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INTERSECTIONAL MICROAGGRESSIONS AND DISORDERED EATING IN ASIAN AMERICAN WOMEN

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Intersectional Microaggressions and Disordered Eating In Asian American Women

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Dissertation submitted to the College of Applied Human Sciences
at West Virginia University

in partial fulfillment of the requirements for the degree in

Doctor of Philosophy in Counseling Psychology

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Keywords: Eating disorders, Asian American women, gendered racial microaggressions

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ABSTRACT

Intersectional microaggressions and disordered eating in Asian American women

Spring Alexandria Szoka

Disordered eating in college-age women is well-documented. Less is known about minoritized populations and disordered eating for college-age women, especially Asian American women. As Asian Americans are often subjected to the “model minority” myth, less research has been dedicated to understanding disordered eating for this population. Small, everyday slights motivated by the model minority myth and other racial stereotypes are known as microaggressions. Asian American women hold an intersectional identity that places them at risk for experiencing microaggressions from their identity as both a woman and as an Asian American. The purpose of this study was to examine relationships between gendered racial microaggressions, appearance investment, and disordered eating among female Asian American students in the US. The study results provide more information about critical factors that could be explored in further research, as well as highlighting how unique, intersectional experiences predict the development of disordered eating and body image concerns. Significant findings suggest that gendered racial microaggression experiences predict disordered eating for Asian American college women, as higher reports of gendered racial microaggressions predicted increased disordered eating levels when accounting for demographic variables. Additionally, higher levels of appearance investment also predicted increased disordered eating. This study provides evidence related to how unique experiences of gendered racial microaggressions relate to disordered eating and body image investment for this population.

Keywords: Eating disorders, Asian American women, gendered racial microaggressions

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DEDICATION

For my mom, who told me I could do and be anything, and that God was in everything I touched.

For those who struggle. We are more than just things to be seen.

She filled my head with dreams, telling me I could become anything I wanted. I believed her so much I thought I could be white.

— Helie Lee, *Still Life with Rice: A Young American Woman Discovers the Life and Legacy of Her Korean Grandmother*

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For the ladies of the Ranch, who participated in creating the seed of Dr. D and all the experiences in between.

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CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

Introduction

Eating disorders (EDs) pose a significant public health issue in the United States and in many countries worldwide (Hoek, 2016; Rodgers et al., 2017; Winter et al., 2019). Disordered eating covers a wide range of behaviors and attitudes related to food and may include dietary restriction and/or purging (APA, 2013; Galmiche et al., 2020). These attitudes and behaviors lead to numerous adverse symptoms, cause disruption of emotional and physical functioning, and may result in future eating disorder diagnoses (Bhatnagar et al., 2004; Sonnevile & Lipson, 2018).

Evidence suggests that racial and sexual oppression, such as racism and sexism, can lead to problems with body image and disordered eating (Cheng et al., 2017, Cummins & Lehman, 2007). Racial and sexual objectification, dissatisfaction with racialized features, and pressure for thinness contribute to body image dissatisfaction for Asian American women (AAW) (Le et al., 2020; Smart et al., 2011; Tsong & Smart, 2015). Due to these risk factors, there is an increasing need for research on this population.

Asian Americans and ethnic minorities are missing from most of the disordered eating literature, as research focuses primarily on White women (Rodgers et al., 2017; Yu et al., 2019). In addition, recent recommendations for therapy with AAW with disordered eating suggests that practitioners examine the relationship between gender and racial oppression and the development of disordered eating (Cheng et al., 2017; Le et al., 2020). Therefore, this study aims to further research on the relationship between gendered racial discrimination, body image, and disordered eating for this marginalized population. In the section that follows, current literature on

disordered eating and body image in AAW will be examined with the goal of integrating intersectionality, disordered eating, and body image investment for AAW.

Eating Disorders: Diagnosis and History

Eating disorders are characterized by maladaptive eating patterns and are defined by the diagnostic and statistical manual (DSM) from the American Psychiatric Association (APA). Eating disorders were first recognized in 1980 and acknowledged by the World Health Organization (WHO) in 1977 in their publication of the International Classification of Disease (ICD) (Crow et al., 2007). Maladaptive eating habits include restricting food (anorexia nervosa; AN), overeating (bulimia nervosa; BN) and binge-eating (binge eating and other specified feeding or eating disorder; OSFED), which can include both restrictive eating, bingeing, and purging (Galmiche et al., 2020). Eating disorders in all diagnostic categories are marked by functional impairment, chronicity, and distress (Cheng et al., 2019; Rodgers et al., 2018). The term disordered eating is used to denote a range of behaviors, feelings, and attitudes that identify the presence of an eating disorder risk. Disordered eating may meet few or many criteria within the diagnostic category of an eating disorder.

There are many health risks associated with disordered eating including depression, obesity, self-harm, suicide, and substance use (Quick & Byrdbrenner 2014; Sonnevile & Lipson, 2018). Anorexia nervosa has a high standardized rate of mortality (death per 100,000 individuals) of 12 while both bulimia nervosa and other eating disorders are lower, at 1.9 (Crow et al., 2009). In relationship to other psychiatric disorders, eating disorders have one of the highest correlations to suicide attempts, hospitalizations, and decreased quality of life/overall functioning (APA, 2013; Ward et al., 2019). These mortality rates are compounded by suicide risk, which is strongly correlated with ED (Uri et al., 2021). The standardized mortality ratio rate

is calculated by dividing the number of expected deaths in a given population by the number of deaths observed. The higher the standardized mortality ratio rate, the greater the risk of unexpected death in a given population. The standardized mortality ratio rate in disordered eating populations is relatively high for death by suicide and is calculated to be 4.7 for anorexia nervosa, 6.5 for bulimia nervosa, and 3.9 for EDNOS (Crow et al., 2009). Abuse of substances is common in the ED population, with up to half reporting a comorbid SUD (Bhaji et al., 2019). Stimulant use may be more common among restricting disorders. A meta-analysis of the literature found SUD lifetime SUD comorbidity with ED to be highest among categories of females, Caucasians, and individuals with binge-purge behaviors. Comorbidity with substance use can provide more risk for adverse physical and mental health effects (Bhaji et al., 2019).

Many cases of eating disorders are diagnosed in the US and worldwide every year, and literature indicates that ED diagnoses are on the rise. According to a review by Galmiche et al. (2020), during the 2000-2006 period, ED prevalence was 3.6 %; during the 2013-2018 period, the prevalence rate more than doubled to 7.8%. In terms of diagnostic categories, OSFED remains the most prevalent in the general population in the US, followed by BED, BN, and AN (Crow et al., 2009). When examining outcomes related to diseases and disorders, it is important to consider not just the fatality of the disease, but also the loss of health and how ones' life can be impaired and shortened due to disability. Disability-adjusted life years is a term used to calculate the overall impairment and loss of life one can expect due disease burden. Anorexia and BE disorders combined are the 12th leading cause of disability-adjusted life years in adolescents and young adults ages 15-19 (Hoek, 2016).

Historically, research about EDs has focused on White female populations. Although EDs were classically thought to be confined to developed Western countries, many studies have

highlighted the prevalence of disordered eating in East European and Asian countries (Galmiche, 2020; Iyer & Haslm (2003; Ng et al., 2020). A review of disordered eating literature reveals that women are most likely to experience this condition, and that women in the US and Europe are more likely than women from other countries to experience an ED (Crow et al., 2009; Galmiche et al., 2020). The DSM-5 reports that AN occurs more often in White women than other race and ethnic categories (APA; 2013).

There may be several reasons contributing to this higher prevalence rate in White populations. One reason is that individuals from non-White groups have historically lower utilization rates of mental health services (Rodgers et al., 2018; Winter et al., 2019, Yu et al., 2019). Being less likely to seek treatment, individuals from non-White groups are less likely to be diagnosed (Sonneville & Lipson, 2018; Vargas et al., 2020). In addition, providers may also have an ascertainment bias towards White individuals, thereby missing diagnoses in non-white populations (Rodgers et al., 2018; APA, 2013). For example, the presentation of ED symptoms can vary across cultural contexts and may not always include an intense fear of gaining weight, which is a necessary criterion for meeting DSM diagnosis (Yu et al., 2019). Women are more likely to be diagnosed with AN, but the gender gap decreases for individuals diagnosed with BE (Hudson et al., 2007).

Prevalence rates for other countries, including countries in Asia, are also significant. ED prevalence is estimated to be about 4.6% (2.0–13.5%) in America, 2.2% (0.2–13.1%) in Europe, and 3.5% (0.6–7.8%) in Asia (Galmiche et al., 2020). There is some controversy regarding prevalence rates of disordered eating within US non-White populations. While some researchers (Cheng et al., 2019; Marques et al., 2011; Wade et al., 2011) posit prevalence rates are similar across ethnic groups in the United States, other researchers (Assari & Kumar, 2018; Claudat et

al., 2016; Rodgers et al., 2018; Uri et al., 2021) note distinctions in prevalence rates across and between groups.

There is growing awareness of how Asian Americans also experience disordered eating. Specific risk factors for Asian Americans may contribute to growing incidences of disordered eating for this population, including acculturation (Kwan et al., 2018; Reddy & Crowther, 2007), cultural beliefs (Ahn et al., 2021; Tsong & Smart, 2015), and body image concepts (Wong et al., 2017). Another factor associated with disordered eating for Asian Americans is racial discrimination (Chang et al., 2014; Cheng et al., 2017; Le et al., 2020; Smart et al., 2014). Looking at these specific risk factors for Asian Americans combined with the likelihood that prevalence rates are underreported due to ascertainment bias and cultural differences in diagnosis points to a need for more research into the treatment of Asian Americans for disordered eating (Smart et al., 2011; Yu et al., 2019).

College and ED

Regarding developmental onset, EDs commonly begin in adolescence (under 18 years of age) and young adulthood, while onset before puberty or after age forty is uncommon (APA, 2013; Ward et al., 2019). The highest prevalence data for ED are reported in adults, due to the accumulation of prolonged disorders that appear during adolescence in addition to disorders that begin after age 18 (Hoek, 2016; Sonnevile & Lipson, 2018). Since onset often occurs during young adulthood and is more frequently diagnosed in women than men, much of the research on disordered eating focuses on college-age women.

Young adults attending college are at high risk of engaging in disordered eating due to social pressures and identity changes during this time (Fitzsimmons-Craft, 2011). A host of biological, psychological, and physical risk factors can predispose individuals to engage in

disordered eating (Cheng et al., 2017). Physical risk factors include body dissatisfaction, perfectionism, genetics, and early age of menarche onset. Prevalence rates are higher in college populations than non-college populations (Ward et al., 2019). In addition, the DSM-5 indicates that young adulthood is the most common age for onset and treatment of ED (APA; 2013). This may be due to an emerging ED at this time, a recurrence of an ED first diagnosed in adolescence, or a prolonged adolescent ED due to the chronicity of this disorder. Environmental factors can trigger these physical factors and compound incidence of ED during young adulthood (Cheng et al., 2017; Fitzsimmons-Craft, 2011).

A variety of social factors can contribute to an increased prevalence of disordered eating in college settings. For example, college settings often highlight weight and shape, thereby increasing investment in one's body image (Brady, 2020; Cheng et al., 2017; Herme, 2016). There is added pressure from college culture that promotes internalization of the thin ideal (Leahy & Crowther, 2008). Research from Davison and McCabe (2000) highlights how a woman's view of her body is based not only on her perception, but how she understands others to view her body. In addition, college women engage in more upward than downward comparison (Leahey & Crowther, 2008; O'Brien et al., 2009; Rancourt et al., 2016). This can lead to a skewed view of women's bodies and body image in a college environment.

There are some predictors of eating disturbances for college Asian American populations that are related to the unique experiences of Asian American women. For example, Asian American college women report greater parental expectations and criticism than their White counterparts (Chang et al., 2014; Tsong & Smart, 2006). In addition, Asian cultural values may drive Asian American college women to attain perfection and achieve success at all costs (Ahn et al., 2021; Akoury et al., 2019). There is evidence that peer influences and a high investment in

appearance ideals may also contribute to disordered eating behaviors for Asian American college women (Rodgers et al., 2018). Asian Americans reported higher levels of purging and cognitive restraint related to diet than White and non-Asian students of color in a large sample of college students (Uri, 2021).

Authors Akoury, Warren, and Culbert (2019) identified culture-specific predictors of disordered eating that combine to present unique risk factors for Asian American college women and include acculturative stress, sexual objectification, and racial objectification. While college students are at high risk of developing an eating disorder, Asian American college students face additional stressors that may increase body image and eating disturbances (Carter, 2017; Cheng et al., 2017). Asian American college women reported higher levels of thin ideal internalization than either White or Black women (Rakhkovskaya & Warren, 2014) and endorsed a more negative self-image and higher levels of body dissatisfaction compared to other ethnic groups (Assari & Kumar, 2018; Uri et al., 2021). Furthermore, Asian-American women with increased perception of rejection or social isolation due to their Asian ethnicity were more likely to endorse greater eating concerns (Tsutakawa, 2023). This is likely due to cultural values and increased objectification via the interplay of race and gender.

Another variable of interest for Asian American college women and disordered eating are experiences of racism. Perceived racial discrimination was found to have a direct link to disordered eating in Asian American college women (Chang et al., 2014). A study of 516 Asian American college women found several mediating factors for disordered eating and experiences of racism including body surveillance, body shame, and internalizing body ideals through the media (Cheng et al., 2017).

Experiences of racism and gender expectations were related to disordered eating symptoms in a qualitative study on second-generation Asian American experiences (Ahn et al., 2021) and in a quantitative study of Asian American college women experiences (Phan & Tylka, 2006). Cheng and Kim (2018) reported correlations between disordered eating in Asian American college students and trauma symptoms. Building on prior work identifying that Asian college students' experiences of racial objectification and trauma symptomatology (Polanco-Roman et al., 2016), the authors found a relationship between disordered eating and trauma symptoms for Asian American college students. The authors concluded that racist campus climates and racial discrimination are associated with disordered eating for Asian American college students (Cheng & Kim, 2018).

Acculturative stress, the stress associated with navigating one's native culture with one's acquired culture, is associated with increased eating pathology in Asian American college students (Akoury et al., 2019; Kwan et al., 2018; Lau et al., 2006), and self-esteem may mediate this relationship (Claudat et al., 2016). Asian American college women have significantly lower levels of self-esteem compared to other ethnic college women (Quick & Byrd-Bredbenner, 2014), which may also drive disordered eating behaviors for AAW. Acculturative stress' relationship to disordered eating is particularly important in situations, such as college, where young women are balancing the demands of their familial culture with the demands and norms of college culture (Tsong & Smart, 2015, Winter et al., 2019).

Research regarding the importance of acculturation as a factor in Asian American college women's disordered eating is mixed. A study of Asian American college women found that a history of hurtful racial teasing, but not acculturation or ethnic disidentification, was associated with disturbed eating and body image (Iyer & Haslam, 2003). The impact of racial teasing and

discrimination may be a significant source of disordered eating and body image dissatisfaction among minority college women (Chang et al., 2014; Cheng et al., 2017; Forbes et al., 2023; Iyer & Haslam 2003; Reddy & Crowther, 2007). A study by Burkhart-Polk (2022) found that experiences of racism predicted disordered eating for Asian American college women, but not racial identity internalization.

Microaggressions and Mental Health

Discrimination against Asian American individuals in the form of microaggressions is related to adverse mental and physical health outcomes as well (Owen et al., 2019). There is some evidence suggesting that microaggressions greatly impact college student populations due to environmental and developmental factors (Carter, 2017). Microaggressions are defined as small, everyday slights or insults regarding minority identity (such as race, gender, sexuality, ability, etc.) that may or may not be intentional, but are received and interpreted as negative (Sue & Sue, 2016).

Racial microaggressions often center around several themes including: (a) assumptions that a person of color is foreign born and therefore not a “real” American; (b) statements that deny racism, such as declarations of colorblindness; (c) expectations of criminality or deviancy; (d) assumptions that life outcomes are solely the result of one’s effort; (e) assumptions that one’s cultural background and communication style are dysfunctional or inferior to those of White culture; (f) being treated as a second-class citizen; and (g) observing a relative absence of people of color from environments and receiving messages that one is not valued in a social setting (Sue et al., 2007).

Microaggressions can also occur as a target of one’s gender (Ho et al., 2018). Examples of gender microaggressions include: Adherence to traditional gender roles (expectations that

women should stay at home, or that women are not good at math), derogatory language describing assertive women, viewing women as equal to men and ascribing lack of achievement to individual failures as opposed to systemic barriers (Sue & Sue, 2016). Women are often a target of microaggressions that focus on sexual objectification, including being leered at in a sexual manner, being told sexually offensive jokes, and receiving unwanted sexual attention (Ho et al., 2018). Because AAW are fetishized as exotic and sexually appealing, they are at high risk of sexual objectification and subsequent microaggressions (Mukkamala & Suyemoto, 2018). Gender microaggressions can occur against men who are not traditionally masculine, as is the case for many Asian American men (Kelly et al. 2018; Trieu & Lee, 2018).

The impacts of microaggressions are variable and have been associated with multiple negative health outcomes. When minorities perceive discrimination in the form of microaggressions, individuals report higher levels of adverse health outcomes (Forrest-Bank et al., 2018, Mays et al., 2007). Perceived discrimination related to gender, race, and sexual orientation have been associated with increased incidences of depression, anxiety, higher blood pressure, and heart disease (Carter, 2017; Harrell et al., 2003; Huynh, 2012; Mays et al., 2007). Meyer (2003) proposed that these correlations are the result of minority stress, a model highlighting how stress mediates stigma on health outcomes for sexual minority populations. There is a wide array of research outlining the negative effects of racial microaggressions, including emotional dysregulation and mental health issues (Farber et al., 2020; Nicholson & Mei, 2020; Vargas et al., 2020). Emotional dysregulation due to experiences of racial microaggressions can place individuals at higher risk for depressive symptoms, suicidal ideation, anxiety, and substance use problems (Owen et al., 2019).

The subtle nature of microaggressions and the ambiguity of microaggressions can negatively impact well-being in a variety of settings, including therapy relationships (Owen et al., 2019; Smart et al., 2014), classrooms and college campuses (Farber 2020; Sanchez et al. 2018), and in healthcare settings (Snyder et al., 2018). Often, individuals experience microaggressions when there is an imbalance of power and these acts are directly connected to power and privilege (Sue & Sue, 2016). Microaggressions occur between individuals from a dominant group towards individuals from a minoritized group and can occur in any social setting.

Microaggressions and Asian Americans

A meta-review of 105 studies examining disordered eating and body image in AAW found a significant effect for microaggressions and racism on negative health outcomes, specifically mental health outcomes (Carter, 2017). Racial microaggressions reported by Asian Americans included being treated as a foreigner, having assumptions made regarding intelligence, being exoticized (especially for AAW), experiencing invalidation of interethnic differences, having others deny racial realities, having their cultural values and communication styles pathologized, being treated as second-class citizens, and experiencing “invisibility” (Settles et al., 2019; Sue et al., 2007; Wong & McCoullough, 2021). Microaggressions have a significant association with negative mental outcomes in Asian Americans (Ong et al., 2013; Vargas et al., 2020). The Asian American Race-Related Stress Inventory (AARRSI) was first created to measure race-related stress among Asian Americans (Liang, et al., 2004).

One stereotype specific for Asian Americans is the “model minority myth,” which often underlies microaggressive statements. This belief centers around the idea that Asian Americans are successful, polite, and work diligently to outperform other minorities in terms of success

(Settles et al., 2019; Yoo et al., 2010). Sue (1973) first highlighted the potential negative implications of this stereotype for Asian Americans including a restricted sense of identity, economic pressures, and a limitation on both educational and vocational opportunities for Asian Americans. While the model minority myth is not necessarily damaging in and of itself, decades of research have provided a wide range of literature on the harms of internalizing the model minority myth (Nicholson & Mei, 2020). Some of the ramifications of internalizing this stereotype include: unrealistic expectations of self, pressures to succeed, greater psychological distress (Farber et al., 2021; Ong 2017), and decreased academic performance (Yoo et al., 2010). The pressures that result from internalizing the model minority myth have significant mental health implications including depression and suicide (Farber et al., 2021; Nicholson & Mei, 2020; Vargas et al., 2020).

Microaggression experiences not only influence mental health, but also impact help-seeking behaviors. For example, microaggression experiences predicted unfavorable help-seeking attitudes in Asian American college students (Kim et al., 2017). Other research suggests that due to model minority myths, healthcare professionals are less likely to diagnose AAW with an eating disorder (Trieu & Lee, 2018). The model minority myth is damaging as it may lead mental health professionals to downplay disordered eating symptoms in Asian Americans due to preconceived ideas of high achievement for AAW.

Wong and McCoullough (2021) highlight the particulars of marginalization as a type of microaggression. Asian Americans are subjected to identity denial and identity erasure as a form of marginalization. Identity denial occurs when Asian Americans are unrecognized, forgotten, or unheard (Sue & Sue, 2016; Trieu & Lee, 2018). Asian men are thought to be more feminine and therefore less attractive and Asian Americans are often victims of identity denial (Trieu & Lee,

2018). While overt acts of discrimination can occur, including backlash against Asian Americans who act in ways that defy Asian American stereotypes, microaggressions against Asian Americans are more typically characterized by obscurity and failure to recognize positive behaviors and achievements (Settles et al., 2019).

While one singular microaggression may not be perceived as particularly harmful, as the number of microaggression experiences increase, minority stress and associated negative mental health outcomes, such as depression or suicidality, also increase (Farber et al., 2020; Nicholson & Mei, 2020; Vargas et al., 2020). Racial microaggressions, specifically those related to model minority and perpetual “foreigners”, were related to poorer self-rated health in a nationally representative sample of Asian Americans (Nicholson & Mei, 2020). Racial microaggressions have also been identified as linked to depressive and somatic symptoms in Asian American adolescents, (Huynh, 2012), which is a key formative period for eating disorders. Ethnic microaggressions for Asian Americans are also related to suicidal ideation (Forrest et al, 2018; O’Keefe et al., 2015) and sleep disturbances (Ong et al., 2018). Compared to everyday offences and abuses unassociated with race, racial microaggressions were related to more adverse outcomes and negative emotions in a longitudinal study of Asian Americans (Wang et al., 2011).

Generational status, immigration status, and number of years living in the United States also impact outcomes related to racial microaggressions. For example, second generational status has been associated with disordered eating and racial microaggressions for AAW, but not first or third generation, highlighting the role of acculturative stress and disordered eating for Asian Americans (Tsong & Smart, 2015). Immigration status and amount of time in the United States has impacted microaggressions for Latinos; individuals who spent less time in the US or self-identified as new immigrants reported fewer experiences of being viewed as “exotic” (Torres-

Harding et al., 2012). Generational status also influences microaggression experiences for other minoritized populations (Farber et al., 2020; Rodgers et al., 2018). Given the significance of generational status on the experiences of racial microaggressions, this study will use generational status as a covariate in the analyses.

Intersectionality

AAW have an increased risk for mental health symptoms due to the intersectional nature of their identities as women, Asians, and experiences of minority stress (Farber et al., 2020; Le et al., 2020, Wong & McCoullough 2021). The term intersectionality was first used by Crenshaw (1989) to describe how individuals holding multiple minority identities (e.g., being both black and female) can multiply risk factors for discrimination, prejudice, and microaggressions due to increased frequency of minority stress. The intersectional standpoint helps scholars and clinicians better understand the unique, lived, experiences of individuals holding multiple minority identities. For example, understanding experiences from a purely racial standpoint does not incorporate the historical and interlocking systems of oppression that define womanhood, sexual orientation, ability, and other stigmatized social identities that impact personal experiences.

As a theoretical framework, intersectionality can be used to understand how overlapping and mutually dependent social categories connect to create a multiplicative experience of disadvantage that is greater than the sum of singular discriminatory experiences of any one category (Le et al., 2020). Researchers and scholars have applied this framework to the analysis of both race and gender as fundamental and non-additive categories comprising racial and gender stereotypes and discrimination (Wong & McCoullough, 2021). When discussing these mutually exclusive categories of race and gender, the discrimination that results in the interchange of race

and gender is sometimes described as gendered racism or gendered racial stereotypes (Le et al., 2020; Liang et al., 2010). Essed (1991) first used the term gendered racism while discussing unique challenges Black women face in the United States.

Intersectional and gendered racial models in particular have been used with Black populations and are more recently being extended to other races and ethnicities including Asian Americans. To better understand gendered racial messages, several tools have been developed to assess these experiences, including a gendered racial microaggression measure for Black women and one for AAW (Lewis & Neville, 2015; Keum et al., 2019). This underscores the need for quantitative understanding of how the intersection of these identities is associated with functioning in a variety of life domains.

AAW not only face pressure to be a model minority and face microaggressions due to race, but are also subjected to strict gender stereotypes and demands to embody traditional Asian feminine standards of being petite, thin, and submissive (Claudat et al., 2016; Winter et al., 2019; Wong et al., 2017). The intersection of gender and race for this population indicates that they face not only sexual objectification, but also experience racially oppressive treatment, or racial objectification (e.g., depictions of AAW as the mysterious and hypersexualized “Dragon Lady” (Keum et al., 2019; Le et al., 2020; Sue & Sue, 2016). Indeed, in a measure of microaggressions for several minority groups, AAW reported the highest level of sexualized microaggressions (Hahm, et al., 2010).

Sue and colleagues (2007) indicated that hypersexualization is common for AAW, which is corroborated in qualitative studies about AAW and their experiences of body image (Javier & Belgrave, 2019; Wong et al., 2017). Ho and colleagues (2018) found that Asian American college women experience a significant amount of sexual harassment, with 70 percent of AAW

reporting experiences leering, ogling, and being told sexually suggestive jokes and stories. While both Asian American men and women experience negative mental health outcomes correlated with higher levels of discrimination, women who were exposed to higher levels of discrimination reported more negative mental and physical outcomes. This finding suggests that the combined influence of both sex and race in discriminatory experiences intensifies physical and mental health risks (Hahm et al., 2010).

Because AAW are fetishized as exotic and sexually appealing, they are at risk of sexual objectification and subsequent microaggressions as a result (Mukkamala & Suyemoto, 2018; Uchida, 1998). A content analysis of internet rape sites found that more than half featured an Asian woman as the victim and textually referenced Asian women. Additionally, Asian women in pornography are more likely to be depicted as passive and feature acts of aggression compared to women featured of other races (Shor & Golriz, 2019). These images in the media may have significant consequences, including research indicating that men who view women as objects are more likely to perpetrate sexual harassment. These images and stereotypes related to “yellow fever” lead to internalization for some AAW, leading to adverse mental health outcomes, including disordered eating (Brady, 2020; Cheng 2019; Han, 2020). AAW have a unique susceptibility to influences on body image via increased risk of objectification through both race and gender (Cheng & Kim, 2018, Le et al., 2020).

Appearance Investment

Another primary variable in the current study will be appearance investment in AAW. Body image disturbance is a core element of eating pathology (APA, 2013). Appearance investment is a related construct measured on two dimensions: motivational salience (MS; the extent to which people focus on their appearance with the goal of becoming esthetically

pleasing); and self-evaluative salience (SES; the extent to which appearance is a central value and defining feature of the self) (Bhatnagar et al., 2007). SES consists of how much one attributes life outcomes to appearance, which is especially salient for minority individuals who experience different life outcomes based on racial appearance. This scale captures how appearance influences the cognitive processes and schemas of an individual, as well as how these schemas may influence choices to change body appearance, such as dieting (Herme, 2016; Jarry et al., 2019).

Body dissatisfaction predicts disordered eating among AAW and other minority women due to internalization of the thin ideal, dissatisfaction with shape, size, and racialized features (Barry, 2020; Cheng et al., 2014; Lau et al., 2006; Phan & Tylka, 2006; Reddy & Crowther, 2007). Evidence suggests that appearance investment has an inverse relationship with body satisfaction, such that higher levels of appearance investment are significant predictors of both poor body satisfaction and poor self-esteem (Jarry et al., 2019). Receiving comments on body appearance has been shown to influence body satisfaction and body investment (Herme, 2016). Appearance investment varies for individuals in relationship to body mass index (BMI), as is the case with other constructs correlated with disordered eating, such as body image satisfaction (Jarry et al., 2019). For instance, individuals may be more invested in body image due to elevated BMI, making BMI a stronger predictor of disordered eating than other variables of interest. Higher BMI likely leads to greater levels of body investment or dissatisfaction when predicting disordered eating, therefore, BMI will be considered a covariate for this study.

Body dissatisfaction and body investment are often high in college student populations (Fitzsimmons-Craft, 2011; Jarry et al., 2019; Uri et al., 2021). In addition, conflicts between home of origin values and one's peer group may lead to higher appearance investment and self-

esteem changes for Asian American college women (Ah & Sukkyung, 2017; Claudat et al., 2016). Second generation AAW experience significant pressure from family socialization experiences related to appearance, including messages about the importance of being thin and not gaining weight, resulting in body shame and low self-esteem (Ahn, 2021). These early childhood socialization experiences may increase one's self-objectification, leading to unhealthy weight control behaviors in adolescence or early adulthood.

Self-objectification is a process by which individuals engage in surveying self as an object and engage in self-evaluation based on how others view one's appearance (Rollero & Piccolli, 2017). An aspect of self-objectification is captured by the self-evaluative salience (SES) subscale of the Appearance Schema Inventory (Bhatnagar., 2004; Jarry et al., 2019). Self-objectification is high in college students and is associated with several harmful consequences, including increased body shame, anxiety, and increased body image investment due to fear of body evaluation by others (Cheng et al., 2017, Fitzsimmons-Craft, 2011). As women increasingly engage in self-objectification, they become increasingly invested in their own body appearance.

A review of 38 studies from 2015-2018 regarding disordered eating in ethnic minorities found that all contributed to evidence supporting the relationship between disordered eating, acculturative stress, and investment in appearance for minority respondents (Cheng et al., 2019). Individuals from racial and ethnic minority groups experience disordered eating at high rates and may experience appearance investment in terms of racialized features, not simply weight (Brady, 2020; Sonnevile & Lipson 2018).

Greater levels of appearance investment have been associated with several negative mental health outcomes. For example, higher Appearance Schema Inventory-Revised (ASI-R;

Bhatnagar et al., 2004) total scores are related to lower general and social adjustment, and higher anxiety, social anxiety, and depression (Jarry et al., 2019). In addition, appearance investment is associated with greater levels of body comparison and perceived sociocultural pressure to improve or maintain appearance (Muisse & Desmarais, 2010). However, no study to date has examined body image investment for Asian American college women. AAW face significant sociocultural pressure to improve/maintain appearance, as well as strong collective cultural values that prioritize family opinions, including opinions related to appearance (Ahn et al., 2021; Wong et al., 2017). Therefore, understanding appearance investment in is likely an important factor for predicting disordered eating in Asian American college women.

Race, Discrimination, and Disordered Eating

Several theorists and researchers have made a connection between racial discrimination and disordered eating. Racial objectification in the form of racial/ethnic teasing, microaggressions, and racial discrimination conveys negative attitudes towards one's appearance (Polanco-Roman et al., 2016; Trieu & Lee, 2018). Experiences of discrimination can also lead to self-deprecating thoughts, feelings, and behaviors about one's body and facial features and thereby motivate the development of disordered eating behaviors (Brady, 2020; Cheng, 2014; Cheng & Kim, 2014; Javier & Belgrave, 2018), appearance investment, and the desire to change appearance. In addition, ethnic and racial minorities can experience acculturative stress and minority stress leading to disordered eating behaviors (Akoury et al., 2019; Rodger et al., 2019).

As tools to measure microaggressions for different minorities emerge, racial microaggressions and body image concerns are increasingly the focus of quantitative research. Racial discrimination is associated with disordered eating and body image concerns in minoritized college students (Kwan, 2018; Sonnevile & Lipson, 2018), African American

women (Assari, 2018), Black and Hispanic high school students, and Asian Americans (Cheng & Kim, 2018; Iyer & Haslam, 2003; Javier & Belgrave, 2019; Le et al., 2020). Teasing and discrimination related to racialized features further objectify AAW, exposing this population to greater body image disturbance risk (Brady, 2020; Nicholson & Mei, 2020). Additionally, levels of perceived racial discrimination and racial/ethnic teasing have been associated with more body dissatisfaction among AAW (Cheng, 2014; Iyer & Haslam, 2003). Taken together, this research suggests the significance of gendered racial experiences and body image concerns for AAW.

A meta-review of 105 studies examining disordered eating and body image in AAW found a significant effect for microaggressions and racism on negative health outcomes, specifically mental health outcomes (Carter et al., 2017). Similarly, Kwan et al. (2018) indicated that racial discrimination and minority stress may impact disordered eating for non-dominant populations, including Asian Americans. Several studies have linked minority stress and racial/ethnic identity with increased risk of disordered eating. For example, a study comprised primarily of Hmong Asian American participants found overwhelming evidence for disordered eating and unhealthy weight control behaviors compared to White counterparts (Rodgers et al., 2018). A population-based study of nearly 3,000 respondents found that adolescent girls of various Asian backgrounds reported the highest rates of disordered eating compared to those of Black, Hispanic, and White respondents (Lee-Winn et al., 2014). Asian American men also have high rates of disordered eating compared to respondents of other ethnicities (Kelly et al., 2018).

Few studies have looked particularly at the intersection of gender and race to understand body image and disordered eating. However, there is initial evidence supporting racial sexual discrimination as a unique predictive factor for disordered eating (Brady, 2020; Le et al; 2020). For example, when racial and gender discrimination were measured separately, studies found no

significant correlation with disordered eating for Asian American college women. However, gendered racial discrimination was found to be significantly related to both disordered eating and body image disturbance for Asian Americans (Cheng & Kim, 2018; Le et al., 2020). This research highlights how intersectional discrimination may contribute uniquely to disordered eating and body image for AAW.

Summary of Study

Overall, prior research indicates that there is a relationship between racial discrimination and disordered eating. However, it is unknown how gendered racial microaggressions relate to variables of appearance investment and disordered eating for Asian American college women. It is hypothesized that gendered racial microaggression experiences will predict increased disordered eating as measured by the EAT-26. It is also hypothesized that higher scores on a measure of appearance investment will moderate this relationship.

CHAPTER 2: METHOD

The goal of this study was to understand the relationships among the experience of gendered racial microaggressions, disordered eating, and body image in Asian American college women. The sampling strategy used a national convenience sample via Cint, a company that obtains national samples for academic and market research. Cint partners with over 150 Web-based panel providers to supply diverse, quality respondents and specializes in reaching unique, hard to contact populations (Cint, 2021). Cint employs project managers who identify individuals who meet eligibility criteria and then provide access to survey materials, as well as review the surveys for data quality and completion. The researcher paid Cint directly per completed survey costs to the researcher are calculated based on estimated time of survey completion and how difficult participants are to locate and recruit. Participants are paid directly through the Cint platform via a point system, and points can be redeemed for gift cards or monetary value (Cint, 2021). More information regarding participant recruitment and Cint is discussed in the Procedure section of this chapter.

Participants

Inclusion criteria for this study included that a participant self-identify as an Asian-American woman and be enrolled, at least part-time, at a college or university. Exclusionary criteria included those individuals who identify as male, do not identify as Asian American, do not identify as a college student, and individuals under 18 years of age. While gender identity is an important and complex variable that is worthy of consideration, breaking this category down into multiple gender identity exclusion or inclusion criteria could have reduced the overall number of respondents or confound results. For example, high levels of body dissatisfaction and disordered eating have been reported in the trans population (Witcomb et al., 2015). While the

inclusion criteria of US citizenship (US born or naturalized) was considered, it was rejected in favor of participants identifying specifically as Asian American more broadly. International students from Asian countries are less likely to identify as Asian American, and citizenship may prevent target participants from completing the study. For example, Asian American students are often mistaken as international students and may perpetuate the “perpetual foreigner” stereotype that Asian Americans often experience (Yeo et al., 2019). Asking individuals to clarify US citizenship status could be considered a microaggression and offend potential participants.

To determine the number of participants needed for this study, G*Power software was used (Erdhelder et al., 1996). Statistical power refers to the probability of correctly rejecting a false null hypothesis. According to Judd et al. (2009), a power analysis is important to determine the correct sample size, since statistical analyses require a specific level of power to detect the hypothesized effect. A large enough sample size will contribute to that power, helping to avoid a Type II error. Authors recommend using a computer algorithm, such as G*Power, to estimate power for a multiple linear regression analysis.

An a priori power analysis (Erdhelder et al., 1996) indicated at least 109 participants were needed for a multiple linear regression with two predictor variables, five covariates, and one outcome variable. The number of participants needed for the multiple linear regression analysis was calculated by entering the number of predictor variables (two), the number of covariates (five), a desired effect size of Cohen’s $d = .15$ and a power ($1 - \beta$ err prob) of .80, and a probability level of .05 (Cohen, 1983). Given that online survey studies suffer from 10-12% attrition rate (Hoerger, 2010) as well as missing data, an additional 34 individuals were recruited, bringing the total to 143 participants. A medium effect size of $d = .15$ was chosen for this study as it is the most accepted effect size in the social sciences (Erdhelder et al., 1996).

Measures

Each of the measures chosen for this study was selected based on their assessment of the constructs in question, as well as the psychometric qualities of each instrument. Information regarding the reliability and validity of the scales chosen for this study are reported, as well as the type of variable each scale represents in this study.

Gendered Racial Microaggressions Scale for AAW (GRMSAAW; Keum et al., 2018; See Appendix B)

This 22-item measure aims to assess the unique experiences of AAW regarding microaggressions. Due to the number of mental health problems related to discrimination and racism, this tool was designed to better comprehend the intersectional nature of microaggressions AAW face in the United States. For the purpose of this instrument, the authors defined microaggressions as small, potentially unintentional slights that communicate hostility to minority groups from majority groups. This measure captures a facet of gendered and racially discriminatory experiences stemming from restricted gender stereotypes and sexual fetishization of AAW. Items load on the four following subscales: (a) Ascription of Submissiveness, (b) Assumption of Universal Appearance, (c) Asian Fetishism, and (d) Media Invalidation (Keum et al., 2018).

Sample items include, “Others expect me to be submissive” and “Others have suggested that all AAW look the same”. Items are scored on a 4-point Likert-type scale from 0=Never to 3=Often/Frequently. After reverse-scoring for negatively worded items, answers are summed and totaled with higher scores indicating greater levels of gendered racial microaggression experiences. The authors suggest that the total score of all four subscales can be used as a general

measure of gendered racial microaggression experiences (Keum et al., 2018). Therefore, the total score of the GRMSAAW was used as a predictor variable in the analyses.

Regarding validity and reliability for scale items, internal consistency estimates were reported at .80 and above in the initial study. Initial construct validity was supported, as GRMSAAW scores were significantly associated with sexism ($r=.54, p<.01$) and racial microaggressions, ($r=.63, p<.01$), in the original study. Regarding predictive validity, the GRMSAAW significantly predicted scores on a measure of depression ($b=.31, r^2=.12, p<.05$), as there is ample evidence of the link between minority stress and poor mental health outcomes (Meyers, 2003; Nicholson & Mei, 2020). This measure yielded a unique significant relationship ($r^2=.02, p<.05$) between gendered racial microaggressions and depression above and beyond the added effects of racism and sexism, providing small but significant evidence of incremental validity (Keum et al., 2018).

The GRMSAAW has been used as a variable in several research studies despite being published in 2018, pointing to the interest in an intersectional approach for understanding daily experiences of prejudice and discrimination. For example, Le et al., (2020) found that gendered racial microaggressions as measured by the GRMSAAW were positively correlated with disordered eating ($r=.35, p<.01$) and racism ($r=.59, p<.05$). In addition, Le et al. (2020) reported adequate internal consistency reliability with a Cronbach's alpha of .91 for the 22 total questions of the GRMSAAW. Other studies utilizing this measure reported Cronbach's alpha levels of .80 or above (Ghabrial, & Andersen, 2020; Nicholson & Mei, 2020). The total score on the GRMSAAW was used as a predictor variable in the analysis for the current study.

The Eating Attitudes Test-26 (EAT-26; Garner et al., 1982; see Appendix C)

The EAT-26 is a 26-item measure inquiring about the frequency of engaging in disordered eating behaviors such as, “I avoid eating when I am hungry” and “I like my stomach to be empty.” Items are rated on 6-point Likert-type scale ranging from 1=Never to 6=Always, with higher scores indicating more maladaptive eating attitudes after reverse-scoring item number 26. The EAT-26 loads on three factors: dietary (related to food avoidance and a preoccupation with being thinner); bulimia and food preoccupation (related to recurrent thoughts about food and bulimia); and oral control (related to dietary restraint and the perception that others would like the individual to gain weight) (Garner et al., 1982). While the EAT-26 loads on three factors when analyzed with confirmatory factor analysis, there are no specific subscales, therefore, the total score of this abbreviated measure is used.

The EAT-26 has demonstrated excellent psychometric properties including good sensitivity and specificity. For example, a review of the EAT-26 found a threshold score of 20 yielded a sensitivity of 88%, and a specificity of 96% (Garfinkel & Newman, 2001). That is, when scored clinically the EAT-26 correctly identified individuals with eating disorders 96% of the time and incorrectly identified women with eating disorders 12% of the time. The EAT-26 is highly correlated with the original EAT measure ($r = 0.98$) and was determined to have good psychometric properties in its initial validation (Garner et al., 1982). Test-retest reliability reported by Mazzeo (1999) yielded a Pearson correlation of .91. It has demonstrated excellent internal consistency in samples of Black and White adult women, with Cronbach’s alphas ranging from .85 to .88, respectively (Kelly et al., 2012).

A review of eating disorder assessments indicated that the EAT-26 demonstrates strong cross-cultural validity, has been used with various populations, and is correlated with other

disordered eating measures (Kashubeck-West, 2001). For Asian American college women specifically, the total EAT-26 score ($\alpha = .91$) correlated with measures of internalization of the thin ideal ($r=.52, p<.05$) and body dissatisfaction ($r=.40, p<.05$) (Cheng, 2014). A study of Asian and Asian American women and disordered eating yielded a Cronbach's alpha of .87 for the composite score of the EAT-26 (Phan & Tylka, 2006).

In the present study, the EAT-26 was totaled and used as a continuous score rather than clinically with a threshold score. The continuous measure of disordered eating is often used with nonclinical samples of women in research and allows for the assessment of variability across a full range of item responses (Garfinkel & Newman, 2001). Therefore, the EAT-26 measure total was used, with higher scores indicating greater levels of disordered eating. This measure was used as the outcome (response) variable in all analyses.

Appearance Schemas Inventory-Revised (ASI-R; Bhatnagar et al., 2004; see Appendix D)

Body image investment is a multidimensional construct that includes components of both attitudes and behaviors related to one's appearance. Bhatnagar and colleagues (2004) defined body image investment as the extent to which people are appearance schematic, or to what extent appearance is important to an individual. This construct is measured on two dimensions: motivational salience (MS; the extent to which people focus on their appearance with the goal of becoming aesthetically pleasing); and self-evaluative salience (SES; the extent to which appearance is a central value and defining feature of the self). SES consists of how much one attributes life outcomes to appearance.

This measure has 20 items total, with 10 items loading on each subscale. Sample items include, "When I meet people for the first time, I wonder what they think about how I look" and "Before going out, I make sure that I look as good as I possibly can." These two items load on

the SES and MS scale, respectively. All items are rated on a 5-point Likert-type scale from 1=Strongly Disagree to 5=Strongly Agree. Six of these 20 items are negatively worded and are reverse scored, with greater total scores indicating greater levels of appearance investment. Test-retest reliability for the overall ASI-R was reported by Cash and Grasso (2005) with Pearson correlations ranging from 0.80 to 0.95 at Time 1 and from 0.81 to 0.95 at Time 2. Convergent validity was demonstrated for a sample of adult women ($n=468$) when comparing the ASI-R composite score to the Body Image Quality of Life Inventory ($r=.53, p<.01$), SES scale ($r=.60, p<.01$), and MS scale, ($r=.25, p<.01$), as well as a measure of sociocultural attitudes towards appearance on the composite score ($r=.57, p<.01$), SES scale ($r=.59, p<.01$), and MS scale ($r=.36, p<.01$). Divergent validity was demonstrated by negative correlations with a measure of self-esteem for the composite score ($r=-.40, p<.01$), and the SES scale ($r=-.54, p<.05$), but not for the MS scale (Bhatnagar et al., 2004). A meta-analysis of over 20 studies using the ASI-R reported satisfactory alphas of .88 or above for the composite score (Jarry et al., 2019).

While no studies to date have used the ASI-R with Asian American college populations specifically, many studies have used this measure with college students in general. Regarding use in ethnically diverse samples, the original ASI-R validation study compared scores of White women with scores of African American women and found that African American women reported significantly less schematic investment in their appearance on the composite of the ASI-R, ($F(1,391) = 6.74, p<.01$), and the Self-Evaluative Saliency score, ($F(1,391)=13.96, p<.01$). However, African American women reported comparable schematic investment on the Motivational Saliency factor compared to White women, ($F(1,391)=.01, p<.01$) (Cash et al., 2004). The ASI-R has been used with ethnically diverse college students including Hispanic college students (Smith & Davenport, 2012), three studies with South Korean college women

(Johnson et al., 2014; Jung & Lee, 2006; Kim & Park, 2016;), and African American college women (Herme, 2016) with alphas reported in all studies at .87 or above. Body image investment as measured by the ASI-R total score was used, with higher scores indicating greater levels of appearance investment as a predictor variable in the analyses.

Covariates

Body mass index (BMI) and generational status were included as covariates in this study, given prior research demonstrating that BMI (Rakhkovskaya & Warren, 2014) and generational status (Tsong & Smart, 2016) are associated with disordered eating. Height and weight were collected through self-report and calculated as BMI (lb/ht²), since self-reported height and weight correlate reasonably with laboratory BMI calculations (McAdams et al., 2007). Age and college status were highly correlated in the study results, so college status or year in college was used as an indicator of both age and college status to avoid multicollinearity. Prior studies indicate a significant relationship between age, BMI, and generational status with other body image and eating disorder measures in Asian American college women populations (Akoury et al., 2019; Claudat et al., 2016; Uri et al., 2021). Therefore, BMI, college status, and generational status were used as covariates in the current study.

Demographic Questionnaire (see Appendix E)

The demographic questionnaire collected information on covariates as well as background information to better understand participant characteristics. All demographic variables are reported as descriptive statistics in the final analyses and outlined in Table 1.

The 7-item background questionnaire included questions on a range of demographic variables such as age, socioeconomic status, marital status, college year status, sexual orientation, ethnicity, weight, and height. Generational status was captured by a multiple-choice

question ranging from 1=First generation to 5=Fifth generation or more. This variable was scored as continuous and included as a covariate in the analyses. BMI was obtained by asking height and weight of participants and then transformed into BMI to be used as a continuous variable for the statistical analyses. Participants were provided with several options for racial identity endorsement, as well as an open-ended, other, write-in response. Asian American as a general phrase includes over 200 different ethnicities. Due to the difficulty of breaking down ethnic categories into discrete options for statistical purposes, the top 12 ethnic groups used in prior research on this topic and population were used and an other option was provided to allow participants to self-identify.

Procedure

Before administering this study to participants, the researcher submitted a detailed summary to the WVU Office of Research Integrity and Compliance's Institutional Review Board (IRB). Upon approval, the researcher contacted Cint to initiate a nationwide search for Asian American female college students. Participants were identified by Cint through pre-developed market research participant panels from across the US. Cint advertised for the study on their platform and recruited individuals who had previously been targeted based on demographics and interests. Potential respondents were provided with an introductory document acknowledging IRB approval, the purpose of the study, participant eligibility, and requesting completion of a questionnaire about body image, eating concerns, and lived experiences of perceived discrimination. Participants were notified within the introductory document that no identifying information would be collected beyond basic demographics, that the survey would take approximately 20 minutes to complete, and that individuals would be compensated by Cint. A Qualtrics hyperlink was embedded within the introductory document leading to required

responses for screening criteria and the survey battery if eligibility criteria were endorsed. The remaining items did not require a response for participants, but participants were encouraged to respond to missing items by a prompt informing them that they missed a question. This prompt was only presented the first time, allowing participants to skip any question they did not want to answer.

The survey consisted of a total of 75 items, including all measures. The researcher paid Cint directly \$2.00 per completed survey. The number of points provided to participants was not so large as to potentially serve as coercion to take part in the study and Gift card pass totals depend on how many points have been accrued. Gift card passes can be redeemed at many different retailers, including Starbucks, Amazon, AMC theaters, Grubhub, Target, and others (Cint, 2021). Should participants not meet eligibility criteria, the survey battery link was not available and ineligible participants were re-directed to a page thanking potential participants for their time.

The survey (taken in Qualtrics) opened with an introductory document outlining IRB approval, the purpose of the study, and informed consent. Informed consent explained that no identifying information would be collected beyond basic demographics and requested that Asian American college women fill out a questionnaire about body image, eating concerns, and lived experiences of perceived discrimination. Should individuals become distressed during the survey, resources were provided to national mental health and crisis lines and students were advised to contact their local college counseling center for help. Participants were informed that they would be compensated directly by Cint for their participation in this study.

After the introduction and informed consent, participants were asked to answer questions related to eligibility criteria, including being over the age of 18 and willing to participate in the

survey, and identifying as an Asian American woman enrolled in college. If eligibility criteria were endorsed, participants were then provided with the Gendered Racial Microaggressions Scale for AAW (GRMSAAW; Keum et al., 2018), the Eating Attitudes Test-26 (EAT-26; Garner et al., 1982), and the Appearance Schemas Inventory-Revised (ASI-R; Bhatnagar et al., 2004) in a counterbalanced manner to avoid response-patterning, followed by a brief demographic questionnaire. The survey battery was piloted by four individuals and was estimated to take about 20 minutes to complete based on average pilot response times.

At the conclusion of the survey, participants were thanked for their participation in research about body image and lived experiences of perceived discrimination. Participants were then compensated by Cint directly for their participation. The participants were also provided links to national eating disorder resources, as well as information directing students to reach out to college counseling centers, should concerns related to survey content arise (See Appendix E). All data was collected within the Qualtrics platform, de-identified, and analyzed with SPSS statistical software to determine descriptive statistics as well as regression analyses to determine predictive values of variables on a measure of disordered eating.

Research Design and Analysis

A quantitative, self-report, survey-style, cross-sectional research design was used to answer the research questions for this study. This research design was chosen in order to maximize the breadth of information that could be gathered in a short period and therefore maximize the amount of basic data that would be available for analysis. This plan was chosen to address the lack of information in this research area and the necessity for greater exploratory research regarding intersectional identities and disordered eating. This design did not manipulate any variables.

CHAPTER 3: RESULTS

The purpose of this study was to assess the associations between gendered racial microaggressions, appearance investment, and disordered eating among Asian American college women. Correlational analyses were used to examine relationships among variables of gendered racial microaggressions, appearance investment, and demographic variables. The researcher used multiple regression analyses with the predictor variables of gendered racial microaggressions, appearance investment, BMI, generational status, and level of college education on disordered eating. Additionally, an interaction term of gendered racial microaggressions and appearance investment was calculated to determine if appearance investment moderated the predictor variable of disordered eating.

This chapter describes the overall composition of sample demographics to better understand respondent characteristics. Additionally, this chapter describes results of the preliminary analysis, data screening, descriptive statistics for each measure, as well as the statistical analysis results for each hypothesis.

Preliminary Analyses

Respondent Demographics

The analytical sample began with 193 research participants. After removing 52 participants with missing data or response times under two minutes, the final analytical sample was $n=143$. All 143 participants completed the study in its entirety; as a result, there were no missing values to compute. Of the 143 participants included in analyses, the average age reported was 20.96 years ($SD = 2.80$), ranging from 18 years to 39 years. Participants primarily identified as Chinese or Indian/Sri Lankan/Bengali (23% and 19.3% respectively) and primarily identified as first generation Asian American (44.1%). Individuals identifying as “other” category included

categories Vietnamese (16), Bengali (2), Burmese (2), Cambodian (2), Nepali (1), Taiwanese (2), Lithuanian (1), White (1), Nepali (1), Dominican (1), and White (1). Additionally, participants reported an average BMI of 22.10 ($SD = 4.76$). BMI was calculated using respondent report of height and weight. The BMI reported for this sample is similar to other research study samples of Asian American college students varying in BMI from 21.51 to 24.17 (Carpenter et al., 2013; Le et al., 2022; Le et al., 2020; Tsong et al., 2022). See Table 1 for more information on respondent demographics.

Table 1*Demographic Data for the Sample (N =143)*

Variables	Percentage
<i>Age</i>	$M = 20.96$ $SD = 2.80$
<i>BMI</i>	$M = 22.10$ $SD = 4.76$
<i>Education</i>	
1 st year college	13.4%
2 nd year college	19.7%
3 rd year college	23.9%
4 th year college	16.9%
Graduate student	26.1%
<i>Generational Status</i>	
1 st generation AA	44.1%
2 nd generation AA	35.7%
3 rd generation AA or more	20.3%
<i>SES Growing up</i>	
Very low	40.0%
Low	23.7%
Low middle	28.9%
Middle	7.4%
High end middle	40.4%
High	21.3%
Very high	5.0%
<i>Marital Status</i>	
Single/Never married	80.3%
Married/Domestic partnership	12.0%
Partnered/Long-term relationship	7.7%

Ethnicity

Chinese	23.2%
Other	21.0%
Indian/Sri Lankan/Malaysian	19.6%
Korean	13.0%
Filipino	10.9%
Japanese	7.2%
Hmong	3.6%
Pacific Islander	1.4%

Sexual Orientation

Heterosexual	59.6%
Bisexual	20.6%
Prefer not to say	7.8%
Questioning	5.7%
Lesbian	4.3%
Queer	2.1%

Preliminary Data Screening and Assumption Testing

The researcher completed a preliminary screening of the data, including screening for outliers, multicollinearity, normality, linearity, and homoscedasticity. Multicollinearity was assessed using the variance inflation factor (VIF); assumptions regarding outliers and multicollinearity were met and all VIF levels were below a threshold of 1.0 (Judd et al., 2011). Scatterplots, distributions, and normality statistics were also reviewed to examine assumptions of normality; these statistics indicate varied degrees of skewness and kurtosis present within the data. Further preliminary analyses of the data set were calculated, including descriptive statistics, correlational analyses, internal consistency, and reliability for each measure. Normality statistics are presented in Table 2.

All variables displayed adequate internal consistency as measured by Cronbach's α . The ASI-R had satisfactory variation with scores ranging from 41-96 out of 100 possible points and

an overall mean of 68.76. The internal consistency for this measure was similar to prior studies using this measure with an $\alpha=.85$. The GRMSAAW likewise indicated a variation in responses with an overall mean of 58.69 from a possible score of 88 and an α of .94. Finally, the EAT-26 has a total possible score of 156 with respondents averaging a score of 71.18. The reliability statistic for this measure was also in the highly acceptable range ($\alpha=.92$). See Table 2 for more information about study measures.

Table 2

Descriptive Statistics for the Study Measures

Variable	Number of Items	Sample Mean	SD	Range	Possible Range	Cronbach's α
Appearance Schema (ASI-R) Total	20	68.76	11.03	41-96	20-100	.85
Gen-Racial Micro. GRMSAAW Total	22	58.69	13.65	21-84	0-88	.94
Eating Attitudes Test (EAT-26)	26	74.18	21.97	35-148	26-156	.92

Note. $N = 143$; Appearance Schema (ASI-R) Total=Appearance Schema Inventory Revised Total Score; Eating Attitudes Test (EAT-26) Total= Eating Attitudes Test Total Score; Gen-Racial Micro. GRMSAAW Total = Gendered Racial Microaggressions Scale for Asian American Women Total Score.

Bivariate Correlation Analyses

To look at correlations among the main study variables, a series of bivariate correlation analyses were conducted. As seen in Table 3, gendered racial microaggressions were significantly and positively correlated ($r = .54, p < .01$) with a participant's degree of maladaptive eating, as expected. Additionally, significant positive correlations exist between

appearance investment ($r = .51, p < .01$) and experiences of gendered racial microaggressions. College status was significantly correlated with EAT-26 scores ($r = -.20, p < .05$), however, BMI was not significantly correlated with predictor variables. Generational status was correlated with GRMSAAW ($r = -.18, p < .01$). As age and college status categories were highly correlated ($r = .33, p < .01$), the researcher chose to use college status as a control variable in regression analyses, as including both would violate statistical assumptions of multi-collinearity. Socioeconomic status growing up (SES) was not significantly correlated with any other variable. Overall, the results of correlational analyses between study variables indicate that gendered racial microaggressions have a direct and positive relationship with disordered eating. In other words, as gendered racial microaggressions experiences increase, so does the level of reported disordered eating. Fewer experiences of gendered racial microaggressions are reported by individuals identifying as second-generation or more Asian Americans. The more removed students were from the immigration of their parents, the less students reported incidents of gendered racial microaggressions. College status was also related to study variables to some extent; first year students were more likely to report experiencing gendered racial microaggressions than individuals who were farther along in educational experience and age. Socioeconomic status did not have a relationship with reported microaggressions, appearance investment, or disordered eating.

Table 3*Bivariate Correlations Among the Study Variables*

Variable	1	2	3	4	5	6	7	8
1. Eating Attitudes (EAT-26)	--							
2. Gendered Racial Micro. (GRMSAAW)	.54**	--						
3. Appearance Schema (ASI-R)	.51**	.51**	--					
4. SES	-.03	-.02	-.11	--				
5. BMI	-.03	-.04	.01	.12	--			
6. College Status	-.20*	-.10	-.11	-.34**	.13	--		
7. Generational Status	-.01	-.18*	-.11	-.16	.14	-.02	--	
8. Age	-.14	-.01	.00	.02	-.13	.33*	-.07	--

Note. $N = 143$; Appearance Schema (ASI-R) = Appearance Schema Inventory Revised Total Score; Eating Attitudes (EAT-26) = Eating Attitudes Test Total Score; Gen-Racial Micro. GRMSAAW = Gendered Racial Microaggressions Scale for Asian American Women Total Score; SES = Socioeconomic Status Growing up; BMI = Body Weight Mass Index
 * $p < .05$; ** $p < .01$

Major Findings

This section presents major findings organized according to each of the three research questions and hypotheses associated with this study. Research questions were answered using the following instruments: Eating Attitude Test (EAT-26), Appearance Schema Investment Inventory (ASI-R), Gendered Racial Microaggression Scale for Asian American Women (GRMSAAW), and specific demographic variables of BMI, generational status, and level of college education.

Hypothesis 1: Higher reported instances of gendered microaggressions, as measured by the total GRMSAAW score (Keum et. al., 2018), will predict increased disordered eating as measured by the EAT-26 total score when college status, generational status, and BMI are held constant.



Figure 1

Disordered eating was measured using the Eating Attitudes Test total score (EAT-26; Appendix D). The EAT-26 provides an assessment of an individual's attitudes and behaviors (Garfinkel & Newman, 2003). Using a correlational analysis (Table 3), participants' disordered eating (EAT-26) scores were significantly related to the experience of gendered racial microaggressions ($r=.54$, $p < .01$), offering preliminary support for this hypothesis.

To test this hypothesis further, a 2-model regression analysis was used to assess the degree to which each of the predictor variables and control variables predict EAT-26 scores

(Table 4). In model 1, gendered racial microaggressions were entered into the regression analysis. Results revealed that GRMSAAW scores are predictive of EAT-26 ($\beta = .54, p < .01$). To account for possible covariates, Model 2 added college status, generational status, and BMI to the model. Gendered racial microaggressions scores were still a significant predictor of EAT-26 scores ($\beta = .53, p < .01$), supporting hypothesis 1. College status was the only other significant control variable, ($\beta = -.16, p < .01$).

These results indicate that there is a direct and positive predictive relationship between gendered racial microaggressions and disordered eating. The experience of gendered racial microaggressions accounts for 28% of the variance in eating attitudes scores. Including college status allowed an additional 2% of the variance to be accounted for, bringing the total predictive power of the GRMSAAW to 30% ($adj\ r^2 = .30$). When taking college status into consideration, for every one-point increase in the experience of gendered racism as measured by the GRMSAAW, the score on the EAT-26 increased by .3 points, which supports hypothesis one.

Table 4*Summary of Multiple Regression Analyses for Predicting EAT-26R Endorsement*

Variables	Model 1 Gendered Racial Microaggressions Predicting EAT-26 Endorsement			Model 2 Gendered Racial Microaggressions and Predicting EAT-26 Endorsement + Control Variables		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
	adj $R^2 = .28$ ($SE = 18.61$)			adj $R^2 = .30$ ($SE = 18.58$) Cohen's $f^2 = .19$		
Gendered Racial Micro. (GRMS)	.86	.11	.54**	.86	.12	.53**
College Status	--	--	--	-2.47	1.15	-.16*
Generational Status	--	--	--	-.61	2.14	-.02
BMI	--	--	--	.18	.34	.04

Note. $N = 143$; Appearance Schema (ASI-R) = Appearance Schema Inventory Revised Total Score; Eating Attitudes (EAT-26) = Eating Attitudes Test Total Score; Gen-Racial

Hypothesis Two: Higher reported instances of gendered microaggressions, as measured by the total GRMSAAW score (Keum et. al., 2018), will be moderated by body image investment as measured by the total ASI-R score (Bhatnagar, 2004) when college status, generational status, and BMI are held constant.

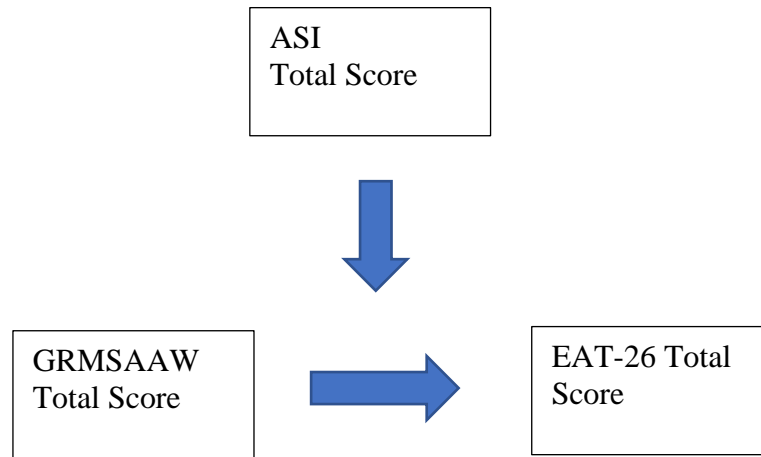


Figure 2

The researcher hypothesized that scores on a measure of appearance investment (ASI-R) would moderate the relationship between gendered racial microaggressions and disordered eating using the EAT-26 (see Figure 2). This hypothesis was tested using a 3-model linear regression analysis. In Model 1, appearance investment and gendered racial microaggressions were entered into the regression analysis. The regression analysis was used to assess the degree to which each of the predictor variables, appearance investment and gendered racial microaggressions, predicts EAT-26 scores (Table 5). Model 1 of the results of this regression analysis indicate that when appearance investment and gendered racial microaggressions are simultaneously entered into the regression equation, 35% of the variance of the outcome variable is accounted for ($adj\ r^2=.35$). Both are significant predictors ($\beta = .37, p <.01$; $\beta = .32, p <.01$).

Adding control variables in Model 2 minimally increased the amount of variance accounted for by the regression model. BMI and generational status were not significant predictors in this model ($\beta =.03, p >.01$ and $\beta = -.01, p >.01$, respectively), however, college status was a significant predictor ($\beta = -.13, p <.01$). Specifically, when both predictor variables

and demographic variables were entered into regression Model 2, 36% of the variance of EAT-26 scores are accounted for ($adj\ r^2=.36$).

To test the moderation effect, a third regression analysis was completed to determine if the interaction term of ASI-R x GRMSAAW predicted the EAT-26, as seen in Model 3. Results indicate that while both variables of gendered racial microaggressions and appearance investment predict EAT-26 scores, appearance investment does not moderate the relationship ($\beta =.07, p<.05$). As such, Hypothesis 2 was not supported.

Table 5

Summary of Multiple Regression Analyses for Variables Predicting Endorsement of Disordered Eating: Appearance Investment as a Moderating Variable

Variables	<u>Model 1</u>			<u>Model 2</u>			<u>Model 3</u>		
	Gendered Racial Micro. and Appearance Investment on Eating Attitudes			Gendered Racial Micro. and Appearance Investment on Eating Attitudes + Control Variables			Gendered Racial Micro. and Appearance Investment on Eating Attitudes + Control Variables + Interaction Term		
	adj $R^2 = .35$ ($SE = 17.65$)			adj $R^2 = .36$ ($SE = 17.73$)			adj $R^2 = .39$ ($SE = 17.74$.) R^2 change = .39**		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
GRMSAAW	.60	.13	.37**	.62	.13	.38**	-.62	.13	.38**
ASI-R	.64	.16	.32**	.59	.16	.30**	.57	.16	.29**
GRMSAAW X ASI-R	--	--	--	--	--	--	.01	.01	.07
BMI	--	--	--	.18	.32	.03	.16	.32	.03
College Status	--	--	--	-2.14	1.10	-.13*	-1.	1.13	-.12
Generational Status	--	--	--	-.37	2.04	-.01	-.5	2.05	-.02

Note. $N = 143$; Appearance Schema (ASI-R) = Appearance Schema Inventory Revised Total Score; Eating Attitudes (EAT-26) = Eating Attitudes Test Total Score; Gen-Racial Micro. GRMSAAW = Gendered Racial Microaggressions Scale for Asian American Women Total Score; BMI = Body Weight Mass Index
* $p < .05$; ** $p < .01$

Summary

This chapter presented findings and analyses of data gathered from individuals who identify as female, Asian American, enrolled in college, and were 18 years of age or older at the time of participation. The study included measures of disordered eating, appearance investment, and gendered racial microaggressions. Measures were organized around two research questions regarding the predictive value of appearance investment and gendered racial microaggressions on disordered eating. The first hypothesis stated that scores on a measure of gendered racial microaggressions would predict disordered eating using the EAT-26. The second hypothesis stated that scores on a measure of appearance investment (ASI-R) would moderate the relationship between gendered racial microaggressions and disordered eating using the EAT-26.

Significant major outcomes from statistical analyses found that disordered eating (as measured by the EAT-26) was significantly predicted by appearance investment and gendered racial microaggressions. However, the interaction of appearance investment and gendered racial microaggressions did not moderate the outcome. Educational status contributed to a small but significant amount of the variance of EAT-26 scores. Generational status and socioeconomic status did not predict EAT-26 scores for hypothesis one or hypothesis two.

These findings mean that Asian American women in this sample, regardless of generational status, BMI, or college status with greater reported instances of gendered racial microaggressions reported higher incidents of disordered eating.

Chapter Four will explore specific conclusions to be drawn from these findings as well as limitations and overall implications for the present study. Finally, the discussion will provide recommendations for future research in the area of disordered eating and Asian American college students.

CHAPTER FOUR: DISCUSSION

The purpose of this study was to examine relationships among gendered racial microaggressions, appearance investment, and disordered eating among female Asian American students in the U.S. It was hypothesized that 1) reported rates of gendered racial microaggressions would predict disordered eating and 2) appearance investment would moderate the predictive relationship between gendered racial microaggressions and disordered eating. This study aimed to provide greater insight into the factors that predict Asian American women's experiences related to body image and disordered eating. The study results provide information about critical factors that could be explored in further research, as well as highlighting how unique, intersectional experiences predict the development of disordered eating and body image concerns.

Summary of the Findings

In the current study, significant findings suggest that gendered racial microaggression experiences predict disordered eating for Asian American college women, as higher reports of gendered racial microaggressions predicted increased disordered eating levels when accounting for demographic variables. Additionally, higher levels of appearance investment also predicted increased disordered eating. Both factors directly predicted disordered eating, however, appearance investment did not moderate the predictive relationship between gendered racial microaggressions and disordered eating.

Educational status negatively predicted disordered eating, such that individuals with increased levels of education experienced lower levels of disordered eating. Educational status, age, and BMI were all associated with appearance investment and experiences of gendered racial

microaggressions. Generational status did not factor significantly into either appearance investment or gendered racial microaggression's prediction of disordered eating. These findings support prior research indicating that individuals experiencing discrimination are more likely to have adverse health outcomes (Carter, 2017). Understanding the intersection of both female and Asian identities offers a more nuanced approach to understanding how these factors uniquely predict disordered eating.

Intersectionality and the External Objectification of AAW

Racial discrimination is associated with several negative health outcomes including disordered eating for AAW (Cheng et al., 2017; Cheng, 2014; Le et al., 2020; Smart et al., 2014). Asian Americans frequently report being perceived as perpetual foreigners and experiencing model minority stress, leading to higher levels of stress overall as well as adverse mental health outcomes (Carter, 2017; Sue & Sue, 2007). Racial microaggressions are more likely to cause mental health problems than microaggressions unrelated to race and are highly correlated with disordered eating and body image concerns (Rodgers et al., 2018). Teasing and discrimination related to racialized features further objectify Asian American women, exposing this population to greater body image disturbance risk (Brady, 2020; Nicholson & Mei, 2020). This study found that experiencing gendered racial microaggressions strongly predicts disordered eating, capturing the combined experience of both racism and sexism for a population frequently objectified in Western culture.

These results could be explained in part by using an intersectional framework to capture an aspect of identity and daily lived experience that strongly contributes to disordered eating and body image concerns. Due to racialized expectations and exoticification of AAW, this population is subject to distinct forms of sexism and racism that can influence culture-specific appearance

evaluations (Cheng, 2017). AAW identified experiencing the highest number of sexualized microaggressions compared to other minoritized groups (Hahm et al., 2010) and are often highlighted as hypersexual and subjected to more violent sexual acts in pornography than women of other races and ethnicities (Shor & Golriz, 2019).

Asian American women are subjected to many negative social images depicting Asian women as skinny, small, submissive, and taking up little emotional or physical space (Claudat et al., 2016; Winter et al., 2019; Wong et al., 2017). Often, media portrayal of AAW in the guise of multicultural and inclusive content inadvertently replicates racist and sexist stereotypes (Kim & Chung, 2008). Portrayals of AAW as “doll like” and driven by strong sexual desires contribute to higher experiences of sexualized microaggressions (Hahm et al., 2010). This image is further complicated by historical racial connotations including “yellow fever”, a derogatory term used to denote a sexual Asian fetish stemming from the US post-Korean and Vietnam era (Ho et al., 2019). The GRMSAAW directly taps into fetishization, ascribed submissiveness, and invalidating media messages that are unique to the intersectional identity of AAW and reflect the external objectification that AAW experience. Disordered eating behaviors may be used as a coping mechanism to deal with negative feelings associated with these microaggressions and foster a sense of control in the face of unrealistic or impossible beauty standards (Forbes et al., 2023).

AAW experience distal appearance-related pressures as well as proximal appearance-related pressures in the form of unique cultural and familial pressures. AAW experience family pressures to conform to a thin, petite ideal as well as maintain a high degree of success and achievement (Wong et al., 2017). Asian American women indicated a high level of body image dissatisfaction through comparison with both White mainstream ideals and other Asian women

(Ahn et al., 2022). Traditional Asian gender expectations has been linked to several negative mental health outcomes as well as disordered eating. Individuals faced with both proximal (family values) and distal (societal) objectification pressures may further heighten body surveillance and elicit body shame related to ethnic racial identity for AAW. Encountering gendered racial stereotypes through microaggressions can compound shame around both ethnic identity and body, thereby contributing to increased levels of disordered eating (Forbes et al., 2023).

To summarize, AAW experience intersectional discrimination through fetishization, the ascription of passivity, invalidation through lack of representation, pervasive White beauty ideals, and intersectional objectification (Keum et al., 2021). As gendered racial microaggressions focus on visible identities of race and gender, experiencing gendered racial microaggressions could heighten body surveillance and increase self-objectification, thereby contributing to greater levels of disordered eating. Whether explicitly or implicitly, intersectional microaggressions contribute to adverse mental health outcomes such as body shame, disordered eating, depression, and suicidality (Forbes et al., 2023).

Intersectional Microaggressions and Appearance Investment

While many studies have highlighted how experiences of racial discrimination impact mental health outcomes, less have used quantitative methods and even fewer have looked specifically at how intersectional identities relate to body image and disordered eating for AAW (Le et al., 2020, Yu et al., 2020). In the present study, intersectional microaggressions and appearance investment directly predicted disordered eating. Members of stigmatized groups are at greater risk for experiencing negative self-evaluations after exposure to a mainstream beauty standard than members of other stigmatized groups (Evans & McConnel, 2003). These findings

are noteworthy because they contribute to a small but growing body of research highlighting the effects of discrimination and microaggressions on health outcomes as well as provide novel information regarding the role of appearance investment in disordered eating for Asian American women.

Appearance Schema and Internalized Objectification for AAW

Asian American women are subject to distinct forms of sexism and racism that can influence culture-specific appearance evaluations. A woman's view of her body is based not only on her perception, but how she understands others to view her body (Davidson McCabe, 2000). King and Iwamoto (2022) found that Asian American women high in self-objectification experienced higher levels of gendered racial microaggressions and thereby higher rates of disordered eating and depression. Because AAW are exposed to messages regarding the importance of a thin body type from both their Asian heritage and U.S. mainstream cultures, they may report similar levels of body dissatisfaction and disordered eating behaviors regardless of the degree to which they identify with their ethnic group. Adherence to traditional gender roles and ideologies has been linked to internalized weight bias, weight loss behaviors, and disordered eating and appearance concerns (Ahn et al., 2022; Nagata et al., 2020). While generational status is usually associated with how much one adheres to traditional gender roles and ideologies, there may be other factors that better account for how closely one is tied to traditional cultural beliefs.

An individual's perception and subsequent interpretation of messages about body image may lead to disordered eating (Javier & Belgrave, 2019). The self-evaluative salience scale (SES) of the ASI captures an aspect of self-objectification and the results of this study indicate that appearance investment is a moderately strong predictor of disordered eating behaviors for AAW. Self-evaluative salience consists of how much one attributes life outcomes to appearance,

which is especially relevant for minority individuals who experience different life outcomes based on racial appearance. This scale captures how appearance influences the cognitive processes and schemas of an individual, as well as how these schemas may influence choices to change body appearance, such as dieting and disordered eating (Herme, 2016; Jarry et al., 2019).

Asian American women compare themselves not only to White mainstream ideal appearance standards, but also compare themselves to other Asian women. Asian American women indicated a high level of dissatisfaction and body image issues through self-comparison to both White mainstream ideals as well as Asian cultural expectations for thinness or modification of racial features, such as the eye shape (Wong et al., 2017). Therapists treating Asian American women with disordered eating found that including parents of adult daughters in treatment was effective and necessary (Smart et al., 2011). Challenging client and parent beliefs about Asian and mainstream US pressures regarding achievement and beauty was an important part of disordered eating recovery, thus highlighting how embedded self-objectification processes are in the development of disordered eating for AAW.

Higher rates of appearance investment did not influence the degree to which individuals experiencing gendered racial microaggressions engaged in disordered behaviors. Both appearance investment and gendered racial microaggressions individually predicted disordered eating for Asian American college women. Prior studies identified that appearance investment predicted disordered eating for White and Black women, however, this is the first study indicating that levels of appearance investment predict disordered eating for Asian American women. It may be that appearance investment did not moderate the outcome of disordered eating, as self-objectification related to SES may be better explained through experiences of intersectional microaggressions. In other words, experiences of gendered racial microaggressions

lead to higher levels of appearance investment and seek to change body features through disordered eating as a way of managing distress related to body image. While appearance investment did not moderate the outcome variable in this study, it is related to disordered eating for this population even when accounting for the significant contribution of gendered racial microaggressions.

College Settings and Disordered Eating in AAW

Furthermore, college settings increase body image concerns due to the focus on social comparison as well as being a place to explore identity development. It may be that during the first years of college, intersectional microaggressions have a stronger predictive relationship with disordered eating and appearance investment due to the college experience and environment (Fitzsimmons-Craft, 2011). Campus conditions may also contribute to the predictive relationship of gendered racial microaggressions and disordered eating, as racist campus climates and racial discrimination have been associated with disordered eating for Asian American college students (Cheng & Kim, 2018).

A variety of social factors can contribute to an increased prevalence of disordered eating in college settings. For example, college settings often highlight weight and shape, thereby increasing investment in one's body image (Brady, 2020; Cheng et al., 2017; Herme, 2016). There is added pressure from college culture that promotes internalization of the thin ideal (Leahy & Crowther, 2008). In addition, college women engage in more upward than downward comparison (Leahy & Crowther, 2008; O'Brien et al., 2009; Rancourt et al., 2016). This can lead to heightened levels of self-objectification and appearance investment in the college setting.

There are several reasons Asian American women may be more susceptible to disordered eating behaviors in college environments. First, Asian culture's emphasis on thinness and

comparison to other Asian women (Smart & Tsong, 2014) may contribute to greater levels of upward social comparison than non-Asian peers. Acculturative stress may be particularly intense as young women balance the demands of their familial culture with the demands and norms of college culture (Tsong & Smart, 2015, Winter et al., 2019). Furthermore, members of stigmatized groups, such as Asian women, may be more likely to experience negative self-evaluations after exposure to a mainstream beauty standard than members of other stigmatized groups. For example, Asian women responded differently than Black women and were more likely to endorse mainstream beauty standards and report greater body dissatisfaction than Black women (Evans & McConnel, 2003).

As young adulthood is a developmental period focused on building identity and social relationships, college students suffer acutely from episodes of social anxiety and fears of rejection. Asian-American women with increased perception of rejection or social isolation due to their Asian ethnicity were more likely to endorse greater eating concerns, pointing to the exponential risk of disordered eating and body image concerns for minoritized groups in college (Tsutakawa, 2023). Furthermore, Asian American college women have significantly lower levels of self-esteem compared to other ethnic college women (Quick & Byrd-Bredbenner, 2014) which may also place them at greater risk for mental health and eating concerns.

Given the prevalence rates of body image and disordered eating concerns on college campuses, disordered eating can be seen as a culturally acceptable expression of psychological turmoil and distress. Therapists who specialize in treatment of ED for Asian American women agree that ED symptoms provide Asian American women with culturally congruent coping strategies and to create distance in relationships and that may be fraught with conflict and fear of rejection (Smart et al., 2011). For example, Asian American college women report greater

parental expectations and criticism than their White counterparts (Chang et al., 2014; Tsong & Smart, 2006). In addition, Asian cultural values may drive Asian American college women to attain perfection and achieve success at all costs (Ahn et al., 2021; Akoury et al., 2019). Asian Americans reported higher levels of purging and cognitive restraint related to diet than White and non-Asian students of color in a large sample of college students (Uri, 2021).

Generational Status and Disordered Eating in AAW

Unlike other studies highlighting the role of generational status in relation to both disordered eating and microaggressions, this study found no evidence that generational status significantly predicted EAT-26 scores. This finding is unique given most of the research indicating generational status as a significant variable in adverse health outcomes related to microaggressions. For example, generational status was shown to play an important role in self-perception (Tsong et al., 2020) and the experience of gendered racial microaggressions. However, it appears that acculturation does not change the relationship between Asian American women's experience of gendered racial microaggressions and disordered eating in the current study. How much one identifies with Asian culture based on generational status has no impact on how the experience of intersectional microaggressions predicts disordered eating.

Asian American women are subject to distinct forms of sexism and racism that can influence culture-specific appearance evaluations. Perhaps, when viewing gendered racial microaggressions from an intersectional lens, the experience is a universally shame inducing experience contributing to self-consciousness about one's appearance regardless of influence by generational cultural values or acculturation. Given that gendered racial microaggressions are focused specifically on aspects of sexualized appearance including fetishization and ascription of submissiveness, it follows that gendered racial microaggressions would lead to questions about

one's identity, lower self-esteem, and self-objectification. Experiencing body criticism from family and continual comparison to White women can foster negative beliefs about self and body (Brady et al., 2017).

Because AAW are exposed to messages regarding the importance of a thin body type from both their Asian heritage and U.S. mainstream cultures, they may report similar levels of body dissatisfaction and disordered eating behaviors regardless of the degree to which they identify with their ethnic group. Adherence to traditional gender roles and ideologies has been linked to internalized weight bias, weight loss behaviors, and disordered eating and appearance concerns (Ahn et al., 2022; Nagata et al., 2020). While generational status is usually associated with how much one adheres to traditional gender roles and ideologies, there may be other factors that better account for how closely one is tied to traditional cultural beliefs.

There is some evidence that generational status and ethnic identity may not be a strong predictor of disordered eating for Asian Americans. For example, Asian American college women experiencing social isolation or stigma due to their Asian ethnicity regardless of generational status were more likely to endorse preoccupation, concern, guilt, and greater concern related to food and eating behaviors (Tsutakawa, 2023). Furthermore, Akoury (2019) found no significant differences in pressure for thinness or thin ideal internalization between high and low ethnic identity Asian American women, indicating that cultural identity may not be a strong predictive factor of body image concerns or disordered eating for Asian American college women. In this sample, college status and environment are better predictors than generational status.

This study included BMI as a covariate given prior literature indicating this variable correlates with disordered eating for college women. Qualitative studies of Asian American

women highlight generational and familial messages about thinness and body size as important themes related to disordered eating (Javier & Belgrave, 2019; Winter et al., 2019). Surprisingly, this study did not find BMI to be a significant predictor of EAT-26 scores. This is dissimilar to other studies indicating BMI as a strong predictor of disordered eating, such that those with a lower BMI engaged in lower levels of maladaptive eating (Akoury et al., 2019). As much literature focuses on White female experiences of disordered eating, BMI might not be as salient in body dissatisfaction and disordered eating for Asian American women. Rather, dissatisfaction with racialized features may be a better predictor of disordered eating for this population, as hypothesized by Winter et al. (2019). The experience of gendered racial microaggressions may highlight dissatisfaction with the fixed and visible identity of being both female and Asian, making BMI a less salient predictor in this population. Moreover, the presentation of ED symptoms can vary across cultural contexts and may not always include an intense fear of gaining weight, which is a necessary criterion for meeting DSM diagnosis (Yu et al., 2019).

In terms of appearance investment, past research shows individuals may be more invested in body image due to elevated BMI, making BMI a strong predictor of disordered eating, particularly for White females (Jarry et al., 2019). However, the current study results indicate that this is not true for Asian American women, and that BMI does not correlate with body image dissatisfaction as it does in majority populations. Along with past research such as Yu et al., (2020), the present study is important to understand the relationship between commonly associated factors of disordered eating and how these factors may not be accurate for Asian American populations.

Asian Americans have been noticeably missing from research regarding eating disorders and body image. Overall, the current study results highlight the importance of examining the

unique impact of gender and race combined for Asian American college women with disordered eating. Gendered racial microaggressions reflect greater external objectification pressures as well as contribute to internal objectification and self-evaluation salience pressures. Sexualized racial images may contribute to self-objectification, and appearance investment related to self-evaluation and appearance motivations predicted disordered eating in this study. Developmental and environmental factors related to the college setting may strengthen the relationship between gendered racial microaggressions and appearance investment for Asian American women. There is evidence that peer influences and a high investment in appearance ideals contribute to disordered eating behaviors for Asian American college women (Rodgers et al., 2018).

In this sample, BMI was not a significant predictor of disordered eating. High BMI or fear of gaining weight are strongly associated with disordered eating for White women, however, BMI was not a significant predictor of disordered eating in this study. It may be that dissatisfaction with racialized features or external pressures related to racialized sexual stereotypes are more salient for Asian American college women. Additionally, generational status in context of college environment did not significantly predict disordered eating. Individuals further along in progress towards their degree as measured by college status endorsed lower levels of disordered eating, indicating that college status in this sample was a stronger predictor than generational status of disordered eating.

Limitations

Within the current study, the primary limitations include issues related to the use of self-report surveys, conceptualizing key constructs, measuring body investment and gendered racial microaggressions, and of obtaining a nationally representative sample.

This study has a survey-based design for brevity and feasibility of completion. Survey-based designs are excellent sources of information regarding respondent attitudes, however, there are certain disadvantages characteristic of this design. First, self-report measures are subject to participant biases and cannot be independently verified. Therefore, the survey results may not reflect the general attitudes of participants accurately (Price & Murnan 2004). In addition, respondents may be motivated by social desirability to answer in a certain manner (Fowler, 2014). While a social desirability measure was considered for this study, it was not included due to evidence that longer survey batteries result in higher attrition rates (survey fatigue). Given that longer surveys have higher incomplete rates, revised and abbreviated measures of the constructs evidencing adequate reliability and validity were chosen for this study. However, participants may have answered dishonestly to questions related to personal experiences of disordered eating and microaggressions to avoid feeling shame, guilt, or hurt (Fowler, 2014).

Survey language may also pose a barrier for some first-generation Asian Americans, and first-generation Asian Americans may also be unfamiliar with microaggressions (Sue & Sue, 2016). The study requirements were that participants must be enrolled in a four-year college, improving the likelihood that that participants are fluent in English and familiar with microaggressions (Kim et al., 2017). While removing first-generation respondents was considered, there is not enough research in this area to support removing these responses from the analyses. Generational status was included as a covariate in the analyses to account for these differences that may be due to acculturation, given prior studies indicating the importance of generational differences (Ah & Sukkung, 2017; Ahn et al., 2021; Torres-Harding et al., 2012). Acculturation is difficult to measure and using generational status as opposed to an acculturation measure may have impacted results. Including an acculturation measure was considered, but

ultimately rejected due to concerns with survey fatigue. The researcher does acknowledge that generational status as a variable may not adequately capture these differences may be a limitation to this study.

Another limitation to consider is that two demographic variables, educational status and age, were highly correlated. Due to the probability of multicollinearity confounding results, it was decided that educational status would be included in the final analysis and not age, with the understanding that including age and educational status in statistical analyses would be redundant. There may be some drawbacks of using educational status as a variable instead of age. However, it was decided that the extrapolation of data to educational status as opposed to age may be more useful for future research and clinical conclusions. Including other demographics as covariates was considered for this study, however, due to the increased number of respondents necessary for a regression model with numerous variables and likelihood of type II error, as well as contributing to survey fatigue, additional demographic questions were not included.

Additionally, while the measures chosen for this study have demonstrated adequate evidence of reliability and validity, it is possible that measures do not fully capture constructs of interest. The ASI-R has never been validated on an Asian American population, which threatens the internal validity of this study (Bhatnagar et al., 2004). However, there is evidence of validity for specific ethnic groups within the Asian American umbrella term (Cheng et al., 2019) and the study results showed adequate levels of reliability. The ASI-R may also potentially confound results of analyses depending on how appearance investment relates to gendered racial microaggressions. For example, individuals who are highly appearance schematic may also be more sensitive to microaggressions. In addition, the GRMSAAW is a relatively new measure and

few studies have been published using this instrument. While the GRMSAAW demonstrates evidence of convergent validity with other instruments intending to measure related constructs, it may be subject to internal and construct validity threats (Emons et al., 2007).

Another potential limitation is that, while this study intends to measure attitudes of Asian American female college students, the sample may not be completely representative of this population. As a convenience sample, sample bias could be present due to characteristics of respondents who chose to respond to the survey compared to those who choose not to (Leong, 2006).

While this study recruited from a national survey platform, bias in response rates or survey responses from those in different geographic regions may be present. Participants were identified by Cint through pre-developed market research participant panels from across the USA, and the participants were provided a small monetary reward for completing the survey. Because the survey was provided online, there is no way to control or account for the environment in which it was completed and may impact survey results. Geographic location was not used as a control variable and may limit generalizability of results.

Using the broad category “Asian American” as a target population presents some disadvantages. “Asian American” is a label that encompasses many diverse backgrounds and ethnicities. According to Sue and Sue (2016), Asian Americans include at least 40 different specific groups, all with their own language, religion, history and culture, including Pacific Islanders, Native Hawaiians, Chinese, Filipinos, Asian Indians, Vietnamese, Koreans, Japanese, and others. Therefore, while the survey requirement indicated that participants self-identify as Asian American, there are many unique ethnicities captured by this term, which may have impacted survey results.

Another threat to external validity for this study are historical events and possible cohort study effects that should be considered. For example, a historical event influencing participant responses was the COVID-19 pandemic. As this study focused on college-age women, there may also be some cohort study effects that should be considered. For example, “Black Lives Matter” and the “Me Too” movements may influence cohort responses due to increased social awareness of racial and gender disparities (Mazumder, 2019; Noble & Schewe, 2003). Survey results may vary based on external events and experiences for each individual while completing the survey battery (Fowler, 2014). For example, an individual experiencing an act of racism prior to completing the survey battery likely would respond differently than an individual experiencing the same act several days later.

Future Directions

Appearance investment may play a significant role in how gendered racial microaggressions impact disordered eating. Given that the interaction term of gendered racial microaggressions and appearance investment predicted a unique and significant amount of the variance in Eat-26 scores, it is likely that appearance investment mediates this relationship, where appearance investment could be an explanatory variable for the outcome of EAT-26 scores. Given that appearance investment was found to be a significant predictor of disordered eating, future research should focus on how this factor is related to both intersectional microaggressions and disordered eating. Future research may also look to understand how pride in one’s appearance and Asian identity could mitigate some effects of gendered racial microaggressions and thereby decrease body image and eating concerns.

While high ethnic identity in prior literature has been seen as a strength, high ethnic identity increased Asian American women’s body shame and fueled disordered eating (Cheng et

al., 2019). Taken together, this study and other research indicates that the unique experience of gendered racial microaggressions tend to predict levels of disordered eating. Appearance investment may also be a function of racial dissonance or body shame triggered by racial microaggressions. Asian American women have a unique susceptibility to influences on body image via increased risk of objectification through both race and gender (Cheng & Kim, 2018; Le et al., 2020). More research is necessary to explore the function of these variables in the relationship between disordered eating and gendered racial microaggressions.

Another potential future research direction may include how recent events including COVID-19 and the increase in violence towards Asian Americans may be an important point to consider.

Yu and colleagues (2020) pointed to the gap in research related to Asian Americans and disordered eating. Other questions pertinent to this study and future directions may focus on how age impacts disordered eating throughout the lifespan, given the decrease in effect for gendered racial microaggressions as one matures in age and educational status as well as how disordered eating impacts individuals in community college settings or in the workforce. Furthermore, what techniques could be used to process experiences of intersectional microaggressions for college students and educate others on how stereotypes and discrimination contribute to disordered eating should be explored.

Implications for Counseling Psychology

Disordered eating concerns have high prevalence rates on college campuses. As such, it is important for practitioners to understand how presentations and predictive factors vary across gender and race. When working with Asian American female clients, there are several factors that are important for both understanding and addressing disordered eating concerns in a

multicultural context. It is essential for psychology professionals to be aware of how environmental factors, such as microaggressions, can impact psychological well-being. Furthermore, social and cultural pressures provide unique challenges to body image concerns for this population.

Researchers and practitioners may consider prioritizing intersectionality in their understanding of Asian American women's eating pathology (Le et al., 2022). Clinicians can work towards understanding their own identities and examine biases to prevent further harm and unintentional microaggressions when working with AA clients. Given the strong predictive relationship between microaggressive experiences and disordered eating, becoming familiar with these experiences will inform clinicians about some of the internalized schemas contributing to body image and disordered eating concerns. Additionally, it is important to understand how factors recognized as correlates of disordered eating, such as BMI, may not be a piece of the clinical presentation for Asian Americans.

Clinicians can be curious about how the unique intersection of being both Asian and female contributes to appearance concerns and disordered eating, recognizing that generational status may not play an important role in how one experiences gendered racial microaggressions. Given that educational status decreases the effect gendered racial microaggressions have on disordered eating, providing mixed educational support groups may be beneficial. Understanding and addressing each client's specific identity in relationship to the intersection of race and gender will provide a better framework for understanding challenges related to body image and disordered eating for this population. Practitioners can understand how the interaction of identity markers impact client presenting problems as opposed to multicultural models that focus on how singular categories of identity shape presenting concerns.

Research suggests that stigma and unfamiliarity with disordered eating and adverse health effects related to disordered eating contribute to low utilization rates of mental health services for Asian American women (Tsong et al., 2022). Acknowledging the impact of intersectional microaggression for Asian American women may reduce stigma and encourage help-seeking. Given the low utilization rates of counseling services for Asian American women, it may be helpful to offer materials and advertisements that represent a wide array of races and body types. Given the highly sexualized image of Asian American women, it may be worthwhile to offer support and advocacy resources around sexual and racial harassment.

The relationships among gendered racial microaggressions, appearance investment, and disordered eating in the present study suggest that individuals with greater experience of gendered racial microaggressions are at greater risk for higher levels of disordered eating attitudes. Gendered racial microaggressions also predicted levels of appearance investment for Asian American college female students. Additional research is needed to better understand how gendered racial microaggressions impact appearance investment and disordered eating, as well as implement interventions that directly address the intersectional experience of disordered eating and body image for Asian American college women. Drawing from research about identity development and intersectionality, facilitating conversations about intersectionality and body image could have a positive impact. Similarly, fostering a more holistic appreciation for the unique experiences of minoritized populations could provide better care for individuals experiencing disordered eating in a college setting, and acknowledging the significant impact of gendered and racial microaggressions on campus.

Conclusion

In conclusion, the present study was intended to illuminate the experiences of Asian American college students and disordered eating. This population has not been researched with specific interest in how variables of gendered racial microaggressions and appearance investment predict disordered eating. Significant relationships between study variables were identified as well as information regarding participant demographics. Study findings may provide mental health professionals with information about how experiences of gendered racial microaggressions directly relate to disordered eating for this minoritized population. It is hoped that this research will promote a commitment to understanding the experiences of Asian American college students and improve mental health and well-being on college campuses.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association.
- Ah, S., & Sukkyung, L. (2017). Effects of self-esteem and depression on abnormal eating behavior among Korean female college students: Mediating role of body dissatisfaction. *Journal of Child and Family Studies*, 26(1), 176–182. <https://doi.org/10.1007/s10826-016-0542-2>
- Ahn, L. H., Keum, B. T., Meizys, G. M., Choudry, A., Gomes, M. A., & Wang, L. (2021). Second-generation AAW's gendered racial socialization. *Journal of Counseling Psychology*, 7(1), 1-17. <https://doi.org/10.1037/cou000057>
- Akoury, L. M., Warren, C. S., & Culbert, K. M. (2019). Disordered eating in Asian American Women: Sociocultural and culture-specific predictors. *Frontiers in Psychology*, 10(9), 1–11. <https://doi.org/10.3389/fpsyg.2019.01950>
- Assari, S. (2018). Perceived discrimination and binge eating disorder; gender difference in African Americans. *Journal of Clinical Medicine*, 7(5), 89-96. <https://doi.org/10.3390/jcm7050089>
- Assari, S., & Kumar, A. (2018). Social determinants of physical self-rated health among Asian Americans; comparison of six ethnic groups. *Societies*, 8(2), 24-33. <https://doi.org/10.3390/soc8020024>
- Bahji, A., Mazhar, M. N., Hudson, C. C., Nadkarni, P., MacNeil, B. A., & Hawken, E. (2019). Prevalence of substance use disorder comorbidity among individuals with eating disorders: A systematic review and meta-analysis. *Psychiatry research*, 273, 58–66. <https://doi.org/10.1016/j.psychres.2019.01.007>

- Bhatnagar, Cash, T. F., Melnyk, S. E., & Hrabosky, J. I. (2004). The assessment of body image investment: An extensive revision of the Appearance Schemas Inventory. *International Journal of Eating Disorders*, 35(3), 305–316. <https://doi.org/10.1002/eat.10264>
- Burkhart Polk, Mary E., (2022). *The impact of perceived daily racism and racial identity development on body dissatisfaction among Asian American female college students* (Publication no. 11440). WVU Research Repository: Graduate Theses, Dissertations, and Problem Reports. <https://researchrepository.wvu.edu/etd/11440>
- Carter, R. T., Lau, M. Y., Johnson, V., & Kirkinis, K. (2017). Racial discrimination and health outcomes among racial/ethnic minorities: A meta-analytic review. *Journal of Multicultural Counseling and Development*, 45(4), 232–259. <https://doi.org/10.1002/jmcd.12076>
- Carpenter, C. L., Yan, E., Chen, S., Hong, K., Arechiga, A., Kim, W. S., Deng, M., Li, Z., & Heber, D. (2013). Body fat and body-mass index among a multiethnic sample of college-age men and women. *Journal of obesity*, 2013, 790654. <https://doi.org/10.1155/2013/790654>
- Cint, 2021. *Cint Digital Insights Gathering Platform*. Retrieved August 9, 2021, from <https://www.cint.com>
- Chang, E. C., Perera, M. J., & Kupfermann, Y. (2014). Predictors of eating disturbances in South Asian American females and males: A look at negative affectivity and contingencies of self-worth. *Asian American Journal of Psychology*, 5(3), 172–180. <https://doi.org/10.1037/a0031627>

- Cheng, Z. H., Perko, V. L., Fuller-Marashi, L., Gau, J. M., & Stice, E. (2019). Ethnic differences in eating disorder prevalence, risk factors, and predictive effects of risk factors among young women. *Eating Behaviors, 32*, 23–30. <https://doi.org/10.1016/j.eatbeh.2018.11.004>
- Cheng, H. L., Tran, A. G., 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. <https://doi.org/10.1037/cou0000195>
- Cheng, H. L., & Kim, H. (2018). Racial and sexual objectification of Asian American women: Associations with trauma symptomatology, body image concerns, and disordered eating. *Women and Therapy, 41*(3–4), 237–260. <https://doi.org/10.1080/02703149.2018.1425027>
- Claudat, K., White, E. K., & Warren, C. S. (2016). Acculturative stress, self-esteem, and eating pathology in Latina and Asian American female college students. *Journal of Clinical Psychology, 72*(1), 88–100. <https://doi.org/10.1002/jclp.22234>
- Crow, S. J., Peterson, C. B., Swanson, S. A., Raymond, N. C., Specker, S., Eckert, E. D., & Mitchell, J. E. (2009). Increased mortality in bulimia nervosa and other eating disorders. *The American Journal of Psychiatry, 166*(12), 1342–1346. <https://doi.org/10.1176/appi.ajp.2009.09020247>
- 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*(3), 217–230. <https://doi.org/10.1080/10640260701323474>
- Emons, W. H., Sijtsma, K., & Meijer, R. R. (2007). On the consistency of individual classification using short scales. *Psychological Methods, 12*(1), 105. <https://doi.org/10.1037/1082-989X.12.1.105>

- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, & Computers*, 28(1), 1-11. <https://doi.org/10.3758/BF03203630>
- Essed, P. (1991). *Understanding everyday racism: An interdisciplinary theory*. Sage Publications, Inc. <https://doi.org/10.4135/9781483345239>
- Evans, P.C & McConnell, L.C., (2003). Do racial minorities respond in the same way to mainstream beauty standards? Social comparison processes in Asian, Black, and White Women, *Self and Identity*, 2:2, 153-167. <https://doi.org/10.1080/15298860309030>
- Farber, R., Wedell, E., Herchenroeder, L., Dickter, C. L., Pearson, M. R., & Bravo, A. J. (2020). Microaggressions and psychological health among college students: A moderated mediation model of rumination and social structure beliefs. *Journal of Racial and Ethnic Health Disparities*, 8(1). 245-255. <https://doi.org/10.1007/s40615-020-00778-8>
- Fitzsimmons-craft, E. E. (2011). Social psychological theories of disordered eating in college women: Review and integration. *Clinical Psychology Review*, 31(7), 1224–1237. <https://doi.org/10.1016/j.cpr.2011.07.011>
- Forbes, N., Yang, L. C., & Lim, S. (2023). Intersectional discrimination and its impact on Asian American women's mental health: A mixed-methods scoping review. *Frontiers in Public Health*, 11(3). <https://doi.org/10.3389/fpubh.2023.993396>
- Fowler, F. J. (2009). *Survey research methods* (5th ed.). SAGE Publications.
- Forrest-Bank S.S., & Cuellar M.J. (2018). The mediating effects of ethnic identity on the relationships between racial microaggression and psychological well-being. *Social Work Research*, 42(1):44–56. <https://doi.org/10.1093/swr/svx023>

- Galmiche, M., Déchelotte, P., Lambert, G., & Tavolacci, M. P. (2019). Prevalence of eating disorders over the 2000-2018 period: A systematic literature review. *The American Journal of Clinical Nutrition*, *109*(5), 1402–1413. <https://doi.org/10.1093/ajcn/nqy342>
- Garfinkel, P. E., & Newman, A. (2001). The Eating Attitudes Test: Twenty-five years later. *Eating and Weight Disorders*, *6*(1), 1–21. <https://doi.org/10.1007/bf03339747>
- Garner, D. M., Bohr, Y., & Garfinkel, P. E. (1982). The Eating Attitudes Test: Psychometric features and clinical correlates. *Psychological Medicine*, *12*(4), 871–878. <https://doi.org/10.1017/S0033291700049163>
- Ghabrial, A., & Andersen, J.P. (2020). Development and initial validation of the Queer People of Color Identity Affirmation Scale. *Journal of Counseling Psychology*, *68*(1), 38-53. <https://doi.org/0.1037/cou0000443>
- Hahm, H. C., Ozonoff, A., Gaumond, J., & Sue, S. (2010). Perceived discrimination and health outcomes a gender comparison among Asian-Americans nationwide. *Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health*, *20*(5), 350–358. <https://doi.org/10.1016/j.whi.2010.05.002>
- Harrell, J. P., Hall, S., & Taliaferro, J. (2003). Physiological responses to racism and discrimination: An assessment of the evidence. *American Journal of Public Health*, *93*(2), 243–248. <https://doi.org/10.2105/ajph.93.2.243>
- Heppner, P. P., Wampold, B. E., Owen, J., Wang, K. T., & Thompson, M. (2015). *Research design in counseling*. Cengage Learning.
- Hermé, A. C. (2016). The effects of appearance schemas and commentary on body image and eating disorder psychopathology (Publication No. 379) [Doctoral dissertation, Loma

- Linda University]. Scholar Repository@LLU: Digital Archive of Research, Scholarship, and Creative Works. <https://scholarsrepository.llu.edu/etd/379>
- Ho, I. K., Dinh, K. T., Bellefontaine, S. M., & Irving, A. L. (2018). Cultural adaptation and sexual harassment in the lives of Asian American women. *Women and Therapy, 41*(3–4), 281–297. <https://doi.org/10.1080/02703149.2018.1430300>
- Hoek, H. (2016). Review of the worldwide epidemiology of eating disorders. *Current Opinion in Psychiatry, 29*, 336–339. <https://doi.org/10.1097/YC0.0000000000000282>
- Hoerger, M. (2010). Participant dropout as a function of survey length. *Cyberpsychology, Behavior, and Social Networking, 13*(6), 697–701. <https://doi.org/10.1089/cyber.2009.0445>
- Huynh V.W. (2012). Ethnic microaggressions and the depressive and somatic symptoms of Latino and Asian American adolescents. *Journal of Youth and Adolescence;41*(7), 831–846. <https://doi.org/10.1007/s10964-012-9756-9>
- Iyer, D. S., & Haslam, N. (2003). Body image and eating disturbance among South Asian-American women: The role of racial teasing. *International Journal of Eating Disorders, 34*(1), 142–147. <https://doi.org/10.1002/eat.10170>
- Jarry, J. L., Dignard, N. A. L., & O’Driscoll, L. M. (2019). Appearance investment: The construct that changed the field of body image. *Body Image, 31*, 221–244. <https://doi.org/10.1016/j.bodyim.2019.09.001>
- Javier, S. J., & Belgrave, F. Z. (2019). “I’m not White, I have to be pretty and skinny”: A qualitative exploration of body image and eating disorders among Asian American women. *Asian American Journal of Psychology, 10*(2), 141–153. <https://doi.org/10.1037/aap0000133>

- Johnson, K. P., Kim, E., Lee, J. Y., & Kim, A. J. (2014). Identifying antecedents of risky appearance management behaviors. *Clothing and Textiles Research Journal*, 32(2), 107–123. <https://doi.org/10.1177/0887302x14522857>
- Judd, C. M., McClelland, G. H., & Ryan, C. S. (2011). *Data analysis: A model comparison approach*. Routledge.
- Jung, J., & Lee, S. H. (2006). Cross-cultural comparisons of appearance self-schema, body image, self-esteem, and dieting behavior between Korean and U.S. Women. *Family and Consumer Sciences Research Journal*, 34, 350–365.
<https://doi.org/10.1177/1077727X06286419>
- Kashubeck-West, S., & Mintz, L. B. (2001). Eating disorders in women: Etiology, assessment, and treatment. *The Counseling Psychologist*, 29(5), 627–634. <https://doi.org/10.1177/0011000001295001>
- Kelly, N. R., Smith, T. M., Hall, G. C., Guidinger, C., Williamson, G., Budd, E. L., & Giuliani, N. R. (2018). Perceptions of general and post-presidential election discrimination are associated with loss of control eating among racially/ethnically diverse young men. *International Journal of Eating Disorders*, 51(1), 28-38.
<https://doi.org/10.1002/eat.22803>
- Keum, B. T., Brady, J. L., Sharma, R., Lu, Y., Kim, Y. H., & Thai, C. J. (2018). Gendered Racial Microaggressions Scale for Asian American women: Development and initial validation. *Journal of Counseling Psychology*, 65(5), 571–585. <https://doi.org/10.1037/cou0000305>
- Kwan, M. Y., Gordon, K. H., & Minnich, A. M. (2018). An examination of the relationships between acculturative stress, perceived discrimination, and eating disorder symptoms

- among ethnic minority college students. *Eating Behaviors*, 28, 25–31.
<https://doi.org/10.1016/j.eatbeh.2017.12.003>
- Kim, P. Y., Kendall, D. L., & Cheon, H.S. (2017). Racial microaggressions, cultural mistrust, and mental health outcomes among Asian American college students. *American Journal of Orthopsychiatry*, 87(6), 663–670. <https://doi.org/10.1037/ort0000203>
- Kim, M., & Park, W. (2016). Who is at risk on Facebook? The effects of Facebook News Feed photographs on female college students' appearance satisfaction. *The Social Science Journal*, 53(4), 427–434. <https://doi.org/10.1016/j.soscij.2016.08.007>
- Lau, A. S. M., Lum, S. K., Chronister, K. M., & Forrest, L. (2006). Asian American college women's body image: A pilot study. *Cultural Diversity and Ethnic Minority Psychology*, 12(2), 259–274. <https://doi.org/10.1037/1099-9809.12.2.259>
- Le, T. P., Kuo, L., & Yamasaki, V. (2020). Asian American women, feminism, and Asian American women's eating pathology: An intersectional investigation. *Sex Roles*, 83(3-4), 127–142. <https://doi.org/10.1007/s11199-019-01100-5>
- Lee-Winn, A., Mendelson, T., & Mojtabei, R. (2014). Racial/Ethnic disparities in binge eating: disorder prevalence, symptom presentation, and help-seeking among Asian Americans and non-Latino Whites. *American journal of public health*, 104(7), 1263–1265.
<https://doi.org/10.2105/AJPH.2014.301932>
- Lewis, J. A., & Neville, H. A. (2015). Construction and initial validation of the Gendered Racial Microaggressions Scale for Black women. *Journal of Counseling Psychology*, 62(2), 289-302. <https://doi.org/10.1037/cou0000062>
- Liang, C. T. H., Nathwani, A., Ahmad, S., & Prince, J. K. (2010). Coping with discrimination: The subjective well-being of South Asian American women. *Journal of Multicultural*

- Counseling and Development*, 38(2), 77–87. <https://doi.org/10.1002/j.2161-1912.2010.tb00116.x>
- Mays, V. M., Cochran, S. D., & Barnes, N. W. (2007). Race, race-based discrimination, and health outcomes among African Americans. *Annual Review of Psychology*, 58, 201–225. <https://doi.org/10.1146/annurev.psych.57.102904.190212>
- Mazzeo, S. E. (1999). Modification of an existing measure of body image preoccupation and its relationship to disordered eating in female college students. *Journal of Counseling Psychology*, 46(1), 42–50. <https://doi.org/10.1037/0022-0167.46.1.42>
- McAdams, M. A., Van Dam, R. M., & Hu, F. B. (2007). Comparison of self-reported and measured BMI as correlates of disease markers in US adults. *Obesity*, 15(1), 188–188. <https://doi.org/10.1038/oby.2007.504>
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Muise, A., & Desmarais, S. (2010). Women’s perceptions and use of “anti-aging” products. *Sex Roles*, 63, 126–137. <http://dx.doi.org/10.1007/s11199-010-9791-5>
- Mukkamala, S. & Suyemoto, K. L. (2018). Racialized sexism/sexualized racism: A multimethod study of intersectional experiences of discrimination for Asian American women. *Asian American Journal of Psychology*, 9, 32–46. <https://doi.org/10.1037/aap0000104>
- Ng, S., Liu, Y., Gaither, S., Marsan, S., & Zucker, N. (2020). The clash of culture and cuisine: A qualitative exploration of cultural tensions and attitudes toward food and body in Chinese young adult women. *International Journal of Eating Disorders*, 54(2), 174–183. <https://doi.org/10.1002/eat.23459>

- Nicholson, H. L., & Mei, D. (2020). Racial Microaggressions and self-rated health among Asians and Asian Americans. *Race and Social Problems*, 12(3). <https://doi.org/10.1007/s12552-020-09293-1>
- Ong, A. D., Cerrada, C., Lee, R. A., & Williams, D. R. (2017). Stigma consciousness, racial microaggressions, and sleep disturbance among Asian Americans. *Asian American Journal of Psychology*, 8(1), 72–81. <https://doi.org/10.1037/aap0000062>
- O’Keefe V.M., Wingate, L.R., Cole, A.B., Hollingsworth, D.W., & Tucker, R.P. (2015). Seemingly harmless racial communications are not so harmless: Racial microaggressions lead to suicidal ideation by way of depression symptoms. *Suicide and Life-Threatening Behavior*.;45(5):567–76. <https://doi.org/10.1111/sltb.12150>
- Owen, J., Tao, K. W., & Drinane, J. M. (2019). Microaggressions: Clinical impact and psychological harm. *Microaggression Theory: Influence and Implications*, 67-85. <https://doi.org/10.1002/9781119466642.ch5>
- Polanco-Roman, L., Danies, A., & Anglin, D. M. (2016). Racial discrimination as race-based trauma, coping strategies, and dissociative symptoms among emerging adults. *Psychological Trauma: Theory, Research, Practice And Policy*, 8(5), 609–617. <https://doi.org/10.1037/tra0000125>
- Phan, T., & Tylka, T. L. (2006). Exploring a model and moderators of disordered eating with Asian American college women. *Journal of Counseling Psychology*, 53(1), 36–47. <https://doi.org/10.1037/0022-0167.53.1.36>
- Price, J. H., & Murnan, J. (2004). Research limitations and the necessity of reporting them. *American Journal of Health Education*, 35(2), 66–67. <https://doi.org/10.1080/19325037.2004.10603611>

- Quick, V. M., & Byrd-Bredbenner, C. (2014). Disordered eating, socio-cultural media influencers, body image, and psychological factors among a racially/ethnically diverse population of college women. *Eating Behaviors, 15*(1), 37–41.
<https://doi.org/10.1016/j.eatbeh.2013.10.005>
- Rancourt, D., Schaefer, L. M., Bosson, J. K., & Thompson, J. K. (2016). Differential impact of upward and downward comparisons on diverse women's disordered eating behaviors and body image. *International Journal of Eating Disorders, 49*(5), 519–523.
<https://doi.org/10.1002/eat.22470>
- Rakhkovskaya, L. M., & Warren, C. S. (2014). Ethnic identity, thin-ideal internalization, and eating pathology in ethnically diverse college women. *Body Image, 11*(4), 438–445.
<https://doi.org/https://doi.org/10.1016/j.bodyim.2014.07.003>
- Reddy, S. D., & Crowther, J. H. (2007). Teasing, acculturation, and culture conflict: Psychosocial correlates of body image and eating attitudes among South Asian women. *Cultural Diversity and Ethnic Minority Psychology, 13*(1), 45–53.
<https://doi.org/10.1037/1099-9809.13.1.45>
- Rodgers, R. F., Berry, R., & Franko, D. L. (2018). Eating disorders in ethnic minorities: An update. *Current Psychiatry Reports, 20*(10), 90. <https://doi.org/10.1007/s11920-018-0938-3>
- Rollero, C., & De Piccoli, N. (2017). Self-objectification and personal values. An exploratory study. *Frontiers in Psychology, 8*(6), 1–8. <https://doi.org/10.3389/fpsyg.2017.01055>
- Sedgwick, P. (2013). Multiple regression. *BMJ (Online), 347*(7916)
<https://doi.org/10.1136/bmj.f4373>

- Sanchez D., Adams W., Arango S., Flannigan A. (2018). Racial-ethnic microaggressions, coping strategies, and mental health in Asian American and Latinx American college students: A mediation model. *Journal of Counseling Psychology, 65*(2), 214–225.
<https://doi.org/10.1037/cou0000249>
- Settles, I. H., Buchanan, N. T., & Dotson, K. (2019). Scrutinized but not recognized: (In)visibility and hypervisibility experiences of faculty of color. *Journal of Vocational Behavior, 113*, 62–74. <https://doi.org/10.1016/j.jvb.2018.06.003>
- Shor, E., & Golriz, G. (2019). Gender, race, and aggression in mainstream pornography. *Archives of Sexual Behavior, 48*(3), 739–751. <https://doi.org/10.1007/s10508-018-1304-6>
- Smart, R., Tsong, Y., Mejía, O. L., Hayashino, D., & Braaten, M. E. T. (2011). Therapists' experiences treating Asian American women with eating disorders. *Professional Psychology: Research and Practice, 42*(4), 308–315. <https://doi.org/10.1037/a0024179>
- Smart, R., & Tsong, Y. (2014). Weight, body dissatisfaction, and disordered eating: Asian American women's perspectives. *Asian American Journal of Psychology, 5*(4), 344–352. <https://doi.org/10.1037/a0035599>
- Smith, A. R., & Davenport, B. R. (2012). An evaluation of body image assessments in Hispanic college women: The Multidimensional Body-Self Relations Questionnaire and the Appearance Schemas Inventory-Revised. *Journal of College Counseling, 15*, 198–214. <http://dx.doi.org/10.1002/j.2161-1882.2012.00016>
- Snyder, C. R., Wang, P. Z., & Truitt, A. R. (2018). Multiracial patient experiences with racial microaggressions in health care settings. *Journal Of Patient-Centered Research and Reviews, 5*(3), 229–238. <https://doi.org/10.17294/2330-0698.1626>

- Sonneville, K. R., & Lipson, S. K. (2018). Disparities in eating disorder diagnosis and treatment according to weight status, race/ethnicity, socioeconomic background, and sex among college students. *International Journal of Eating Disorders*, *51*(6), 518–526.
<https://doi.org/10.1002/eat.22846>
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist*, *62*(4), 271–286. <https://doi.org/10.1037/0003-066X.62.4.271>
- Sue, D. W., & Sue, D. (2016). *Counseling the culturally diverse: Theory and practice*. John Wiley & Sons.
- Torres-Harding, S. R., Andrade, A. L., & Romero Diaz, C. E. (2012). The racial microaggressions scale (RMAS): A new scale to measure experiences of racial microaggressions in people of color. *Cultural Diversity and Ethnic Minority Psychology*, *18*(2), 153–164. <https://doi.org/10.1037/a0027658>
- Trieu, M. M., & Lee, H. C. (2018). Asian Americans and internalized racial oppression: Identified, reproduced, and dismantled. *Sociology of Race and Ethnicity*, *4*(1), 67–82.
<https://doi.org/10.1177/2332649217725757>
- Tsong, Y., & Smart, R. (2015). The role of cultural beliefs in disordered eating among Asian-American women. *Asian American Journal of Psychology*, *6*(4), 342–349.
<https://doi.org/10.1037/aap0000029>
- Tsutakawa, M. J. (2023). *Multicultural Predictors of Internalized Weight Bias and Disordered Eating Behaviors in Asian American Women* (Publication No. 29994616) [Doctoral dissertation, University of La Verne]. ProQuest Dissertations and Theses Global.

- Tylka, T. L., & Hill, M. S. (2004). Objectification theory as it relates to disordered eating among college women, *Sex Roles*, *51*(12). <https://doi.org/10.1007/s11199-004-0721-2>
- Uchida, A. (1998). The Orientalization of Asian women in America. *Women's Studies International Forum*, *21*(2), 161–174. [https://doi.org/10.1016/S0277-5395\(98\)00004-1](https://doi.org/10.1016/S0277-5395(98)00004-1)
- Uri, R. C., Wu, Y. K., Baker, J. H., & Munn-Chernoff, M. A. (2021). Eating disorder symptoms in Asian American college students. *Eating Behaviors*, *40*, Advance online publication. <https://doi.org/10.1016/j.eatbeh.2020.101458>
- Vargas, S. M., Huey Jr., S. J., & Miranda, J. (2020). A critical review of current evidence on multiple types of discrimination and mental health. *American Journal of Orthopsychiatry*, *90*(3), 374–390. <https://doi.org/10.1037/ort0000441>
- Wang, J., Leu, J., & Shoda, Y. (2011). When the seemingly innocuous “stings”: Racial microaggressions and their emotional consequences. *Personality and Social Psychology Bulletin*, *37*(12), 1666–1678. <https://doi.org/10.1177/0146167211416130>
- Ward, Z.J., Rodriguez, P., Wright, D.R., Austin S.B., & Long, M.W. (2019). Estimation of eating disorders prevalence by age and associations with mortality in a simulated nationally representative US cohort. *Journal of American Medical Association*, *2*(10):e1912925. <https://doi.org/10.1001/jamanetworkopen.2019.12925>
- Winter, V. R., Danforth, L. K., Landor, A., & Pevehouse-Pfeiffer, D. (2019). Toward an understanding of racial and ethnic diversity in body image among women. *Social Work Research*, *43*(2), 69–80. <https://doi.org/10.1093/swr/svy033>
- Witcomb, G. L., Bouman, W. P., Brewin, N., Richards, C., Fernandez-Aranda, F., & Arcelus, J. (2015). Body image dissatisfaction and eating-related psychopathology in trans

- individuals: A matched control study. *European Eating Disorders Review*, 23(4), 287–293. <https://doi:10.1002/erv.2362>
- Wong, Y. J., & McCullough, K. M. (2021). The intersectional prototypicality model: Understanding the discriminatory experiences of Asian American women and men. *Asian American Journal of Psychology*, 12(2), 87–99. <https://doi.org/10.1037/aap0000208>
- Wong, S. N., Keum, B. T. H., Caffarel, D., Srinivasan, R., Morshedian, N., Capodilupo, C. M., & Brewster, M. E. (2017). Exploring the conceptualization of body image for Asian American women. *Asian American Journal of Psychology*, 8(4), 296–307. <https://doi.org/10.1037/aap0000077>
- Yeo, H. T., Mendenhall, R., Harwood, S. A., & Hunt, M. B. (2019). Asian international student and Asian American student: Mistaken identity and racial microaggressions. *Journal of International Students*, 9(1), 39–65. <https://doi.org/10.32674/jis.v9i1.278>
- Yoo, H. C., Burrola, K. S., & Steger, M. F. (2010). A preliminary report on a new measure: Internalization of the Model Minority Myth Measure (IM-4) and its psychological correlates among Asian American college students. *Journal of Counseling Psychology*, 57(1), 114–127. <https://doi.org/10.1037/a0017871>
- Yu, K. Y., Pope, S. C., & Perez, M. (2019). Clinical treatment and practice recommendations for disordered eating in Asian Americans. *Professional Psychology: Research and Practice*, 50(5), 279–287. <https://doi.org/10.1037/pro0000244>

Appendix A: INFORMED CONSENT

Dear Participant,

This letter is a request for you to take part in a research project to assess how everyday insults or slights related to race and gender impact body image for Asian American women. This project is being conducted by Spring Szoka, MA of West Virginia University with supervision of Dr. Lisa Platt, an assistant professor in the college of Education and Human Services. This study has been reviewed and is in compliance with the West Virginia University Institutional Review board. Your participation in this project is greatly appreciated and will take approximately twenty minutes to fill out the attached questionnaire. You will be compensated by Cint upon completion of this survey.

Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. You must be 18 years of age or older to participate. I will not ask any information that should lead back to your identity as a participant. Your participation is completely voluntary. You may skip any question that you do not wish to answer, and you may discontinue at any time. West Virginia University's Institutional Review Board acknowledgement of this project is on file.

Should any of the questions cause you distress, please call the national mental health hotlines or visit their website for a referral to a mental health counselor to discuss your concerns. You may also contact your college/university counseling center for an appointment.

National Eating Disorder helpline: 1-800-931-2237

<https://www.nationaleatingdisorders.org/help-support/contact-helpline>

Mental Health America: 1 (800) 969-6642

I hope that you will participate in this research project, as it could be beneficial in understanding more about body image and the lived experiences of Asian American college students. Thank you very much for your time. Should you have any questions about this letter or

the research project, please feel free to contact Dr. Lisa Platt at (304) 293-2176 or Spring Szoka at sl0033@mix.wvu.edu.

Thank you for your time and help with this project.

I willingly agree to be part of this study. I am over the age of 18 and currently enrolled in college.

- Yes
- No

Describe your generational status:

- First generation Asian American
- Second generation Asian American
- Third or more generation Asian American
- I am not Asian or Asian American

What is your gender?

- Male
- Female

Appendix B: GENDERED RACIAL MICROAGGRESSIONS SCALE

Others expect me to be submissive

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others express sexual interest in me because of my Asian appearance

- Never
- Almost Never
- Sometimes
- Often/Frequently

I see non-Asian women being cast to play female Asian characters

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others have talked about AAW as if they all have the same facial features (e.g., eye, shape, skin tone)

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others have been surprised when I disagree with them.

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others take sexual interest in me because of my Asian appearance.

- Never
- Almost Never
- Sometimes
- Often/Frequently

I rarely see AAW playing the lead role in the media.

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others have suggested that all AAW look alike.

- Never
 - Almost Never
 - Sometimes
 - Often/Frequently
- Others take my silence as a sign of compliance.

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others take romantic interest in AAW just because they never had sex with an AAW before.

- Never
 - Almost Never
 - Sometimes
 - Often/Frequently
- I rarely see AAW in the media.

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others have talked about AAW as if they all have the same body type (e.g., petite, tiny, small-chested).

- Never
 - Almost Never
 - Sometimes
 - Often/Frequently
- Others have been surprised when I do things independent of my family.

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others have implied that AAW seem content for being a subordinate.

- Never
- Almost Never
- Sometimes
- Often/Frequently

Others have treated me as if I am always open to sexual advances.

- Never

- Almost Never

- Sometimes

- Often/Frequently

Others treat me as if I will always comply with their requests.

- Never

- Almost Never

- Sometimes

- Often/Frequently

I see AAW playing the same type of characters (e.g., Kung fu woman, mistress, tiger mom) in the media.

- Never

- Almost Never

- Sometimes

- Often/Frequently

Others expect me to sacrifice my own needs to take care of others (e.g., family, partner) because I am AAW.

- Never

- Almost Never

- Sometimes

- Often/Frequently

Others have pointed out physical traits in AAW that do not look "Asian".

- Never

- Almost Never

- Sometimes

- Often/Frequently

Others have hinted that AAW are not assertive enough to be leaders.

- Never

- Almost Never

- Sometimes

- Often/Frequently

I see AAW characters being portrayed as emotionally distant (e.g., cold-hearted, lack of empathy) in the media.

- Never

- Almost Never

- Sometimes

- Often/Frequently

Others have hinted that AAW seem to have no desire for leadership.

- Never

- Almost Never
- Sometimes
- Often/Frequently

Appendix C: EATING ATTITUDES TEST

Please check a response for each of the following:

I am terrified about being overweight.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Avoid eating when I am hungry.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Find myself preoccupied with food.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Have gone on eating binges where I feel that I may not be able to stop.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Cut my food into small pieces.

- Never
- Rarely
- Sometimes
- Often

- Usually
- Always

Aware of the calorie content of foods that I eat.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Particularly avoid food with a high carbohydrate content (e.g., bread, rice, potatoes, etc.).

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Feel that others would prefer if I ate more.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Vomit after I have eaten.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Feel extremely guilty after eating.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Am preoccupied with a desire to be thinner.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Think about burning up calories when I exercise.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Other people think that I am too thin.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Am preoccupied with the thought of having fat on my body.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Take longer than others to eat my meals.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Avoid foods with sugar in them.

- Never
- Rarely

- Sometimes
- Often
- Usually
- Always

Eat diet foods.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Feel that food controls my life.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Display self-control around food.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Feel that others pressure me to eat.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Give too much time and thought to food.

- Never
- Rarely
- Sometimes
- Often

- Usually
- Always

Feel uncomfortable after eating sweets.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Engage in dieting behaviors.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Like my stomach to be empty.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Have the impulse to vomit after meals.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Enjoy trying new rich foods.

- Never
- Rarely
- Sometimes
- Often
- Usually
- Always

Appendix D: APPEARANCE SCHEMA INVENTORY

I spend little time on my physical appearance.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

When I see good looking people, I wonder about how my own looks measure up.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

I try to be as physically attractive as I can be.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

I have never paid much attention to what I look like.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

I seldom compare my appearance to that of other people.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

I often check my appearance in the mirror just to make sure I look okay.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree

- Strongly Agree

When something makes me feel good or bad about my looks, I tend to dwell on it.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

If I like how I look on a given day, it's easy to feel happy about other things.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

If somebody had a negative reaction to what I look like, it wouldn't bother me.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

When it comes to physical appearance, I have high standards.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

My physical appearance has had little influence on my life.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

Dressing well is not a priority for me.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree

- Strongly Agree

When I meet people for the first time, I wonder what they think about how I look.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

In my everyday life, lots of things happen that make me think about what I look like.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

If I dislike how I look on a given day it's hard to feel happy about other things.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

I fantasize about what it would be like to be better looking than I am.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

Before going out, I make sure that I look as good as I possibly can.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

What I look like is an important part of who I am.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree

- Strongly Agree

By controlling my appearance, I can control many of the social and emotional events in my life.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

My appearance is responsible for much of what's happened to me in my life.

- Strongly Disagree
- Mostly Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Strongly Agree

Appendix E: DEMOGRAPHIC QUESTIONNAIRE

Describe your ethnicity:

- Pacific Islander
- Chinese
- Korean
- Hmong
- Indian/Sri Lankan/Malaysian
- Japanese
- Filipino
- Other: Please describe: _____

Age:

- _____

What is your college status?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate education

What is your marital status?

- Single, never married
- Married/ Domestic Partnership
- Divorced
- Partnered in a long-term relationship

Describe your SES (socioeconomic status) growing up?

- Very low income
- Low income
- Low middle income
- Middle income
- High end middle income
- High income
- Very high income

What is your height in inches?

- _____

What is your weight in pounds?

What is your sexual orientation?

- Heterosexual
- Bisexual
- Lesbian
- Prefer not to say
- Gay
- Queer
- Questioning

Appendix F: DEBRIEF

Thank you for your participation! We appreciate your contribution. If you have any concerns about eating or would like to speak with a professional mental health specialist, please call the national mental health hotlines or visit the website below. You may also contact your college/university counseling center for an appointment to discuss your concerns.

National Eating Disorder Helpline: **800-273-8255**

<https://www.nationaleatingdisorders.org/help-support/contact-helpline>

Mental Health America: **1-800-969-6642**

National Suicide Prevention Lifeline

1-800-273-8255