, *31*, 164-175. doi:10.1111/j.1471-6402.2007.00350.x

Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin, 134*, 460–476. doi:10.1037/0033-2909.134.3.460

Harrison, K., & Fredrickson, B. L. (2003). Women's sport media, self-objectification, and mental health in black and white adolescent females. *Journal of Communication, 53*, 216–232.

Hebl, M. R., King, E. B., & Lin, J. (2004). The swimsuit becomes us all: Ethnicity, gender, and vulnerability to self-objectification. *Personality and Social Psychology Bulletin, 30,* 1322– 1331.

Hedegaard H, Curtin SC, Warner M. (2018) *Suicide mortality in the United States*, 1999–2017. Data Brief, no 330. Hyattsville, MD: National Center for Health Statistics.

Helms, J. E. (1995). An update on Helms' White and people of color racial identity models. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & G. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 181–198). Thousand Oaks, CA: Sage.

Hesse-Biber, S., Livingstone, S., Ramirez, D., Barko, E., & Johnson, A. (2010). Racial identity and body image among Black female college students attending predominantly White colleges. *Sex Roles, 63*, 697–711. doi:10.1007/s11199-010-9862-7

Hurt, M.M., Nelson, J.A., Turner, D.L., Haines, M.E., Ramsey, L.R., Erchull, M.J., & Liss, M., (2007). Feminism: what is it good for? Feminine norms and objectification as the link between feminist identity and clinically relevant outcomes. *Sex Roles, 57*, 355–363.

Iwamoto, D. K., & Liu, W. M. (2010). The impact of racial identity, ethnic identity, Asian values, and race-related stress on Asian Americans and Asian international college students' psychological well-being. *Journal of Counseling Psychology, 57*, 79–91. doi: 10.1037/a0017393

Jones, B. A., & Griffiths K. M. (2015). Self-objectification and depression: An integrative systematic review. *Journal of Affective Disorders, 171,* 22-32, doi: 10.1016/j.jad.2014.09.011

Jung, T., & Wickrama, K.A. (2008) An introduction to latent class growth analysis and growth mixture modeling. *Social and Personality Psychology Compass, 2,* 302-317

Keum, B., Brady, J., Sharma, R., Lu, Y., Thai. C., & Kim, Y.H. (*revise and resubmit*). Gendered racial microaggressions against Asian American women: Development and initial validation of the Asian American Women's Microaggressions Inventory (AWMI), *Journal of Counseling Psychology*

Keum, B.T., Miller, M.J., & Inkelas, K.K. (*in press*). Testing the Factor Structure and Measurement Invariance of the PHQ-9 Across Racially Diverse U.S. College Students. *Psychological Assessment.*

Kim, M., & Chung, A.Y. (2005). Consuming Orientalism: Images of Asian/American Women in Multicultural Advertising, *Qualitative Sociology, 28,* 67-91.

Kim, W., Ryu, Y., & Park, E. (2006). The Korean version of Objectified Body Consciousness Scales (K-OBCS): Development and validation. *Korean Journal of Psychology, 26*, 329–349.

Kim, S. Y., Seo, Y. S., & Baek, K. Y. (2014). Face consciousness among South Korean women: A culture-specific extension of objectification theory. *Journal of Counseling Psychology, 61,* 24–36. doi:10.1037/a0034433

Kozee, H. B., & Tylka, T. L. (2006). A test of objectification theory with lesbian women. *Psychology of Women Quarterly, 30*, 348-357. doi:10.1111/j.14716402.2006.00310.x

Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: a new depression diagnostic and severity measure. *Psychiatric annals*, *32*(9), 509-515. doi: 10.3928/0048-5713-20020901-06

Lam, C. Y., Pepper, C. M., & Ryabchenko, K. A. (2004). Case identification of mood disorders in Asian American and Caucasian American college students. *Psychiatric Quarterly*, *75*, 361–373. doi:10.1023/B:PSAQ.0000043511.13623.1b

Liu, S., Li, C.-I., Wang, C., Wei, M., & Ko, S. (2019). Self-compassion and social connectedness buffering racial discrimination on depression among Asian Americans. *Mindfulness.* Doi: 10.1007/s12671-019-01275-8

Marques, L., Alegria, M., Becker, A.E., Chen, C.N., Fang, A., Chosak, A, et al. (2011). Comparative prevalence, correlates of impairment, and service utilization for eating disorders across U.S. ethnic groups: Implications for reducing ethnic disparities in health care access for eating disorders. *International Journal of Eating Disorders*, *44,* 412–420.

McCutcheon, A.L. (1987). *Latent class analysis*. Newbury Park, CA: Sage.

McKinley, N. M. (2006). The developmental and cultural contexts of objectified body consciousness: A longitudinal analysis of two cohorts of women. *Developmental Psychology, 42,* 679–687.

McKinley, N. M., & Hyde, J. S. (1996). The Objectified Body Consciousness Scale: Development and validation. *Psychology of Women Quarterly, 20*, 181-215. doi:10.1111/j.1471-6402.1996.tb00467.x

Miller, M. J., Keum, B. T., Thai, C. J., Lu, Y., Truong, N. N., Huh, G. A., … Ahn, L. H. (2018). Practice recommendations for addressing racism: A content analysis of the counseling psychology literature. *Journal of Counseling Psychology, 65*(6), 669–680. doi: 10.1037/cou0000306

Mintz, L. B., & Kashubeck, S. (1999). Body image and disordered eating among Asian American and Caucasian college students: An examination of race and gender differences. *Psychology of Women Quarterly, 23*, 781–796. doi:10.1111/j.1471–6402.1999.tb00397.x

Moradi, B. (2013). Discrimination, objectification, and dehumanization: Toward a pantheoretical framework. In S. J. Gervais (Ed.), *Objectification and dehumanization* (pp. 153–181). New York, NY: Springer.http://dx.doi.org/10.1007/978-1-4614-6959-9_7

Moradi, B. (2010). Addressing gender and cultural diversity in body image: Objectification theory as a framework for integrating theories and grounding research. *Sex Roles, 63*, 138-148.

Moradi, B. (2011). Objectification theory: Areas of promise and refinement. *The Counseling Psychologist, 39,* 153–163. doi:10 .1177/0011000010384279

Moradi, B., Dirks, D., & Matteson, A. (2005). Roles of sexual objectification experiences and internalization of sociocultural standards of beauty in eating disorder symptomatology: An examination and extension of objectification theory. *Journal of Counseling Psychology, 52,* 420–428.

Moradi, B., & Huang, Y. P. (2008). Objectification theory and psychology of women: A decade of advances and future directions. *Psychology of Women Quarterly, 32,* 377-398. doi:10.1111/j.1471-6402.2008.00452.x

Moradi, B., & Rottenstein, A. (2007). Objectification theory and deaf cultural identity attitudes: Roles in deaf women's eating disorder symptomatology. *Journal of Counseling Psychology, 54*, 178-188. doi:10.1037/0022-0167.54.2.178

Muehlenkamp, J. J., Gutierrez, P. M., Osman, A., & Barrios, F. X. (2005). Validation of the Positive and Negative Suicide Ideation (PANSI) inventory in a diverse sample of young adults. *Journal of Clinical Psychology, 61*, 431– 445. doi:10.1002/jclp.20051

Muehlenkamp, J., & Saris-Baglama, R. (2002). Self-Objectification and its psychological outcomes for college women. *Psychology of Women Quarterly, 26*(4), 371-379.

Muthén, B. (2003). Statistical and substantive checking in growth mixture modeling: Comment on Bauer and Curran (2003). *Psychological Methods, 8*, 369–377.

Muthén, B., & Muthén, L. K. (2000). Integrating person-centered and variable-centered analyses: Growth mixture modeling with latent trajectory classes. *Alcoholism: Clinical and Experimental Research*, *24,* 882–891.

Muthén, L. K., & Muthén, B. O. (2013). *Mplus users' guide* (7th ed.). Los Angeles, CA: Author.

Nadal, K. L., Davidoff, K. C., Davis, L. S., Wong, Y., Marshall, D., & McKenzie, V. (2015). A qualitative approach to intersectional microaggressions: Understanding influences of race, ethnicity, gender, sexuality, and religion. *Qualitative Psychology, 2*, 147–163

National Center for Health Statistics (2003). *Health, United States, 2003*. Hyattsville, MD: US Public Health Service.

Nicdao, E. G., Hong, S., & Takeuchi, D. T. (2007). Prevalence and correlates of eating disorders among Asian Americans: Results from the national Latino and Asian American study. *International Journal of Eating Disorders, 40*, S22–S26. doi:10.1002/eat.20450

Nolen-Hoeksema, (1987). Sex difference in unipolar depression: evidence and theory. *Psychological Bulletin, 101*, 259–282.

Nuttall, F. Q (2015). Body Mass Index, obesity, BMI, and health: A critical review. *Nutrition Research, 50*(3), 117-128. doi: 10.1097/NT.0000000000000092

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling*, *14*(4), 535-569. doi:10.1080/10705510701575396

O'Brien, K. M. O., & Vincent, N. K. (2003). Psychiatric comorbidity in anorexia and bulimia nervosa: Nature, prevalence, and causal relationships. *Clinical Psychology Review, 23,* 57–74.

Pearson, A. N., Follette, V. M., & Hayes, S. C. (2012). A pilot study of acceptance and commitment therapy as a workshop intervention for body dissatisfaction and disordered eating attitudes. *Cognitive and Behavioral Practice, 19*, 181–197. doi: 10.1016/j.cbpra.2011.03.001

Preti, A., Camboni, M. V., & Miotto, P. (2011). Eating disorders and suicide. In V. R. Preedy, R. R. Watson, & C. R. Martin (Eds.), *Handbook of behavior, food and nutrition (*pp. 1939–1965). New York, NY: Springer. doi:10.1007/978-0-387-92271-3_126

Quinn, D. M., Kallen, R. W., & Cathey, C. (2006). Body on my mind: The lingering effect of state self-objectification. *Sex Roles, 55,* 869–874.

Rondilla, J. L., & Spickard, P. (2007). *Is lighter better? Skin-tone discrimination among Asian Americans.* Lanham, MD: Rowman & Littlefield Publishers

Schlomer, G., Bauman, S., & Card, N. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57*, 1-10.

Schwartz, G. (1978). Estimating the dimension of a model. *The Annals of Statistics, 6,* 461–464.

Sellers, R.M., & Sheldon, J.N. (2003). The role of racial identity in perceived discrimination. *Journal of Personality and Social Psychology*, *84*, 1079- 1092.

Shek, Y. L., & McEwen, M. K. (2012). The relationships of racial identity and gender role conflict to self-esteem of Asian American undergraduate men. *Journal of College Student Development, 53*(5), 703–718. https://doi-org.proxy-um.researchport.umd.edu/10.1353/csd.2012.0065

Shepherd, L., & Evans, C. (2019). From gaze to outrage: The role of group-based anger in mediating the relationship between sexual objectification and collective action. *Sex Roles: A Journal of Research.* doi: 10.1007/s11199-019-01054-8

Strelan, P., Mehaffey, S. J., & Tiggemann, M. (2003). Self-objectification and esteem in young women: The mediating role of reasons for exercise. *Sex Roles*, *48*(1-2), 89-95. doi:10.1023/A:1022300930307

Sue, S., Cheng, J. Y., Saad, C. S., & Chu, J. P. (2012). Asian American mental health: A call to action. *American Psychologist*, *67*(7), 532-544. doi:10.1037/a0028900

Szymanski, D.M., & Henning, S.L., (2007). The role of self-objectification in women's depression: A test of objectification theory. *Sex Roles, 56*, 45–53.

Tabachnick, B. G., and Fidell, L. S. (2013). *Using multivariate statistics, 6th ed.* Boston: Pearson.

Thompson, J. K., van den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J. (2004). The Sociocultural Attitudes Towards Appearance Scale–3 (SATAQ-3): *Development and validation. International Journal of Eating Disorders, 35,* 293–304. Doi: 10.1002/eat .10257

Tiggemann, M., & Williams, E. (2012). The role of self-objectification in disordered eating, depressed mood, and sexual functioning among women: A comprehensive test of objectification theory. *Psychology of Women Quarterly*, *36*, 66-75. doi:10.1177/0361684311420250

Tolaymat, L. D., & Moradi, B. (2011). U.S. Muslim women and body image: Links among objectification theory constructs and the hijab. *Journal of Counseling Psychology, 58*, 383–392. doi:10.1037/a0023461

Tran, A. G. T. T., Cheng, H.-L., Netland, J. D., & Miyake, E. R. (2017). Far from fairness: Prejudice, skin color, and psychological functioning in Asian Americans. *Cultural Diversity and Ethnic Minority Psychology, 23*(3), 407-415. doi:10.1037/cdp0000128

Tsong, Y., & Smart, R. (2015). The role of cultural beliefs in disordered eating among Asian-American women. *Asian American Journal of Psychology, 6*, 342–349. doi:10.1037/ aap0000029

Tylka, T. L., & Hill, M. S. (2004). Objectification theory as it relates to disordered eating among college women. *Sex Roles*, *51*(11-12), 719-730. doi:10.1007/s11199-004-0721-2

Unger, R. K. (1979). *Female and male.* New York: Harper and Row.

Vaes, J., Paladino, P., & Puvia, E. (2011). Are sexualized women complete human beings? Why men and women dehumanize sexually objectified women. *European Journal of Social Psychology, 41*, 774–785. doi:10.1002/ejsp.824

Villapanda, V. (1989). The business of selling mail-order brides. In Asian Women United of California (Ed.), *Making waves: An anthology of writings by and about Asian American women* (pp. 318–326). Boston: Beacon Press.

Wade, T. D., Keski-Rahkonen, A., & Hudson, J. (2011). Epidemiology of eating disorders. In M. Tsuang & M. Tohen (Eds.), *Text-book in psychiatric epidemiology* (3rd ed., pp. 343–360). New York, NY: John Wiley.

Watson, L. B., Ancis, J. R., White, D. N., & Nazari, N. (2013). Racial identity buffers African American women from body image problems and disordered eating. *Psychology of Women Quarterly, 37,* 337–350. doi:10.1177/0361684312474799

Watson, L. B., Grotewiel, M., Farrell, M., Marshik, J., & Schneider, M. (2015). Experiences of sexual objectification, minority stress, and disordered eating among sexual minority women. *Psychology of Women Quarterly, 39*(4), 458–470. doi: 10.1177/0361684315575024

Williams, M. G., & Lewis, J. A. (2019). Gendered racial microaggressions and depressive symptoms among Black women: A moderated mediation model. *Psychology of Women Quarterly, 43*(3), 368–380. doi:10.1177/0361684319832511

Winter, V.R, Gillen, M.M., Cahill, L., Jones A., Ward, M. (2019). Body appreciation, anxiety, and depression among a racially diverse sample of women. *Journal of Health Psychology, 24*(11), 1517-1525. doi:10.1177/1359105317728575.

Wong, Y. J., Brownson, C., and Schwing, A. E. (2011). Risk and protective factors associated with Asian American students suicidal ideation: A multicampus, national study. *Journal of College Student Development, 52*, 396-408.

Wooley, S. C., & Wooley, O. W. (1980). *Eating disorders: Anorexia and obesity*. In A. M. Brodsky & R. Hare-Mustin (Eds.), Women and psychotherapy (pp. 135-158). New York: Guilford.

Yarnell, L. M., & Neff, K. D. (2013). Self-compassion, interpersonal conflict resolutions, and well-being. *Self and Identity, 2*, 146–159. Doi: 10.1080/15298868.2011.649545.

Yeung, A., Chan, R., Mischoulon, D., Sonawalla, S., Wong, E., Nierenberg, A. A., & Fava, M. (2004). Prevalence of major depressive disorder among Chinese-Americans in primary care. *General Hospital Psychiatry*, *26*, 24–30. doi:10.1016/j.genhosppsych.2003.08.006

Yokoyama, K. (2007). The double binds of our bodies: Multiculturally-informed feminist therapy considerations for body image and eating disorders among Asian American women. *Women & Therapy, 30*, 177–192.

Yoo, H. C., Steger, M. F., & Lee, R. M. (2010). Validation of the subtle and blatant racism scale for Asian American college students (SABR-A2). *Cultural Diversity & Ethnic Minority Psychology, 16,* 323–334. doi:10.1037/a0018674

Yu, K.Y., Pope, S.C., Perez, M. (2019). Clinical practice and eating disorder recommendations for disordered eating in Asian Americans, *Professional Psychology: Research and Practice, 50*(5), 279-287. https://doi.org/10.1037/pro0000244