THE IMPACT OF PERCEIVED DAILY RACISM AND RACIAL IDENTITY DEVELOPMENT ON BODY DISSATISFACTION AMONG ASIAN AMERICAN FEMALE COLLEGE STUDENTS

Mary E. Burkhart Polk
West Virginia University, meb0049@mix.wvu.edu

Follow this and additional works at: https://researchrepository.wvu.edu/etd

Part of the Social and Behavioral Sciences Commons

Recommended Citation
Burkhart Polk, Mary E., "THE IMPACT OF PERCEIVED DAILY RACISM AND RACIAL IDENTITY DEVELOPMENT ON BODY DISSATISFACTION AMONG ASIAN AMERICAN FEMALE COLLEGE STUDENTS" (2022). Graduate Theses, Dissertations, and Problem Reports. 11440.
https://researchrepository.wvu.edu/etd/11440

This Dissertation is protected by copyright and/or related rights. It has been brought to you by the The Research Repository @ WVU with permission from the rights-holder(s). You are free to use this Dissertation in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you must obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself. This Dissertation has been accepted for inclusion in WVU Graduate Theses, Dissertations, and Problem Reports collection by an authorized administrator of The Research Repository @ WVU. For more information, please contact researchrepository@mail.wvu.edu.
THE IMPACT OF PERCEIVED DAILY RACISM AND RACIAL IDENTITY DEVELOPMENT ON BODY DISSATISFACTION AMONG ASIAN AMERICAN FEMALE COLLEGE STUDENTS

by

Mary Eleanor Burkhart Polk

Dissertation submitted to the College of Education and Human Services at West Virginia University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Counseling Psychology

Approved by

Jeffrey Daniels, Ph.D., Chair
Lisa Platt, Ph.D.
Joan Doris, Ph.D.
Gabrielle Kline, Ph.D.

Department of Counseling and Learning Sciences

Morgantown, West Virginia 2022

Keywords: disordered eating, discrimination, Asian American, body image, body dissatisfaction

Copyright 2022 Mary Eleanor Burkhart Polk
Abstract

The impact of perceived daily racism and racial identity development on Body Dissatisfaction among Asian American Female college students

Mary Eleanor Burkhart Polk

Eating disorders pose a significant health problem for a diverse group of people. However, knowledge regarding their origins and appropriate treatments has not expanded, more specifically for Asian Americans. This study aimed to increase the knowledge surrounding an essential component of disordered eating, body dissatisfaction, and potential factors in its development. Specifically, the impact of experiences of daily racism and racial identity development on body dissatisfaction among Asian American college women were examined. Using a non-experimental, quantitative survey design, this study assessed the relationship between perceived daily racism and the racial identity schema Internalization on the endorsement of body dissatisfaction associated with racially defined areas among Asian American college women. Two hypotheses were tested using a multiple regression analysis. While the hypotheses were not fully supported, there was a relationship found between experiences of racism and body dissatisfaction. While the original hypotheses were not fully supported, the data provided valuable knowledge regarding potential factors contributing to body dissatisfaction that could lead to disordered eating. Further research will need to look more closely at additional factors, including the difference in the impact of discrimination from the majority and discrimination from one’s ethnicity.
Dedication

This dissertation and the countless hours of hard work poured into it are dedicated to my loving family and friends. To my husband, for being by my side and always believing I would get to this point and to our beautiful baby girl, for putting joy into our lives every day. I love you both more than any words can convey. To my wonderful parents, you brought psychology into my life and made this journey possible. Your love and support has and always will be a blessing. And to the many wonderful friends that have become more like family. You never stopped believing in me and for that I am forever thankful. I also want to thank my committee chairperson, Dr. Daniels, and all my committee members. Thank you for your continued support and guidance throughout this process. It has been invaluable.
CONTENTS

CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW ........................................ 1
Disordered Eating........................................................................................................... 4
Body Image Dissatisfaction.............................................................................................. 6
Disordered Eating Among Asian Americans .................................................................. 8
  Model Minority Myth ...................................................................................................... 9
Body Image Dissatisfaction Among Asian Americans .................................................. 13
Lived Experience of Racism of Asian Americans ......................................................... 15
Racial Identity Development as a Protective Factor ..................................................... 17
Control Variables .......................................................................................................... 22
Summary ......................................................................................................................... 22

CHAPTER 2: METHOD ................................................................................................. 25
Design ............................................................................................................................ 25
Participants ..................................................................................................................... 25
Measures ......................................................................................................................... 28
  Everyday Discrimination Scale – Modified Version (EDS-MV; Clark et al., 2004; see Appendix A) ........ 28
  People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995; see Appendix B) .............. 30
  Body Parts Satisfaction Scale-Revised (BPSS-R; Petrie et al., 2002; see Appendix C) ............... 31
  Demographics (see Appendix D) .............................................................................. 32
Procedure ....................................................................................................................... 33
Analyses .......................................................................................................................... 34
  Preliminary Analyses .................................................................................................. 34
  Primary Analyses ....................................................................................................... 35

CHAPTER 3: RESULTS ................................................................................................. 38
Preliminary Analyses and Tests of Assumptions .......................................................... 38
Primary Analyses .......................................................................................................... 43
  Bivariate Correlation Analyses ............................................................................... 43
Multivariate Regression Analyses ................................................................................ 46
Summary ......................................................................................................................... 51

CHAPTER 4: DISCUSSION ........................................................................................... 52
Eating disorders are a significant health problem; the potential risks of engaging in disordered eating include psychological impairment, medical complications, comorbid psychopathology, and possible death (Yu et al., 2019). Eating disorders are characterized by an obsession with food, body weight, and shape. They include diagnoses of binge eating disorder, bulimia nervosa, and anorexia nervosa (NIMH, 2017). Lifetime prevalence rates of eating disorders are as high as 2.7% and are more common in women (3.8%) than men (1.5%; NIMH, 2017). It is well-documented that body dissatisfaction and accompanying disordered eating are harmful, particularly among women (Brady et al., 2017). This increased awareness of disordered eating has resulted in more research focusing on the origin and treatment of disordered eating and accompanying diagnoses. However, this research has predominately focused on White women (Brady et al., 2017). The overrepresentation of White women is problematic because it devalues the varied experiences of women of color and fails to account for differences in the display of symptoms. Some research over the past decade has begun to acknowledge the prevalence of body dissatisfaction and disordered eating among minority women (Cummins & Lehman, 2007; Lau et al., 2006). However, Asian Americans are still underrepresented in eating disorder research.

Asian Americans make up roughly 5.6% of the U.S. population, and this number has continued to increase (U.S. Census Bureau, 2020). However, the increasing Asian American population has yet to translate into greater inclusion in psychological research (Rodgers et al., 2018). This may be caused, in part, by the stereotypical opinion of Asians and Asian Americans as smaller in stature, meaning they should not struggle with body image like White people or other people of color (Rodgers et al., 2018). Additionally, previous reviews of the literature cited...
low prevalence rates of disordered eating among Asian Americans (Crago et al., 1996). This further reinforced the belief that Asian Americans were not at an increased risk for engaging in disordered eating and, therefore, did not need to be included in research regarding risk factors and effective treatments. While there was evidence that Asian Americans did experience disordered eating, there were a limited number of studies (three) included. The studies that included Asian Americans in their participants reported decreased prevalence of eating disorders compared to other minority groups (Crago et al., 1996). Even with the limited amount of research including Asian Americans, there was still evidence that certain risk factors, including age, minority status, Body Mass Index (BMI), and level of education, were risk factors for engaging in disordered eating. More recent research has now shown a trend that people from Asian backgrounds may be at an increased risk for engaging in disordered eating compared to other racial/ethnic groups, including African Americans, Hispanics, and Caucasians (Rodger et al., 2018).

Unfortunately, while there has been some increase in the inclusion of Asian Americans in research on disordered eating, there have been conflicting conclusions on the factors contributing to the development of disordered eating behaviors, as well as symptom presentation (Brady et al., 2017). The limited number of studies, coupled with the inconsistent research findings, translates to a lack of evidence-based treatment for Asian Americans with disordered eating and associated diagnoses. The information that is well known regarding disordered eating is that body image, particularly negative body image, plays a major role in the development and severity of disordered eating (Frederick et al., 2016; Petrie et al., 2002). There has been some indication that a negative body image may be impacted by a person of color’s experiences with daily racism, a significant factor in their lived experiences (Brady et al., 2017; Cummins &
Lehman, 2007; Rakhikobskayat & Warren, 2014). This is important because negative lived experiences of racism for people of color, including experiences with microaggressions, microinsults, and microinvalidations, have been linked to poorer overall health among minority groups, including Asian Americans (Sue & Sue, 2016). While experiences of daily racism may increase rates of body dissatisfaction among people of color, cultural identity development may serve as a protective factor against body dissatisfaction, particularly for those who are further along in their racial identity development (Alvarez & Helms, 2001; Iwamoto & Liu, 2010).

The term “Asian American” refers to a panethnic and pancontinental group of individuals that come from a diverse population with origins in East Asia, South Asia, and Southeast Asia as defined by the United States Census Bureau (2010). The population of Asian Americans in the United States has continually been on the rise (US Census Bureau, 2020); however, due to multiple sociocultural factors, they are still underrepresented with regard to treatment protocols for disordered eating (Akoury et al., 2019). The lack of culturally appropriate treatments has been connected to the lack of knowledge regarding the factors associated with the development of disordered eating. The current understanding of the etiology of disordered eating is based on Euro-American women’s experiences and does not account for cultural differences. Research focusing specifically on Asian Americans’ racial identity development and their lived experiences of racism may impact their potential risk for engaging in disordered eating. The goal of this research was to improve our knowledge of disordered eating among this population so that available treatments can incorporate this knowledge when working with Asian American clients.
Disordered Eating

Eating disorders affect roughly 9% of the worldwide population (Galmiche et al., 2019). In the United States, 9%, or 28.8 million people, will struggle with some kind of disordered eating during their lifetime. Almost 13% of females will experience some type of disordered eating in their lifetime (Saunders & Eaton, 2018). However, less than 6% of those who engage in disordered eating are classified as “underweight,” resulting in limited treatment recommendations by medical professionals (Galmiche et al., 2019). It should be noted that anorexia and bulimia nervosa are representative of a very small percentage of disordered eating presentations and are extreme manifestations of abnormal eating (Costarelli et al., 2009). Eating disorders are among the deadliest mental illnesses, only outnumbered by opioid overdoses. Each year 10,200 deaths are recorded in the United States as a result of an eating disorder (News Rx Health and Science, 809). This translates to one death every 52 minutes from an eating disorder. Medical costs from physical and mental health-related problems because of disordered eating can be as much as $64.7 million every year in the United States. Disordered eating and eating disorders are associated with depression, obesity, functional impairment, psychiatric disorders, adverse health outcomes, and suicidality (Liechty & Lee, 2013). Twenty-six percent of those who have an eating disorder will attempt suicide.

The prevalence rates of eating disorders have been on the rise, and the age of onset has been falling (Costarelli et al., 2009). The increase in prevalence rates, particularly in western cultures, has been attributed to the thin ideal depicted in mainstream media and television (Costarelli et al., 2009; Saunders & Eaton, 2018). Particularly for young women, media depictions of beauty, especially those displayed by celebrities, have a significant impact on their body image (Shortner & Brown, 2008). Recent literature on this topic identified social media
platforms, including Facebook, Instagram, and Snapchat, as being linked to increased self-comparison resulting in increased disordered eating (Saunders & Eaton, 2018). Both electronic and print media are readily accessible and are saturated with images that promote unattainable standards of beauty and have a profound impact on people, particularly young women (Shortner & Brown, 2008). Adolescents and young adults are at an increased risk for developing and engaging in disordered eating behavior and are also the groups that use social media platforms on a regular basis (Liechty & Lee, 2013; Saunders & Eaton, 2018). Additionally, during adolescence and young adulthood, behaviors associated with body image and disordered eating that were learned as a child are often carried over and become solidified into distorted cognitions and behaviors (Liechty & Lee, 2013).

While it appears the detrimental health effects associated with disordered eating are known, the pressure to conform to social ideals of beauty proves to be a stronger motivation (Shortner & Brown, 2008). Eating disorders and disordered eating are often comorbid with other physical and psychological disorders (Costarelli et al., 2009; Youseff et al., 2004). Many who have disordered eating habits do not meet diagnostic criteria for an eating disorder; however, this does not mean that treatment is not needed and that they are not at risk for health-related issues. Disordered eating is associated with obsessive thinking or preoccupation with food intake, including dieting, body image dissatisfaction, preoccupation with overweightness, and fear of becoming fat (Costarelli et al., 2009). Common psychological factors that have been linked to disordered eating include anxiety, perfectionism, emotion dysregulation, distorted body image, and low self-esteem (Costarelli et al., 2009). Low self-esteem and poor body image have also been identified as risk factors for developing an eating disorder (Fairburn et al., 2003).
Body Image Dissatisfaction

Negative body image is an essential component in the diagnosis of eating disorders and is related to disordered eating attitudes and behaviors (Petrie et al., 2002). A person’s attitude regarding their body, particularly size and shape, is related to overall body dissatisfaction (Petrie et al., 2002). Body dissatisfaction has been connected to increased social anxiety, disordered eating patterns, and the risk of developing a potentially life-threatening eating disorder (Frederick et al., 2016). In addition to having high mortality rates, people with disordered eating have a high rate of relapse, and often even with some of the best treatments for eating disorders, patients remain symptomatic (Walker et al., 2018). While there have been assumptions made regarding the possible reasons for the high rates of relapse among those with disordered eating, research has consistently shown that body image dissatisfaction remains elevated among a significant portion of those with disordered eating and eating disorders (Walker et al., 2018). This includes those who have experienced remission. When body image dissatisfaction is successfully addressed as part of a person’s treatment, better long-term outcomes are achieved.

Body image dissatisfaction includes a range of negative feelings towards one’s own body and often includes the feeling that how a person currently looks does not match their perception of what their “ideal self” should look like (Bimbo et al., 2018). This mismatch between how a person perceives their body and how they wish to look often leads to an individual engaging in disordered eating, including extreme dieting, food restriction, and purging. These behaviors put a person at risk for developing a long-term eating disorder, as well as other health-related disorders. The “ideal self” that a person is often striving for is rooted in the perceived or stated expectations of their peers, the media, and society, in general, is focused on obtaining a “pleasant” body image (Bimbo et al., 2018). Researchers often point to the
unrealistic ideal thin body that is portrayed by the mass media and the increasingly thin models as instigating the steady increase in body image dissatisfaction, which then leads to disordered eating (Lew et al., 2007).

The effectiveness of the media on what people now believe to be the ideal body type is linked to the process of social comparison (Lew et al., 2007). The theory of social comparison by Festinger (1954) posits that people have the innate desire to evaluate themselves and most often will evaluate themselves against others with whom they share similar attributes, including age, race, and general appearance. According to this theory, comparisons that are made with someone who they perceive as superior in a particular dimension will result in a negative self-evaluation. However, comparisons made in which someone is perceived to be inferior will result in a positive self-evaluation. Those depicted in the mainstream media, particularly celebrities, represent those who are superior and often cause people to have a negative self-evaluation (Lew et al., 2007).

Social cognitive theory has been used to better explain the role mass media has played in the increased body dissatisfaction, particularly among young women (Willis & Knobloch-Westerwick, 2014). Social cognitive theory states that parts of a person’s knowledge acquisition can be directly impacted by observing others within the context of social interactions, experiences, and media influences (Willis & Knobloch-Westerwick, 2014). This learning includes watching a person’s actions and the consequences that result from them. Increasingly, the mass media provides a constant stream of behaviors to learn from and has a significant impact on the values that people hold and their motivation for doing many things. This is especially prevalent regarding the values and motivation for achieving the ideal body (Eckler et al., 2017). The mainstream media provides images of unattainable standards of beauty, coupled
with drastic diet and exercise routines designed to help someone achieve their ideal body type. They often promote sexual objectification of women’s bodies, emphasizing their physical features and devaluing them as a whole person (Cheng et al., 2017). The motivation provided by the media is to obtain thinness with little regard for health. This results in women dieting to improve their appearance rather than their health, which can ultimately lead to disordered eating. Interestingly enough, these extreme weight loss plans have been linked to obesity, likely as a result of not being able to maintain the diet and weight loss routine for extended periods of time (Eckler et al., 2017). In contrast, when a person’s motivation for exercise and healthy eating is pleasure or improved fitness, they experience improved body self-esteem (Willis & Knobloch-Westerwick, 2014).

**Disordered Eating Among Asian Americans**

Eating disorder research, diagnosis, and treatments in the United States have historically focused on Euro-Americans, resulting in limited evidenced-based treatments designed for racial and ethnic minorities and a significant gap in the research regarding eating disorders among Asian Americans (Crago et al., 1996; Rogers et al., 2018). Additionally, there is an ongoing debate as to whether minority women in the United States are at an increased or decreased risk for engaging in disordered eating (Claudat et al., 2015). There is ample research attributing disordered eating to the mainstream media’s promotion of thin women, but this also includes women who have small hips and waist, large busts, light eyes, white skin, and long legs (Claudat et al., 2015). While White women may already match some of the ideal women presented by the media, most minority women can never attain this image. The continuous exposure to an unattainable standard of beauty causes significant stress among some minority women (Claudat et al., 2015). The increased stress, coupled with pressures from their culture of origin, creates a
scenario in which minority women may actually experience disordered eating at increased rates compared to White women (Claudate et al., 2015). Additionally, there is a lack of research addressing the extent that sociocultural factors, such as the thin ideal presented by mainstream American media, and culture-specific factors, including a person’s ethnic identity, contribute or even intersect to cause increased disordered eating among minority women (Akoury et al., 2019).

Model Minority Myth

Earlier research regarding the prevalence rates of eating disorders among Asian American high school and college students reported prevalence rates as low as 2% and 3%, respectively, compared to 10%-14% of Caucasian students (Johnson et al., 1984; Lucero et al., 1992; as cited in Crago et al., 1996). While research was limited, conclusions were still made regarding the low prevalence rates of disordered eating among Asian Americans (Crago et al., 1996). Additionally, mental health issues, including disordered eating, have remained underdiagnosed among Asian Americans because of the belief that Asian Americans are the “model minority” (Akoury et al., 2019).

The model minority myth is the idea that Asian Americans are seen as and referred to in an exemplary way because of their education and financial successes (Kim et al., 2013). This often means that Asian Americans’ success is attributed to a lack of systemic barriers, including racism, and their own exemplary work ethic (Yoo et al., 2010). The model minority myth has resulted in a lack of representation in research, which further perpetuates inaccuracies (Museus & King, 2009). Five misconceptions regarding Asian Americans that stem from the model minority myth include, 1) Asian Americans are all the same, 2) Asian Americans are not really racial and ethnic minorities, 3) Asian Americans do not encounter major challenges because of their race, 4) Asian Americans do not seek or require resources and supports, and 5) college
degree completion is equivalent to success (Museus & King, 2009). This myth perpetuates a common misconception that Asian Americans often experience more success than other racial minority groups in the United States (Yoo et al., 2010). The model minority myth oversimplifies the experiences of Asian Americans while also having an othering effect between Asian Americans and other minority groups (Kim et al., 2013).

In addition to not accounting for the complexity of Asian Americans’ lived experiences, the model minority myth has detrimental psychological effects (Fong, 2008; Yoo et al., 2010). Research scholars have suggested a link between the pressure the myth places on Asian Americans and limited help-seeking behavior (Gupta et al., 2011). Kim and colleagues (2013) found that Asian American college students who more strongly internalized the model minority myth were less likely to engage in help-seeking behavior, indicating the myth serves as a barrier to treatment for Asian American students. The lack of help-seeking behaviors may be linked to the pressure some Asian Americans feel to fit into the stereotypes perpetuated by the myth (Gupta et al., 2011). This internalized racism can cause psychological distress while simultaneously decreasing the likelihood of Asian Americans seeking help, possibly because Asian Americans do not want to contradict the positive stereotypes perpetuated by this myth (Gupta et al., 2011).

The internalization of stereotypes is often emphasized in the standards of beauty perpetuated in the United States, particularly across all forms of media (Cheng, 2014). The “thin ideal” that is perpetuated in the media is often connected to Asian American women who are often believed to be naturally slenderer (Cheng, 2014; Cheng, et al., 2017). The pressure to conform to this stereotype has been linked to increased rates of body dissatisfaction and serves as a precursor to engaging in disordered eating (Cheng, 2014). Recently, more research has begun
to focus on eating disorders among minority groups and has recognized that Asian Americans have some of the highest risk factors for developing eating disorders compared to other racial and ethnic minorities (Cummins & Lehman, 2007; Rogers et al., 2018). Research studies have also continued to report that risk factors for developing an eating disorder are higher among younger minority females, who have higher levels of education and are more involved with the dominant culture (Crago et al., 1996; Cummins & Lehman, 2007; Rodgers et al., 2018).

However, there is still limited research on cultural and ethnic factors that may affect diagnosis and treatment (Cummins & Lehman, 2007; Rodgers et al., 2018). Specifically, diagnostic measures and treatment protocols have been normed on Western Caucasian populations and may not be reflective of nor accurately depict eating disorders among Asian Americans.

While the prevalence rates for disordered eating among Asian American and White women may be similar, there are unique risk factors that affect Asian American women (Akoury et al., 2019). As previously discussed, the current research regarding disordered eating among women in Westernized cultures is that the thin ideal marketed by mainstream media creates the desire to obtain a specific body shape, and this desire results in disordered eating (Eckler et al., 2017; Lew et al., 2007; Willis & Knobloch-Westerwick, 2014). This sociocultural model of disordered eating has been extensively studied among Euro-American women, and recent research has found that this model is also applicable to Asian Americans and Asian American women (Nouri et al., 2011; Smart & Tsong, 2014). However, Asian American women are not only influenced by sociocultural factors (Akoury et al., 2019). Specific cultural factors, including connection to their family and culture of origin, also have an impact on the development of disordered eating (Akoury et al., 2019).
In addition to the impact westernized culture has on Asian Americans and the cultural factors impacting their body image ideals, acculturative stress has also been cited as a factor impacting the development of disordered eating among Asian Americans (Berry et al., 2006). Acculturation describes the process of learning and adapting to new social and cultural norms that are different from one’s culture of origin (Claudat et al., 2015). Acculturative stress is caused by the adjustment to a new culture, as well as the internal conflict that often occurs as a person is faced with opposing ideals between their culture of origin and the new culture (Claudat et al., 2015). Acculturative stress is increased with a greater amount of disparity between a person’s culture of origin and the new culture. It has been suggested that ethnic minority women, particularly Asian American women, develop disordered eating patterns as a coping strategy for dealing with their acculturative stress (Kempa & Thomas, 2000). Disordered eating may serve as a distraction technique for the difficulty they are experiencing with the acculturation process.

It has been suggested that self-esteem is the mechanism through which the connection between acculturative stress and disordered eating occurs (Claudat et al., 2015). Self-esteem, defined as a positive or negative attitude toward one’s whole self, is connected to a person’s ability to handle stressful situations. If a minority woman is already experiencing low self-esteem, potentially caused by negative body image from sociocultural factors and specific cultural factors, they may not believe they are capable of handling the stress that comes with the acculturation process (Akoury et al., 2019; Claudat et al., 2015). Additionally, negative self-esteem is linked to body image dissatisfaction and disordered eating (Brady et al., 2017; Frederick et al., 2016). Previous research has found that high levels of acculturative stress are associated with negative self-esteem among college students (Claudat et al., 2015).
Disordered eating is especially prevalent on college campuses, with college counseling centers reporting roughly 25% of students treated exhibiting some kind of disordered eating (Javier & Belgrave, 2015). Disordered eating is believed to be more prevalent among college-age women because of the increased stress that occurs during those years, in addition to the increased influence of one’s peer group and the exploration of one’s own identity outside of who they were while living with their family (Claudat et al., 2015). For ethnic minority women, these stressors, coupled with racial and cultural factors, put them at increased risk for engaging in disordered eating. However, these statistics are not indicative of the prevalence rates of disordered eating among Asian Americans (Javier & Belgrave, 2015). Asian American college students are less likely than any other ethnic minority group to utilize student resources, especially student counseling.

**Body Image Dissatisfaction Among Asian Americans**

As with disordered eating among the dominant culture, body dissatisfaction is associated with eating disorders among Asian Americans as well (Brady et al., 2017). However, the available research regarding prevalence rates of body image dissatisfaction among Asian American women has provided conflicting results (Brady et al., 2017). Some research data suggests that Asian American women experience body dissatisfaction at similar rates as White, Hispanic, and Black women (Cachelin et al., 2000; Grabe & Hyde, 2006; as cited in Brady et al., 2017). Other research has also shown that Asian American women may be more likely to experience body dissatisfaction about specific body parts, specifically breast size, eyes, and overall face (Frederick et al., 2016). Still, other studies have reported that Asian American women experience less overall body dissatisfaction compared to other minorities and White women (Crago et al., 1996; Nouri et al., 2011; as cited in Brady et al., 2017). While these
conflicting reports do not paint the most precise picture of body dissatisfaction among Asian American women, they do show that Asian American women experience some level of body dissatisfaction, and more research should be conducted on this population (Brady et al., 2017).

Research into the causes of body dissatisfaction among Asian American women also has shown conflicting results (Brady et al., 2017). Some studies have found that ethnic identity can be a protective factor that can facilitate a positive sense of self and a better understanding of one's own identity (Rakhobaskaya & Warren, 2014). This positive sense of self can serve to minimize the negative effects associated with the idealization of a Westernized image of beauty (Rakhkobskaya & Warren, 2014). In contrast, other research suggests that a stronger connection to the ideals of Asian culture can exacerbate negative body image (Brady et al., 2017). This is particularly true if a woman with a strong ethnic identity compares herself to her Asian peers, who may be smaller than she perceives herself (Brady et al., 2017).

However, research has consistently reported that Asian American women’s experiences with racism are a contributing factor to increased body dissatisfaction (Brady et al., 2017). Everyday experiences of discrimination can result in increased negative feelings towards one’s body, as well as disordered eating attitudes. Further, perceived racism is associated with the highest rates of body dissatisfaction among Asian American women (Cummins & Lehman, 2007). While it is currently unclear if a strong identification with one’s race and ethnicity serves as a protective factor or is more detrimental, the adverse effects of racism are well documented (Brady et al., 2017; Rakhkobskaya & Warren, 2014).

The experiences of people of color with everyday discrimination, also referred to as perceived daily racism, include the three components of microaggressions (Sue & Sue, 2016). These include microassaults, microinsults, and microinvalidations (Sue & Sue, 2016).
Microassaults are defined as the "classic" and overt forms of racism. They are consciously done with the intent of hurting another person and may include violence, both verbally and physically (Sue & Sue, 2016). Microinsults and microinvalidations are more subtle and may be carried out unintentionally (Sue & Sue, 2016). Microinsults are behaviors or verbal remarks that are insensitive, rude, or demeaning to a person of color’s racial or ethnic identity (Sue & Sue, 2016). Microinvalidations are behaviors or comments that discount or disregard a person of color’s lived experiences, often seen as a denial of racism (Sue & Sue, 2016).

For the purpose of this research study, body dissatisfaction was measured using the Body Parts Satisfaction Scale-Revised (BPSS-R; Petrie et al., 2002). Body dissatisfaction is defined as a person’s attitude toward their body, particularly the size and shape (Petrie et al., 2002). Body satisfaction is used to conceptualize a person’s overall body image. The BPSS-R measures a person’s satisfaction with their body by focusing on key areas that have been shown to correlate with body dissatisfaction (Petrie et al., 2002). This measure was selected for use in this study because it has been normed on women, incorporated newer research than the original BPSS, and has specific questions relating to racially defined areas, such as eyes, lips, face, hips, and breasts.

**Lived Experience of Racism of Asian Americans**

Racism can be defined as when a person’s value and the opportunities they receive are based on characteristics associated with their race and ethnicity (Sue & Sue, 2016). Ultimately, this can lead to their oppression through disadvantages related to the value, or lack thereof, that is placed on them (Smedley, 2012; Sue & Sue, 2016). Racism is pervasive across all levels of society, including individual, internalized, institutional, and structural, and can affect every aspect of a person's life (Smedley, 2012). Racial and ethnic minorities face continuous
discrimination in housing, employment, and health care, and repeated exposure to racism has been linked to poorer health outcomes among minority groups (Smedley, 2012). This includes increased rates of smoking, hypertension, and other stress-related symptoms (Mays et al., 2007; as cited in Smedley, 2012). Specifically, Asian Americans’ experiences of racism are linked to chronic cardiovascular disease, respiratory issues, and pain-related disorders (Gee et al., 2007).

Perceived daily racism has been found to have a significant impact on people of color’s overall health and wellbeing, including negative self-esteem and beliefs about themselves (Garcia et al., 2015; Hosler et al., 2019; Smedley, 2012). The subtle and often unconscious forms of discrimination that people of color experience daily have a significant effect on mental health, often resulting in poor self-esteem and negative body image (Stucky et al., 2011). This is because the continuous occurrences of discrimination can lead to internalized racism, which refers to the acceptance of negative societal beliefs and stereotypes regarding oneself, resulting in the development and reinforcement of the belief that Whites are the superior race and the devaluation of oneself and other people of color (Smedley, 2012). These negative beliefs can ultimately result in decreased self-esteem and feelings of powerlessness (Garcia et al., 2015; Hosler et al., 2019; Smedley, 2012).

For the purpose of this research, the lived experiences of racism of Asian Americans was defined as perceived daily racism, as the current research suggests it provides the most accurate representation of the lived experience of racism of people of color (Claudat et al., 2015; Garcia et al., 2015; Hosler et al., 2019; Molina & Simon, 2014). While there has been preliminary research regarding a multidimensional assessment model for the lived experiences of people of color that includes context, societal relations, institutional dynamics, and discrimination experiences, there has yet to be a formal assessment created (Garica et al., 2015).
For this research, the lived experiences of racism of Asian Americans was measured using the Everyday Discrimination Scale – Modified Version (EDS-MV; Clark et al., 2004). This scale was chosen because, according to current research, experiences with daily racism are the most accurate representation of a person of color’s lived experience (Claudate et al., 2015). While the EDS-MV has not yet been normed on Asian American women, it is the most widely used measure of everyday discrimination and has been normed on women of other racial minority groups (Hosler et al., 2019; Panter et al., 2008). The modified version was also selected because it is more psychometrically sound than the previous version (Clark et al., 2004).

**Racial Identity Development as a Protective Factor**

The lived experiences of Asian Americans, especially how they perceive the racism they encounter daily, is a risk factor for developing both physical and psychological disorders (Brady et al., 2017). Other risk factors, including identification with a minority group, increased internal awareness, and experience of the minority status, as well as increased interactions with members of the majority group, have also been associated with increased disordered eating behaviors (Iwamoto & Liu, 2010; Rodgers et al., 2018). These experiences result in increased levels of stress and have been termed minority stress (Rodgers et al., 2018). Minority stress has been linked to the development of eating disorders (Rodgers et al., 2018). Additionally, researchers have discussed the negative effects of acculturative stress, which is defined as the stress endured during the process of adapting to a new culture that is different from one’s own culture of origin, on disordered eating behavior (Rogers et al., 2018). However, a strong ethnic identity has been cited as a protective factor against eating disorders due to its provision of social support and ability to buffer a person from the harmful effects of minority stress, as well as the capacity to
provide separation from the detrimental effects of the thin-ideal that is strongly associated with Western culture (Alvarez & Helms, 2001; Iwamoto & Liu, 2010).

While there is conflicting data around the effects of ethnic identity development and disordered eating, racial identity development has been consistently shown to be a protective factor (Alvarez & Helms 2001; Iwamoto & Liu, 2010). Racial identity is distinct from ethnic identity in that it refers to a person’s identification with their racial group and how they recognize and overcome the effects of racism (Alverez & Helms, 2001). Ethnic identity refers to a person's identification with their culture, including history, traditions, and language, and does not account for the effects of racism and oppression (Alverez & Helms, 2001).

In 2001, Alverez and Helms studied the people of color racial identity model and Asian Americans' levels of self-esteem. Asian Americans have often been seen as the "model minority," and the racism they experience has not traditionally been acknowledged, even among other minority groups (Alverez & Helms, 2001; Sue & Sue, 2016). This racial identity development model describes the following racial identity schemas from least to most complex: Conformity, Dissonance, Immersion-Emersion, Internalization, and Integrative Awareness (Alverez & Helms, 2001; Helms, 1995). Using the racial identity model, Alverez and Helms (2001) found a positive association between more complex schemas of racial identity, such as Immersion-Emersion and Integrative Awareness, and increased self-esteem. Those with less complex schemas, such as Conformity, had lower self-esteem. Interestingly, Immersion-Emersion status has been associated with greater awareness of racism and increased saliency of race in individuals (Helms, 1995; Iwamoto & Liu, 2010). However, Internalization has been associated with the ability to externalize experiences of racism, suggesting that while experiences of racism may still have ill effects, a person in this stage will be able to identify it as
an outside problem and not something inherently wrong with themselves. This implies that being in the internalization stage could serve as a protective factor against the impact of racism. For this reason, this research study looked specifically at the protective factor of the Internalization schema.

The racial identity schema of internalization was measured using the People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995). Participants completed the measure in its entirety for potential future research, but only the internalization subscale was analyzed. While this measure is older, it was determined to be the best fit for the purposes of this research study. The PRIAS has been used with Asian Americans and has been shown to have acceptable reliability estimates when used with them (Perry et al., 2009). The PRIAS is based on the Minority Identity Development Model that provides a multiple-level representation of racial identity development. Additionally, while there have been differences noted between the identity development of Asian Americans compared to other minority groups, racial identity development has been noted as a shared experience and a narrative that all people of color can relate to (Perry et al., 2009).

Yu and colleagues (2019) put forth nine best practices for working with Asian Americans diagnosed with eating disorders. Included in these best practices was the recommendation to consider multidimensional conceptualizations of body image. Specifically, that Asian Americans may express dissatisfaction with body weight, shape, and size, as well as endorse dissatisfaction with body parts associated with dominant sociocultural standards of beauty, specifically, racialized body parts including facial features, skin tone, and breast size. Additionally, clinicians were encouraged to incorporate intersectional conceptualizations of disordered eating, including but not limited to the relationship of racism to psychological and behavioral functioning (Yu et
al., 2019). While research concerning eating disorders among Asian Americans has increased in recent years, the diagnostic and treatment protocols remain based in Western culture (Rogers et al., 2018). A greater understanding of the effects of Asian Americans’ lived experiences of racism, as well as the potentially protective factor of strong racial identity development, needs to be assessed in order to develop improved diagnostic and treatment protocols that better reflect eating disorder etiology and treatment considerations for Asian Americans. Currently, research indicates young females who have more interaction with traditionally White culture are at greater risk for developing eating disorders (Rogers et al., 2018).

Asian Americans have historically been excluded from disordered eating research, which has been attributed to the effects of the model minority myth (Brady et al., 2017; Franko et al., 2007; Gillen & Lefkowitz, 2012). Over the past decade, minority groups, including Asian Americans, have become increasingly represented in research regarding prevalence rates of disordered eating, which has provided preliminary data on the groups that are most affected by disordered eating behaviors (Rogers et al., 2017). However, these research findings have not addressed the causes of disordered eating among minority groups, nor have they taken into consideration their varied experiences, particularly those of Asian Americans. This is highlighted in research that uses diagnostic measures and treatment protocols that are normed on Western Caucasian populations and are likely not reflective of the true experiences of Asian Americans (Rodgers et al., 2018). This dearth in the research regarding the causes of disordered eating among Asian Americans means that treatment protocols and prevention techniques are likely far less effective for this population, despite the growing knowledge that Asian Americans are as likely, if not more likely, to engage in disordered eating as the majority group.
Body dissatisfaction is an essential component in the development and diagnosis of eating disorders (Petrie et al., 2002). While research supports this conclusion among Asian Americans as well, there is a lack of understanding regarding the factors associated with the development of disordered eating. The thin ideal, a message indoctrinated into American culture by the media, is cited as a major factor in the increased rates of body dissatisfaction (Lew et al., 2007). However, for minority groups, particularly Asian Americans, there are other factors that may play a more significant role in their body image. The impact of both societal and cultural factors on body image has been shown to be most salient for Asian American women (Frederick et al., 2016). While this does not mean Asian American men do not engage in disordered eating, the current research will focus on women because of the higher prevalence rates. At this point, there is conflicting information regarding the potential causes and protective factors for Asian Americans with regard to their body satisfaction (Claudat et al., 2015). Experiences of daily racism have been connected to poorer health outcomes among people of color and are associated with negative views about oneself (Garcie et al., 2015; Hosler et al., 2019; Smedley, 2012). However, the connection between decreased self-esteem caused by experiences of racism and the development of disordered eating has not been fully explored. Additionally, there are conflicting data on racial identity development as a protective factor against the negative health effects associated with experiences of racism (Alverez & Helms 2001; Iwamoto & Liu, 2010). This study sought to gain valuable knowledge regarding the connection between Asian Americans' lived experiences and the development of disordered eating, as well as the potentially protective factor of racial identity development.
Control Variables

The focus of this research study was on the impact of perceived daily racism and identity development on body dissatisfaction; however, this left the possibility of many confounding variables, as body dissatisfaction can be associated with a multitude of different factors. Taking into consideration previous research, several control variables were added to mitigate possible confounding variables. These variables included SES, Body Mass Index (BMI), perceptions regarding weight, COVID-19 related discrimination, and generational status.

Due to the COVID-19 pandemic, an additional control variable of discrimination associated with the Coronavirus was added. New research since the beginning of the pandemic has found that bias towards Asian Americans has steadily increased compared to the early 2000s (Darling-Hammond et al., 2020). Specifically, stigmatizing language about Asian Americans, such as the use of “the China virus,” has increased the subconscious belief that Asian Americans are “perpetual foreigners” (Darling-Hammond, 2020). While the impact of COVID-19 is an important variable, it is beyond the scope of this research to include it as a predictor variable. Further research specifically addressing the impact of pandemic-related discrimination towards Asian Americans on their body dissatisfaction is needed.

Summary

The literature has shown there is a lack of research and understanding regarding the factors associated with disordered eating among Asian Americans, despite evidence indicating prevalence rates comparable to, if not exceeding, those of other minority groups and White people. Therefore, the purpose of this study was to gain knowledge regarding potential contributing factors to the development of disordered eating among Asian Americans. This study examined the relationship between Asian American women’s lived experiences of racism, as
defined by their perceived daily racism, and their identification with the racial identity
development schema of Internalization on dissatisfaction with their body, specifically racialized
body parts and sociocultural standards of beauty. The purposes of this study were to firstly,
depthen the understanding of body dissatisfaction among Asian American females, and secondly,
to begin to inform improved treatment protocols for disordered eating and its origins.

The following hypotheses were tested:

**Hypothesis 1:** Experiences of racism, as measured by the EDS-MV (Clark et al., 2014),
as well as identification with the racial identity schema of internalization, as measured by the
PRIAS (Helms, 1995), would positively predict levels of body dissatisfaction as measured by the
BPSS (Petrie et al., 2002) among Asian American female college students when controlling for
SES, BMI, perceptions of weight, generational status, and COVID-19 related discrimination.

**Hypothesis 2:** The schema subscale internalization, as measured by the PRIAS (Helms,
1995), will serve as a protective factor against the negative impact of perceived daily racism, as
measured by the EDS-MV (Clark et al., 2014), therefore predicting decreased body
dissatisfaction, as measured by the BPSS (Petrie et al., 2002) when controlling for SES and BMI.
Figure 1

Possible protective factor of racial identity schema, internalization
Chapter 2: Method

Design

This study used a non-experimental, quantitative survey design to assess the relationship between perceived daily racism and racial identity development on the endorsement of body dissatisfaction associated with racially defined areas in a sample of Asian American college women when SES, and BMI, perceptions of weight, COVID-19 discrimination, and generational status were controlled. The data were analyzed using the Statistical Package for Social Sciences (SPSS) software.

This study used a descriptive correlational design with two predictor variables and one outcome variable. The predictor variables were perceived daily racism, as measured by participant scores on the Everyday Discrimination Scale Modified Version (EDS-MV; Clark et al., 2004), and racial identity development (internalization), as measured by scores on the People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995). The outcome variable was body dissatisfaction, as measured by scores on the Body Parts Satisfaction Scale-Revised (BPSS; Petrie et al., 2002).

Participants

An a priori power analysis was conducted using G*Power software. This software has been shown to be effective in calculating appropriate sample sizes for a variety of statistical analyses (Faul et al., 2009). A multiple regression analysis with one degree of freedom and two total predictor variables was entered into G*Power with a Cohen’s $f^2 = 0.15$, a power ($1 - \beta$ error prob) of .80, and an alpha ($\alpha$) of .05, indicating a minimum sample size of 77 participants to find an existing medium effect if one exists (Selya et al., 2012). A total of 200 participants were recruited to account for incomplete measures and missing data.
A total of \( n = 189 \) self-identified Asian American women participated in the current study. The sample was recruited through a panel study company, Cint, that specializes in obtaining targeted national samples for academic and market research. Inclusion criteria for this study included, a participate needed to self-identify as an Asian-American female, between 18 and 25 years old, and be enrolled, at least part-time, at a college or university in the United States. Exclusionary criteria included those who have a disability, individuals who identify as transgender, and individuals under 18 years of age. Studies have found that people with lifelong disabilities have a more negative self-concept compared to the general population, as well as low self-concept and body image (Shpigelman & HaGani, 2019). Further, research suggests a strong link between body dissatisfaction and visible disabilities, including disfigurements (Rumsey et al., 2004). Additionally, high levels of body dissatisfaction and disordered eating have been reported in the trans population (Jones et al., 2016; Witcomb et al., 2015). While these populations are important to study, the measures that were used in this study have not been validated on these populations. Additionally, it would be difficult to determine if the results of the study were related to the variables being examined or these potentially confounding variables.

As seen in Table 1, participants’ mean age was 19.84 (SD = 1.30). Over half of the sample had some college (52.4%) with 42.9% indicating they were unemployed. Regarding sexual orientation, 74.1% identified as heterosexual and 92.1% have never married. Looking at socioeconomic status, 25.9% made between $60,000 - $100,000, 20.6% made between $40,000 and $60,000, and 19.6% made below $20,000. It is not known if these numbers are reflective of personal or family income. Regarding generational status, 59.3% of respondents indicated they were second generation and another 23.3% indicated they were first generation.
Table 1

Demographic Data for the Sample (N = 189)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td><strong>M = 19.84  SD = 1.30</strong></td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>High school or equiv.</td>
<td>31.2%</td>
</tr>
<tr>
<td>Some college</td>
<td>52.4%</td>
</tr>
<tr>
<td>Associated degree</td>
<td>11.1%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>2.6%</td>
</tr>
<tr>
<td>Advanced degree</td>
<td>2.6%</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>34.9%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>42.9%</td>
</tr>
<tr>
<td>Part time</td>
<td>22.2%</td>
</tr>
<tr>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>Under $20,000</td>
<td>19.6%</td>
</tr>
<tr>
<td>$20,000 - $40,000</td>
<td>18.0%</td>
</tr>
<tr>
<td>$40,000 - $60,000</td>
<td>20.6%</td>
</tr>
<tr>
<td>$60,000 - $100,000</td>
<td>25.9%</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>15.9%</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>92.1%</td>
</tr>
<tr>
<td>Married Once</td>
<td>1.1%</td>
</tr>
<tr>
<td>Living w/sig. other</td>
<td>6.9%</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>74.1%</td>
</tr>
<tr>
<td>Bisexual</td>
<td>15.3%</td>
</tr>
<tr>
<td>Gay or Lesbian</td>
<td>3.2%</td>
</tr>
<tr>
<td>Other or prefer not say</td>
<td>3.2%</td>
</tr>
<tr>
<td>Generational Status</td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>5.3%</td>
</tr>
<tr>
<td>First Generation</td>
<td>23.3%</td>
</tr>
<tr>
<td>Second Generation</td>
<td>59.3%</td>
</tr>
<tr>
<td>Other</td>
<td>12.2%</td>
</tr>
</tbody>
</table>
Measures

*Everyday Discrimination Scale – Modified Version (EDS-MV; Clark et al., 2004; see Appendix A)*

For this research, the lived experiences of racism of Asian Americans was defined as perceived daily racism, as the research suggests it provides the most accurate representation of the lived experience of racism of people of color (Claudat et al., 2015; Garcia et al., 2015; Hosler et al., 2019; Molina & Simon, 2014). The EDS-MV is a modified version of the 9-item Everyday Discrimination Scale (Williams et al., 1997; as cited in Clark et al., 2004). The EDS-MV was a predictor variable in this study.

The EDS was originally developed to assess perceptions of racism among multiple minority groups (Panter et al., 2008). The EDS-MV has not been normed on Asian American women. However, the EDS is the most widely used measure of everyday discrimination, has been normed on a sample of women, and has been used with other minority populations, including Blacks and Hispanics (Hosler et al., 2019; Panter et al., 2008). The modified version was chosen for this study because it provides a psychometrically sound representation of the construct of the lived experience of racism of minorities (Clark et al., 2004). The modified version is a 9-item scale that includes an alteration to the scale instructions from, “in your day-to-day life how often have any of the following things happened to you?” to, “in your day-to-day life how often have any of the following things happened to you because of your race?” (Clark et al., 2004, p. 364). The scale instructions were changed to reflect the focus on perceived racism. Responses are given on a 6-point Likert-type scale ranging from 1 (almost every day) to 6 (never) and are sum scored. Lower raw scores indicate increased instances of perceived daily racism. All items are then reverse-scored such that higher scores indicate greater perceptions of
racism (Clark et al., 2004). Sample items for this measure include, “in your day-to-day life how often have any of the following things happened to you because of your race,” “treated with less courtesy,” “people act as if you are dishonest,” “threatened or harassed” (Clark et al., 2004, p. 364).

A principal component analysis yielded one factor, which accounted for approximately 49% of the standardized variance (Clark et al., 2004). In a sample of Black adolescents, the alpha reliability coefficient was 0.87, with item-total correlations ranging from 0.50 - 0.70 (Clark et al., 2004). The split-half reliability was 0.83 ($p < 0.0001$; Clark et al., 2004). Correlation analyses indicated that the Everyday Discrimination Scale score was significantly related to internalization and externalization of racist beliefs (Clark et al., 2004). Validity was evaluated by testing for differential item functioning (DIF) between males and females using item response theory (IRT; Stucky et al., 2011). Predictive validity of the revised scale was compared to the original scale as well (Stucky et al., 2011). Convergent and predictive validity were evaluated using three separate measures: (1) a nine-item, dichotomous measure of incidents of overt discrimination due to race/ethnicity, (2) a three-item scale measuring history of depression, and (3) The Center for Epidemiological Studies-Depression Scale (CES-D; Stucky et al., 2011). The EDS-MV and the original EDS were found to be significantly associated with a nine-item measure of overt discrimination ($r = .34$ and .38, $p < .001$, respectively). There has yet to be research done on the reliability and validity of this measure with Asian Americans. Analysis of reliability for this population was conducted in this study. The internal consistency reliability coefficient for the total score of the current study’s sample was .83.
People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995; see Appendix B)

Following a search of the literature on racial identity measures, the PRIAS was the best fit for this research study because it has been used with Asian Americans and has been shown to provide acceptable reliability estimates with this group (Perry et al., 2009). The PRIAS subscale of Internalization was a predictor variable in this study.

The PRIAS is based on the Minority Identity Development Model that includes the schemas of (a) Conformity, (b) Dissonance, (c) Immersion-Emersion, (d) Introspection, and (e) Internalization (Perry et al., 2009). For the purpose of this study, only the subscale, Internalization, was included in the analysis, however participants completed all 50 items. The PRIAS subscale was treated as a continuous variable with all participant scores included in the analysis. The PRIAS was intended to be a categorical variable where participants would ideally have a higher score in one of the four subscales. However, after analyzing the initial data, many participants had very similar scores across two or more of the subscales. For this reason, only the internalization subscale was included, and all participants’ scores were analyzed.

The PRIAS is a 50-item measure that utilizes participant responses to items on a 5-point Likert scale with 1 = strongly disagree, and 5 = strongly agree across the five subscales. Raw scores for each subscale are summed to a total score. Higher scores are shown as having higher levels of usage for the respective schema (Perry et al., 2009). There are four subscales that make up the measure and reflect racial identity attitudes, including Conformity, Dissonance, Immersion-Emersion, and Internalization (Perry et al., 2009). The Internalization subscale of the PRIAS includes components of both Introspection and Internalization schemas. Higher scores reflect greater endorsement of the subscale/racial identity attitudes. A sample item for the
internalization subscale is, "People, regardless of their race, have strengths and limitations" (Perry et al., 2009, p. 255).

Reliability coefficients for the internalization subscale were reported as .61 - .67 (Perry et al., 2009). The internal consistency reliability coefficient for the subscale Internalization in this study was .86. The PRIAS subscales have been shown to be correlated with pertinent mental health outcomes that are consistent with the schemas in the People of Color (POC) model developed by Helms (Perry et al., 2009). Correlation coefficients across all scales ranged from .11 to .35 (Perry et al., 2009). This evidence provides support for the PRIAS’s convergent validity (Perry et al., 2009). Construct validity was assessed by investigating how items on the PRIAS load on meaningful constructs in the POC racial identity model on a sample of Asian Americans (Perry et al., 2009).

**Body Parts Satisfaction Scale-Revised (BPSS-R; Petrie et al., 2002; see Appendix C)**

The revised measure of body parts satisfaction was selected because it incorporated new research regarding body satisfaction, assesses specific body parts, and has been used with women. The BPSS-R is an outcome variable in this study. Body image is an essential factor in the diagnosis of an eating disorder and is directly related to disordered eating attitudes and behaviors (Petrie et al., 2002). A person’s attitude toward their body, particularly the size and shape of their body, is used to conceptualize a person’s body image (Petrie et al., 2002). The BPSS-R is a commonly used measure of body image attitudes (Petrie et al., 2002). The BPSS-R is revised from the 24-item Body Parts Satisfaction Scale (BPSS; Berscheid et al., 1973; as cited in Petrie et al., 2002) that measures satisfaction with one's body by focusing on specific body parts. The revised version includes 14 body parts that have been shown to be correlated with higher body dissatisfaction, including the hips, upper thighs, and stomach. Level of satisfaction
for each body part is indicated on a 6-point Likert-type scale where 1 = extremely dissatisfied and 6 = extremely satisfied. Raw scores are summed to generate a total score. There is also an item that addresses overall body satisfaction using the same 6-point Likert-type scale (Petrie et al., 2002). Factor analysis of responses of a sample of racially diverse undergraduate students resulted in a 2-factor structure: Satisfaction with Body (7 items; Cronbach's alpha = .90) and Satisfaction with Face (4 items; Cronbach's alpha = .72; Petrie et al., 2002). Only items with factor loadings > .45 were retained. Construct validity was assessed using a measure of body image disturbances and body shame and guilt (Kearney-Cooke & Striegel-Moore, 1994; Mazzeo, 1999; as cited in Petrie et al., 2002). Concurrent validity was examined using several other measures of disordered eating (Petrie et al., 2002). The correlation between mean body satisfaction and a single item measuring body satisfaction was reported at .70, providing support for convergent validity for the total body satisfaction score (Petrie et al., 2002). Mean body satisfaction score was also found to be correlated with the Janis-Field Feelings of Inadequacy Scale ($r = .45$ for women), providing support for construct validity (Petrie et al., 2002). Internal consistency reliability for the total score of the current study’s sample was .91.

**Demographics (see Appendix D)**

Participants were asked additional demographic questions, including age, sexual orientation, household income, religion, and height and weight (used to calculate BMI). Participants were also asked if they had experienced increased instances of racism since the start of the COVID-19 pandemic. If they were comfortable, participants were provided the opportunity to elaborate on the nature of this discrimination. The demographic information was used as control variables for data analysis.
**Procedure**

The survey, including the demographics questions, EDS-MV, PRIAS, and BPSS, was entered into the online survey engine, Qualtrics. A CAPTCHA was included prior to the demographics questionnaire weed out potential trolls. The EDS-MV, PRIAS, and BPSS were counterbalanced to reduce order effects.

Upon approval from the West Virginia University Institutional Review Board (IRB), Asian student organizations at preselected colleges and universities within the United States were sent an email (see Appendix E) containing a brief description of the study, eligibility criteria, IRB approval, and a link to the Qualtrics survey. The student organizations were asked to forward the study information to members of their Asian student organizations. Students were also informed of the opportunity to enter a raffle for a chance to win one of 10 $20 Visa gift cards. A list of 40 colleges and universities in the United States with the largest Asian student populations was used for participant recruitment. This list was generated by CollegeExpress and was compiled using enrollment data provided by the colleges and universities. This list was divided into the four geographic regions in the United States: The Northeast, the Midwest, the South, and the West. Two schools were randomly selected from each region to create a list of eight schools that were initially contacted. This initial email did not return any responses, after which all remaining schools were contacted on the list via email. Upon learning that many of the universities do not contact students in the summer, a new recruitment method was used.

Participants were recruited and targeted through a panel study company called Cint, which specializes in obtaining national samples for academic and market research. Inclusion criteria for this study were that participants be between the ages 18 and 25 years old, identified as Asian American, female, identified English as their primary language, and were enrolled, at least
part-time, at a college or university in the United States. Participants were identified by Cint through pre-developed market research participant panels from across the US. Participants were then provided a clickable link to the survey. The survey (taken in Qualtrics) opened with the survey cover letter. Students were also informed of the opportunity to enter a raffle for a chance to win one of 10 $20 Visa gift cards. A Visa gift card for $20 was selected after careful consideration of current research concerning ethical considerations of providing incentives to complete research. The WVU IRB’s guidelines for providing subjects with a gift card were followed, including not requiring participants to complete the survey to receive a gift card, not providing the gift card in advance, and ensuring the amount was not so large as to potentially serve as coercion to take part in the study (WVU IRB, 2015).

Upon clicking the survey, participants were first required to complete the informed consent to participate in the study. Next, participants were asked to verify their age, race/ethnicity, primary language, if they have a disability, and if they identify as transgender. Participants were also asked if they were enrolled, at least part-time, at a college or university in the United States. If any of the participants' answers did not meet the criteria outlined above, the survey closed, and the participants were thanked for their time. All participants were provided with debriefing materials, including links to eating disorder helplines and where to access additional counseling services. All survey data was stored through Qualtrics, as well as downloaded and stored on an encrypted flash drive that is stored in the researcher's locked office. Participants were also provided the opportunity to share their email address to be entered to win a gift card and to be provided study findings.

Analyses

Preliminary Analyses
Descriptive statistics were calculated, and data was assessed for normality prior to conducting the analysis. Correlations among all variables were conducted to assess the assumption of multicollinearity among predictor variables. The assumptions of a multiple regression of normality, linearity, multicollinearity, and homoscedasticity were tested. Normality assumes that the residuals are normally distributed. Linearity assumes a straight-line relationship between the criterion and outcome variables. A multiple regression assumes that the independent variables are not highly correlated with one another, meaning there is no multicollinearity. Homoscedasticity assumes the variation in the residuals or amount of error in the model is similar at each point across the model. Residual plots were used to check the homogeneity of variance and normality assumptions. The output was also examined with regard to multicollinearity, violation of homogeneity of variance, and normality assumptions.

Descriptive statistics were then conducted for each of the variables. In addition, Cronbach’s alpha was calculated to assess the internal consistency reliabilities for each of the instruments. Descriptive statistics can be found in Table 2.

**Primary Analyses**

A multiple regression analysis was used to test the two hypotheses. A stepwise multiple regression analysis is appropriate for these hypotheses because it is used to predict outcomes when there are two or more variables being tested. Additionally, a multiple regression is used when control variables are included to provide clarity about how the variables relate to one another. The use of a multiple regression attempted to explain the variance in body dissatisfaction (outcome variable) attributed to the level of perceived daily racism (predictor variable) and racial identity development (predictor variable) when age, sexual orientation, SES, religion, BMI, and perceptions of weight were held constant. Holding these variables constant in
the multiple regression provided more accurate data on the relationship between body
dissatisfaction and level of perceived daily racism and identity development.

A hierarchical regression analysis was conducted by entering the constructs’ total scores
for each participant in theoretical rank order based on previous literature, indicating the
significance of each added variable. The hierarchical regression consisted of three models for
hypothesis 1 and one model for hypothesis 2. For Hypothesis 1, the outcome variable of body
dissatisfaction was entered first, followed by each predictor variable, Everyday Discrimination,
and the racial identity development schema, Internalization. The control variables of SES, BMI,
perceptions of weight, generational status, and COVID-19 related discrimination were entered in
Step 1 of Model 2. For Model 3 only the control variables SES and BMI were entered. For
Hypothesis 2, the outcome variable off body dissatisfaction and the control variables SES and
BMI were added in Step 1. In Step 2 of model 1 the predictor variables of Everyday
Discrimination and Internalization, as well as the interaction variable were added.

The relationship between the predictor variables of perceived daily racism and racial
identity development and the outcome variable of body dissatisfaction associated with racially
defined areas was interpreted using the multiple correlation coefficient, $R$. This is a measure of
the strength of the relationship between the outcome variable and the predictor variables
combined (Hepner et al., 2016). The square of the multiple correlation coefficient ($R^2$) was
reported to interpret the proportion of variation of the outcome variable that can be explained by
the model (Hepner et al., 2016). The analysis specifically included the magnitude of the
relationship between the variables of the explained variance in perceived daily racism and racial
identity development on body dissatisfaction associated with racially defined areas when SES,
BMI, perceptions of weight, generational status, and COVID-19 related discrimination are held constant.
Chapter 3: Results

Preliminary Analyses and Tests of Assumptions

The current study aimed to investigate the relationship between experiences of racism and body dissatisfaction, and the potentially protective factor of racial identity development, specifically the schema of internalization.

Prior to conducting the primary analyses, several preliminary analyses were conducted. Descriptive statistics were calculated, and data was assessed for normality prior to conducting the primary analyses. Correlations among all variables were conducted to assess the assumption of multicollinearity among predictor variables. The assumptions of a multiple regression of normality, linearity, multicollinearity, and homoscedasticity were tested. Normality assumes that the residuals are normally distributed. Linearity assumes a straight-line relationship between the criterion and outcome variables. A multiple regression assumes that the independent variables are not highly correlated with one another, meaning there is no multicollinearity. Homoscedasticity assumes the variation in the residuals, or amount of error in the model, is similar at each point across the model. Residual plots were used to check the homogeneity of variance and normality assumptions. The output was also examined for multicollinearity, violation of homogeneity of variance, and normality assumptions.

Descriptive statistics were then conducted for each of the variables. In addition, Cronbach’s alpha was calculated to assess the internal consistency reliabilities for each of the instruments.

Table 2 provides preliminary descriptive data for the three measures used in this study. For the BPSS, the sample mean was 47.54 ($SD = 14.91$) compared to a mean of 47.94 ($SD = 14.60$) for the norming group (Frederick et al., 2014)) with a possible range of 0-72. For the
EDS, the sample mean was 45.01 \((SD = 23.52)\) compared to a norm mean of 22.56 \((SD = 9.73)\) for females (Clark et al., 2004). The PRIAS’s subscale are totaled separately, the subscale Internalization had a mean of 44.67 \((SD = 6.80)\). Norming data was not available for the subscale of internalization on the PRIAS.

### Table 2

**Descriptive Statistics for the Study Measures**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Items</th>
<th>Sample Mean</th>
<th>SD</th>
<th>Range</th>
<th>Possible Range</th>
<th>Cronbach’s (\alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPSS Total</td>
<td>12</td>
<td>47.54</td>
<td>14.91</td>
<td>12-84</td>
<td>0 -72</td>
<td>.91</td>
</tr>
<tr>
<td>EDS Total</td>
<td>9</td>
<td>45.01</td>
<td>23.52</td>
<td>36-54</td>
<td>0-54</td>
<td>.83</td>
</tr>
<tr>
<td>PRIAS InterTotal</td>
<td>11</td>
<td>44.67</td>
<td>6.80</td>
<td>19-55</td>
<td>0-55</td>
<td>.86</td>
</tr>
</tbody>
</table>

*Note. \(N = 189\); BPSS Total = Body Parts Satisfaction Score - Total Score; EDS Total = Everyday Discrimination Scale Total Score; PRIAS InterTotal = People of Color Racial Identity Attitude Scale Internalization Subscale – Total Score.*

Prior to running the multiple regression analyses, the assumptions of a multiple regression were assessed, including normality, linearity, multicollinearity, and homoscedasticity. The normality of the residuals was determined using probability-probability (P-P) plots and suggested that errors were normally distributed. The scatterplots of the predictor variables by criterion variables were consistent with the assumptions of linearity being reasonably met. Scatterplots can be found in Figures 2-4. Multicollinearity was assessed using variance inflation factors (VIF) and tolerance. VIF values close to one and tolerance values greater than .20 indicate negligible presence of multicollinearity (Cohen et al., 2014). Tolerance values for all measures were .99 and VIF values were 1.001 indicating a nonsignificant presence of
multicollinearity. Homoscedasticity was assessed using scatter plots. Results suggest that all assumptions of a multiple regression have been met.

**Figure 2**

*P-P Plot Body Parts Satisfaction Scale-Revised*
Figure 3

*P-P Plot Everyday Discrimination Scale-Revised*
The reliability for each measure was assessed using coefficient alphas. Cronbach’s alpha for the BPSS was .91, which is consistent with the norming group reliability coefficient of .90, indicating the internal consistency reliability for this measure was good and consistent with previously reported data. The EDS-MV returned a Cronbach’s alpha of .83. Norming data for the EDS-MV reported a Cronbach’s alpha of .87, consistent with this sample. The People of Color Racial Identity Attitudes Scale (PRIAS) is a 50-item measure with four subscales, conformity, dissonance, immersion-emersion, and internalization. For the purpose of this study, only the subscale of internalization was analyzed. Cronbach’s alpha for the internalization subscale was .86, which is consistent with norming data reporting Cronbach’s alphas .66 and .83 across all subscales.
Primary Analyses

A multiple regression analysis was used to test the two hypotheses. A multiple regression was chosen because of the inclusion of control variables that served to provide clarity about how the variables relate to one another. The multiple regression analysis was used to explain the variance in body dissatisfaction (outcome variable) attributed to the level of perceived daily racism (predictor variable) and racial identity development (predictor variable) when SES, BMI, perceptions of weight, COVID-19 related discrimination, and generational status were held constant.

Bivariate Correlation Analyses

The first step in the primary analyses was a series of bivariate correlations that can be found in Table 3. The primary correlations were conducted using Pearson correlation analyses to investigate the relationships between the variables in this study. There are several correlations that need to be highlighted.

First, EDS-MV scores are statistically significantly positively correlated ($r = .19, p = .017$) with BPSS scores, providing partial support for the first hypothesis, that there is a connection between experiences of discrimination and body dissatisfaction. There were no statistically significant correlations between the PRIAS subscale Internalization and either the EDS or BPSS.

Regarding the control variables, SES was positively correlated with both the BPSS and SES ($r = .16, p = .017; r = .15, p = .017$, respectively). This means that as SES increases there is an increase in perceived daily racism, as well as body dissatisfaction. BMI was negatively correlated with BPSS and SES ($r = -.15, p = .017$) but was not correlated with any other variables. This means that as BMI decreases body dissatisfaction increases. Additionally, an
increase in BMI was related to a decrease in SES. Perceptions of weight were positively correlated with the BPSS and EDS \((r = .28, p < .001; r = .15, p = .017\), respectively\) but negatively correlated with BMI \((r = -.22, p < .001)\). This implies that as a person indicated greater interest in changing how they look, they also reported increased body dissatisfaction and more discrimination. However, as they indicated being more content with their weight their BMI was lower. Generational status was negatively correlated with the subscale of Internalization of the PRIAS \((r = -.17, p = .017)\). This implies that respondents whose families had more recently immigrated to the United States scored higher on the Internalization subscale and were therefore farther along in their racial identity development. Interestingly, COVID-19 discrimination was negatively correlated with both the BPSS and EDS \((r = -.15, p = .017; r = -.33, p < .001\), respectively\).
Table 3

Bivariate Correlations Among the Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BPSSTotal</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. EDS Total</td>
<td>.19*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. PRIAS Internalization</td>
<td>.08</td>
<td>.02</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. SES</td>
<td>.16*</td>
<td>.15*</td>
<td>.10</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. BMI</td>
<td>-.15*</td>
<td>.04</td>
<td>-.07</td>
<td>-.15*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Perceptions of Weight</td>
<td>.28**</td>
<td>.15*</td>
<td>-.02</td>
<td>.06</td>
<td>-.22**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Generational Status</td>
<td>-.09</td>
<td>-.03</td>
<td>-.17*</td>
<td>.07</td>
<td>-.03</td>
<td>.12</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>8. COVID-19 Discrimination</td>
<td>-.15*</td>
<td>-.33**</td>
<td>.04</td>
<td>.00</td>
<td>.01</td>
<td>-.07</td>
<td>.04</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. N = 189; BPSS Total = Body Parts Satisfaction - Total Score; EDS Total = Everyday Discrimination Scale Total Score; PRIAS Internalization = People of Color Racial Identity Attitude Scale Internalization Subscale.

*p < .05 ** p < .001
Multivariate Regression Analyses

**Hypothesis 1:** Experiences of racism, as measured by the EDS-MV (Clark et al., 2014), as well as identification with the racial identity schema of internalization, as measured by the PRIAS (Helms, 1995), will positively predict levels of body dissatisfaction as measured by the BPSS (Petrie et al., 2002) among Asian American female college students when controlling for SES, BMI, perceptions of weight, generational status, and COVID-19 related discrimination.

The first hypothesis of this study was tested using a two-step regression analysis. As seen in Table 4, the predictor variables (EDS) and Internalization were regressed onto the outcome variable (BPSS) in the first model. Similar to the bivariate correlation analysis, EDS scores significantly predicted increased body dissatisfaction scores ($\text{adj } R^2 = .03; SE = 14.68$) ($\beta = .19; p < .05$). However, higher scores on the internalization subscale were not significantly predictive of scores on the BPSS.
Table 4:

Summary of Multiple Regression Analyses for Predicting Body Dissatisfaction: Hypothesis 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Everyday Discrimination</td>
<td>Everyday Discrimination</td>
<td>Everyday Discrimination</td>
</tr>
<tr>
<td></td>
<td>+ Internalization</td>
<td>+ Internalization</td>
<td>+ Internalization</td>
</tr>
<tr>
<td>Predicting Body Dissatisfaction</td>
<td></td>
<td>Predicting Body Dissatisfaction</td>
<td>Predicting Body Dissatisfaction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adj $R^2 = .03$ (SE = 14.68)</td>
<td>adj $R^2 = .13$ (SE = 13.86)</td>
<td>adj $R^2 = .05$ (SE = 14.50)</td>
<td></td>
</tr>
<tr>
<td>Cohen’s $f^2 = .23$</td>
<td></td>
<td>Cohen’s $f^2 = .08$</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
<th>B</th>
<th>SE B</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday Discrimination</td>
<td>.57</td>
<td>.22</td>
<td>.32</td>
<td>.23</td>
<td>.10</td>
<td>.54</td>
<td>.22</td>
<td>.18</td>
</tr>
<tr>
<td>PRIAS Internalization</td>
<td>.17</td>
<td>.26</td>
<td>.09</td>
<td>.16</td>
<td>.04</td>
<td>.12</td>
<td>.16</td>
<td>.05</td>
</tr>
<tr>
<td>SES</td>
<td>--</td>
<td>--</td>
<td>1.36</td>
<td>.77</td>
<td>.13</td>
<td>1.16</td>
<td>.80</td>
<td>.11</td>
</tr>
<tr>
<td>BMI</td>
<td>--</td>
<td>--</td>
<td>-.15</td>
<td>.21</td>
<td>-.05</td>
<td>-.38</td>
<td>.20</td>
<td>-.14</td>
</tr>
<tr>
<td>Perceptions of Weight (ref: Lose Weight)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain Weight</td>
<td>--</td>
<td>--</td>
<td>2.58</td>
<td>3.34</td>
<td>.06</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Stay the Same</td>
<td>--</td>
<td>--</td>
<td>12.39</td>
<td>2.83</td>
<td>.33**</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Do Nothing</td>
<td>--</td>
<td>--</td>
<td>5.37</td>
<td>3.28</td>
<td>.12</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Generation (ref: Second)</td>
<td>--</td>
<td>--</td>
<td>2.67</td>
<td>2.51</td>
<td>.08</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>First Gen</td>
<td>--</td>
<td>--</td>
<td>4.34</td>
<td>4.63</td>
<td>.07</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>International Other</td>
<td>--</td>
<td>--</td>
<td>-1.63</td>
<td>3.36</td>
<td>-.04</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Covid Discrimination (ref: No)</td>
<td>--</td>
<td>--</td>
<td>-2.99</td>
<td>2.17</td>
<td>-.10</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. N= 189; BPSS Total = Body Parts Satisfaction - Total Score; EDS Total = Everyday Discrimination Scale Total Score; PRIAS Internalization = People of Color Racial Identity Attitude Scale Internalization Subscale.

* $p < .05$; ** $p < .001$
Model 2 of the regression included the covariates of SES, BMI, perceptions regarding weight, COVID-19 discrimination, and generational status. With all covariates included, EDS scores and Internalization did not statistically significantly predict BPSS scores. This indicates that when the confounding factors were accounted for the relationship was no longer significant. However, due to the small sample size and large number of covariates, there is the potential that a possible effect was lost. There was a significant positive relationship between women who reported they would like to stay the same with regard to their weight and body dissatisfaction ($\beta = .19; p = .01$). This is a surprising result and will be discussed further.

In Model 3, only the covariates SES and BMI were included with the predictor variables of EDS and internalization and were regressed onto the outcome variable BPSS. All other covariates were taken out because of their limited relationships to the predictor variables. Additionally, there was concern that due to the small sample size, a large number of covariates could decrease the actual relationship between the variables. With only two covariates, the hypothesis was again partially supported ($\text{adj } R^2 = .05; SE = 14.50$) ($\beta = .18; p < .05$). That is, there was still a significant relationship between increased experiences of discrimination and body dissatisfaction. However, the relationship between EDS scores and the internalization subscale was not statistically significant when SES and BMI were entered into the equation.

**Hypothesis 2:** The schema subscale internalization, as measured by the PRIAS (Helms, 1995), will serve as a protective factor against the negative impact of perceived daily racism, as measured by the EDS-MV (Clark et al., 2014), therefore predicting decreased body dissatisfaction, as measured by the BPSS (Petrie et al., 2002) when controlling for SES and BMI.

To test hypothesis 2, model 1 included the predictor variables EDS and Internalization, the outcome variable BPSS, the control variables of SES and BMI, and the interaction variable
internalization X EDS to determine if the schema of internalization was a protective factor. The interaction term was added to this model to assess the possible protective factor of a more complex racial identity schema. While the previous hypothesis aimed to determine a relationship, research has shown support for racial identity being a protective factor against the impact of experiences of racism (Alvarez & Helms, 2001; Iwamoto & Liu, 2010). This hypothesis was not supported, as the internalization subscale was not a significant predictor of either body dissatisfaction or experiences of racism (adj $R^2=.05$; $SE = 14.52$) ($\beta = - .55$).
Table 5  
Summary of Multiple Regression Analyses for Predicting Body Dissatisfaction:  
Hypothesis 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Everyday Discrimination + Internalization Predicting Body Dissatisfaction + SES + BMI + Interaction Term</td>
</tr>
<tr>
<td></td>
<td>adj $R^2 = .05 (SE = 14.52)$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday Discrimination</td>
<td>1.48</td>
<td>1.49</td>
<td>.48</td>
</tr>
<tr>
<td>Internalization</td>
<td>1.09</td>
<td>1.51</td>
<td>.50</td>
</tr>
<tr>
<td>SES</td>
<td>1.22</td>
<td>.80</td>
<td>.11</td>
</tr>
<tr>
<td>BMI</td>
<td>-0.38</td>
<td>.20</td>
<td>-.13</td>
</tr>
<tr>
<td>Internalization x EDS</td>
<td>-0.02</td>
<td>.03</td>
<td>-.55</td>
</tr>
</tbody>
</table>

Note. $N = 189$; BPSS Total = Body Parts Satisfaction - Total Score; EDS Total = Everyday Discrimination Scale Total Score; PRIAS Internalization = People of Color Racial Identity Attitude Scale Internalization Subscale.  
*p < .05; ** p < .001
Summary

In looking at the findings of the regression analyses, the hypotheses were not supported. While there was a relationship found between experiences of racism and body dissatisfaction, the racial identity development schema, internalization, did not predict body dissatisfaction. It was further hypothesized that racial identity development, specifically the schema of internalization, would serve as a protective factor for body dissatisfaction. However, this was not supported. There was a significant relationship found between respondents who indicated not wanting to change how they look and body dissatisfaction. Possible explanations for these results will be discussed in detail in the following chapter.
Chapter 4: Discussion

The purpose of this study was to investigate the possible link between perceived experiences of daily racism, racial identity development, and body dissatisfaction among Asian-American college women. Particularly, this study examined the harm that discrimination can cause on a person’s body satisfaction, as well as the potentially protective factor of a more complex racial identity. Two hypotheses were tested by performing multivariate regression analyses after controlling for SES, Body Mass Index (BMI), perceptions regarding weight, experiences of COVID-19 discrimination, and generational status.

Hypothesis 1 tested the relationship between the amount of body dissatisfaction related to increased daily racism and identification with the racial identity schema of internalization when controlling for SES, BMI, perceptions regarding weight, COVID-19 related racism, and generational status. This hypothesis was not supported. While there was a relationship found between scores on the discrimination measure and body dissatisfaction, no connection was found for internalization. Although this does provide support to the notion that experiences of daily racism predict body satisfaction, racial identity development does not play a significant role, at least for this sample. There are several possible reasons for this that will be discussed. Additionally, the control variables that were identified as possibly have a confounding effect did not have as great an impact on the data. There was concern that because of the large number of covariates, any possible relationships may not be detected due to small sample size. For this reason, only the covariates of SES and BMI were retained.

Hypothesis 2 predicted that the racial identity schema of internalization would serve as a protective factor against experiences of racism on body dissatisfaction. Again, this hypothesis
BODY DISSATISFACTION AMONG ASIAN AMERICANS

was not supported. This is consistent with the findings in the correlation analysis, as well as hypothesis 1.

According to Alvarez and Helms (2001), schemas mediate the relationship between the perceived messages from cultural communications and racial adjustment. Previous research has addressed the protectiveness of racial identity schemas coming from a person’s ability to externalize their experiences of racism and recognize them as a systemic experience rather than as a personal deficit (Alvarez & Helms, 2001). Therefore, the racial identity schemas are more protective when an Asian American is aware of racism as an external problem. Two central components of racial identity development emerge, awareness of racism and recognizing and overcoming the internalized response to racism. Despite this previous research, no significant protective factor was identified for internalization in this study.

No significant relationship was found between either experiences of racism or body dissatisfaction and the schema of internalization. This could have been because the PRIAS was not measuring the subscales in the way that was originally identified. It was assumed that participants would score markedly higher on one of the four subscales, thus indicating their alignment with that schema. However, when reviewing the data, many participants scored similarly across all subscales. The results, therefore, did not provide the clear-cut data that was needed to determine if a schema could have had an impact on body dissatisfaction.

The connection between racism and body dissatisfaction was not surprising and is well founded in research. Everyday experiences of discrimination have been linked to increased negative feelings towards one’s body, as well as disordered eating attitudes. Further, perceived racism is associated with the highest rates of body dissatisfaction among Asian American women.
BODY DISSATISFACTION AMONG ASIAN AMERICANS

(Cummins & Lehman, 2007). The finding in this study lends more support to the body of research on experiences of discrimination and body dissatisfaction.

**Strengths and Limitations**

There are several limitations of this study. Many of these limitations are related to the use of survey-based research and threats to internal and external validity. A research study does not have validity; rather, it is determined to what extent a study has evidence of validity. External validity is about the generalizability of the results to the population. When conducting a research study using a multiple regression, there should be two main objectives related to validity; to draw conclusions about the predictor variables’ relationships with the outcome variable and to make inferences about the implications for the population (Heppner et al., 2016).

In this study, the EDS-MV has not been normed on Asian-Americans and therefore may not measure everyday discrimination with this population in the way it is intended. However, the BPSS-R was selected because it is a widely used measure of body dissatisfaction (Petrie, et al., 2002). Additionally, the BPSS-R has been normed on a sample of women (Corning et al., 2010), the population studied in this project. Concerning the sample of women, prior research has found that the number of body parts the women wished were smaller were positively correlated with their Eating Disorder Inventory (EDI) Body Dissatisfaction subscale ($r = .68, p = .001$) and with their EDI Drive for Thinness scores ($r = .49, p = .006$). The number of body parts the women were content with was also inversely correlated with EDI Body Dissatisfaction scores ($r = -.66, p < .001$) and EDI Drive for Thinness scores ($r = -.46, p = .009$; Corning et al., 2010).

Another threat to internal validity is that the EDS-MV has not been normed on Asian-American women. Participant scores on the EDS-MV for this sample had a much higher mean score and SD compared to the norming data. Participants in this study overall had a wider variety
of scores compared to the norm sample. Because the questions were not normed on a sample of Asian Americans, they may have had an impact on answers, as well as the specificity of the study sample that is not representative of the normative sample. However, the EDS-MV is one of the most widely used measures of everyday discrimination (Panter et al., 2008). Additionally, it has been revised to better reflect instances of perceived racism in daily life, which reflects the construct it was designed to measure (Clark et al., 2004). Research indicates a connection between the lived experiences of minorities and perceived daily racism, as well as a connection between experiences of racism and poorer health outcomes, specifically related to minority and acculturative stress (Garcia et al., 2015). This stress is associated with the development of body dissatisfaction and disordered eating (Alvarez & Helms, 2001; Claudet et al., 2016; Rodgers et al., 2018).

Another threat to internal validity is the PRIAS may not measure racial identity development as concretely as previously believed. This limitation was identified while reviewing the collected data. The PRIAS is not scored as a total score, rather each subscale is totaled separately, and the highest score is assumed to be the schema the participant best aligns with. However, when reviewing participant responses there was not a clear delineation across schemas. Several participants had similar scores in both the least and most complex schemas, which is surprising. This suggests the PRIAS may not be capturing racial identity development data the way it was intended for the purpose of this study. Future research looking at the protective factor of racial identity development should include measures that are able to pinpoint a participant’s schemas more effectively.

With all self-report cross-sectional studies there is the risk of missing potential data points. The data shows a snapshot in time for a person rather than experiences over time. If, for
instance, a person has just had an experience of racism, their answers may differ than if they had responded to the questions either just before or several days later. Additionally, because this is a self-report study, there is no way to account for environmental or situational factors. It may be beneficial to have future research explore longitudinal data to examine how experiences of racism, body dissatisfaction, and racial identity development change over time.

Participant honesty and accuracy in reporting are a potential threat to internal validity because there is no way to ensure that every participant met study criteria and responded to the measures honestly. Additionally, the survey was provided online for this study, so there was no control over the environment in which the person completed the survey. Participants could also answer dishonestly to avoid the feelings of shame and guilt related to social desirability. Jann and colleagues (2012) discussed the issues of the social-desirability bias, which can result in underestimating socially undesirable activities such as abortion, illicit drug use, or cheating, and overestimating socially desirable activities such as voting, seat belt use, and exercising. Particularly with the BPSS-R, respondents may have underreported their negative feelings toward their body either because they were uncomfortable being honest or taking the survey in the presence of someone with whom they were not prepared to disclose their true feelings. Lastly, the $20 Visa gift card incentive may have caused participants to answer dishonestly. For example, a participant may have indicated they fit the inclusion criteria even if they did not so they would be entered to win the gift card. However, the benefits of increased participation outweighed this potential threat to internal validity. The potential of too few participants could result in insufficient statistical power and increase the potential for a Type II error (Heppner et al., 2016).
External validity addresses the extent to which the findings can be generalized across populations and settings (Heppner et al., 2016). Selection bias poses a threat because random sampling was not used, so there is no way to know if the students who elected to participate in the study had similar characteristics that could make them more likely to participate in the study, such as previous interest or knowledge in the topic or earned credit for classes. Specifically, this sample was homogenous in that it asked for Asian American female college students between 18 and 24 years old. This could mean that the results of this study are not generalizable to other Asian Americans.

A post-hoc analysis determined a medium effect size, as well as an appropriate number of participants. However, compared to other studies in general, it is more often that much larger studies are better suited for multiple covariates. While the G*Power analysis indicated the sample size was sufficient for this study, in relation to much larger studies with thousands of participants, there was not enough data to warrant the original number of covariates. A small sample size also limits the probability of finding a statistically significant outcome. With the current sample, some variables were trending toward a positive relationship but did not rise to the level of statistical significance. While the number of participants was appropriate for statistical analyses, a larger sample may have been needed to determine if there was a statistically significant relationship. Adding to this was the decision to include only college age females. While this group of participants is easier to access than the general population, they may have all had relatively similar experiences across college campuses and may have been more alike in their racial identity development. Future research should expand the research question to include a larger age demographic, as well as sex and gender variability.
Statistical power is the probability of correctly finding a relationship between variables when there is a true relationship (Heppner et al., 2016). A study with low statistical power may find there is no relationship when a relationship does exist. This is a Type II error. Insufficient power is often the result of not having enough participants (Heppner et al., 2016). A study’s ability to accurately detect a relationship is related to the size of the effect. A larger effect size makes it possible to have a smaller sample and detect a relationship. Less power is needed in a study if a larger effect size is detected. An a priori power of .80 was selected for this study because it has become the accepted standard for power in social sciences research (Heppner et al., 2016). A power level of .80 means that 80% of the time, the results will be statistically significant if a true effect exists (Heppner et al., 2018). However, it also means there is a 20% chance that no statistically significant results will be found when they do exist (Heppner et al., 2018). The appropriate sample size for this study was determined to be 127 based on an a priori power analysis and adding an additional 50 participants to account for missing data. The total number of participants for this study was 180.

Alpha (α) is also another factor that affects power (Heppner et al., 2018). For this study, alpha was set at .05. This means there is a 5% chance of concluding there is an effect when there is not an effect. If alpha is set more conservatively, such as .01, it is more difficult to reject the null hypothesis, thereby decreasing the chance of a Type I Error but sacrificing power (Heppner et al., 2016). In this study, I selected an alpha level of .05 because it is the most commonly used, and because of the potential for a small sample size, increasing power was important to better ensure avoiding a Type II error (Heppner et al., 2016). Alpha levels of .01 are more commonly used when multiple tests are being done simultaneously (Heppner et al., 2016). A Type I error incorrectly accepts the null hypothesis when the null hypothesis should be rejected. Type I and
Type II errors are inversely related; the higher the threshold for a Type I error is set, the higher the risk of a Type II error (Heppner et al., 2016). Overall, there was an increased possibility of rejecting the null hypothesis and potentially reporting a relationship between experiences of racism, racial identity development, and body dissatisfaction when there was not one. This study was looking at a very specific group of people and therefore had the potential to have a small sample size, therefore alpha was increased, thus potentially increasing the risk for a Type 1 error. Although, it should be noted that an alpha set at .05 is generally considered acceptable, and further research should be conducted to support the findings of this study.

While this study had several limitations, there are also strengths that should be highlighted. Importantly, this study expanded the understanding of body dissatisfaction among Asian American women and the impact of racism on their daily lives. This comes at a critical time for many Asian Americans, as the COVID-19 pandemic saw a concerning increase in racism towards Asian Americans. For this study alone, roughly 50% of the respondents reported experiencing some type of racism directly related to COVID-19. This study can serve as a starting point for future research to expand the knowledge regarding body dissatisfaction and disordered eating among Asian Americans.

Asian Americans have been noticeably missing from research regarding body dissatisfaction and eating disorders, and this has likely negatively impacted the treatment they receive. This study helped provide the beginnings of a conversation and provides a jumping off point for future research regarding more appropriate and culturally sensitive treatments and preventive measures for disordered eating. Additionally, this study focused on a broader construct, body dissatisfaction, which is a precursor to disordered eating, potentially capturing more beneficial data than studies only looking at a diagnosable eating disorder. Eating disorders
can be life-threatening, so determining possible causes, as well as identifying preventative measures, could help protect those who are at higher risk for developing an eating disorder. Lastly, this study was able to access participants across the United States, thereby limiting the possible confounding variable of geographic location.

**Implications for Future Research**

The present study aimed to examine the lived experiences of Asian American female college students and the possible protective factors of racial identity development on body dissatisfaction. Future research should expand the discussion of racism, racial identity development, and body dissatisfaction to a wider population of Asian Americans to better understand the impact across all Asian Americans.

Future research should focus on factors that may impact a person’s racial identity development, including family influence, cultural and familial pressures, views towards mental health treatment, and previous experiences with treatment. It can be easy to lump all Asian American cultures into one category and base research and treatment off those (Yu et al., 2019). While there may be many similarities, there are also differences that will have an impact on a person’s lived experiences. Gaining a better understanding of these differences and their impact will help in the creation and implementation of more culturally appropriate treatments. While this study was survey-based to capture a wider range of topics, future research could use interviews to capture more qualitative data that shed specific light on these variables. Additionally, future research could implement a longitudinal design to capture more long-term data that better reflects change over time with these highly sensitive topics. This data could then be used to inform larger studies looking at preventive measures that can be taken to help reduce body dissatisfaction and, ultimately, eating disorders.
Additionally, it was determined that separating racial identity development into more and less complex schemas did not provide an accurate representation of their complexities and the experiences of the people growing in their racial identity development. This was highlighted when looking at the outcome data, as many of the participants were not definitively in any one schema. The PRIAS was intended to be used as a categorical variable. However, due to the closeness in scores, it was analyzed as a continuous variable and all participant scores were included. Higher scores on the Internalization subscale indicated greater identification with the schema. This made it difficult to truly determine if the schema of internalization had the protective factors that were originally hypothesized. It will be important for future research to address the more nuanced differences between the schemas rather than defining them by complexity. In looking at the more nuanced differences between schemas it will also be important to examine discrimination that occurs within one’s culture and family. For example, many women may feel they do not meet the American standard of beauty but also do not fit within their culture’s or ethnicity’s beauty standards. Examining the origins of a person’s body dissatisfaction can provide valuable insight into a person’s lived experiences and therefore provide richer data with which to enhance research and treatment.

**Clinical Implications**

Previous research has reported a sharp increase in rates of disordered eating among Asian Americans, now equaling and sometimes exceeding those of White, Latinx, and Black women (Cummins et al., 2005; Franko et al., 2007). Despite the increasing prevalence rates among Asian American women, treatments for disordered eating continue to focus on the experiences of White women. This Eurocentric view of disordered eating treatment at the very least serves as a barrier to treatment for ethnic minorities, particularly Asian Americans, and can ultimately be
detrimental to their healing. The preliminary findings of this study highlight the importance of accounting for the lived experience and racial identity development of Asian American women when treating body image issues, as well as disordered eating.

The findings from this study add to the body of literature regarding the negative impact of racism on a person’s body satisfaction. While the results were not able to provide additional information regarding a possible protective factor of racial identity development, findings did support the need for treatment protocols that provide a validating experience for Asian Americans. When working with someone who identifies as an Asian American it is important to account for possibly negative experiences they have had, including racism, in order to fully understand and treat disordered eating linked to body dissatisfaction.

All mental health treatments must be evidence-based, which includes the implementation of scientifically backed approaches and evidence-informed decisions when determining the best treatment for an individual (Yu et al., 2019). Previous research has highlighted the importance and effectiveness of tailoring treatments to specific cultural backgrounds (Huey & Tilley, 2018). This knowledge has not translated to eating disorder treatments for Asian Americans. However, using the growing body of research regarding disordered eating and body dissatisfaction among Asian Americans can help to build a framework for providing more culturally competent care within existing treatments.

When treating clients with body image concerns, it is important to consider the multidimensional conceptualization of appearance. As highlighted throughout this study, Asian Americans’ eyes, lips, face, hips, and breasts are often a source of discrimination for not matching typical American/Western beauty standards (Petrie et al., 2002). When assessing body
image concerns, measures such as the Body Parts Satisfaction Scale-Revised can be helpful in understanding and conceptualizing a client’s presenting concerns.

Conclusion

This study sought to expand the literature on Asian American females’ experiences of body dissatisfaction as it relates to lived experiences of racism and racial identity development. While the hypotheses were not fully supported, valuable information regarding further research and possible treatments was gained, specifically, the connection between body dissatisfaction and experiences of racism. While this may not have been surprising, it does continue to provide support for the need to create multiculturally appropriate treatment protocols that factor in a person’s lived experiences. Additionally, it is clear further research into the possible positive impact of racial identity is needed. While the current study did not find the results originally expected, it shed light on a possibly important component of a person’s lived experiences and potential risk for body dissatisfaction that could lead to disordered eating. These findings included the positive relationship between experiences of discrimination and body dissatisfaction. Additionally, correlations were found between BMI, body dissatisfaction, and SES. Correlations were also found between perceptions of weight, body dissatisfaction, discrimination, and BMI. Generational status and the racial identity schema of internalization were also significantly correlated. Lastly, COVID-19 related discrimination, body dissatisfaction and experiences or racism were significantly positively correlated. These results can help to guide future research questions regarding body dissatisfaction.

While this study only looked at Asian American female college students, it provides valuable information for the need to acknowledge the negative impact racism has and the steps that need to be taken to help protect Asian American students from harm. While it was
hypothesized that an increased understanding of racism as an external factor can serve as protection from the impact of racism, it is as important, if not more so, for acts of racism to be recognized and systems set in place to minimize their occurrence while continuing to provide racially sensitive care to all minority students. In conclusion, it will be important to continue with this research to gain a better understanding of the impact of racism and racial identity development on body dissatisfaction and the possible development of eating disorders, as well as continuing to explore the implications for multiculturally informed evidence-based treatments for disordered eating and similar disorders.
References


Appendix A

Everyday Discrimination Scale – Modified Version

Items
In your day-to-day life, how often have any of the following things happened to you BECAUSE OF YOUR RACE

a. Treated with less courtesy 1 2 3 4 5 6
b. Treated with less respect 1 2 3 4 5 6
c. Receive poorer service 1 2 3 4 5 6
d. People act as if you are not as smart 1 2 3 4 5 6
e. People act as if they are afraid of you 1 2 3 4 5 6
f. People act as if you are dishonest 1 2 3 4 5 6
g. People act as if they are better 1 2 3 4 5 6
h. Called names 1 2 3 4 5 6
i. Threatened or harassed 1 2 3 4 5 6

Note. Using a 6-point Likert scale, responses range from '1' (Almost every day) to '6' (Never). All items are reverse scored such that higher scores indicate greater perceptions of racism.
Appendix B

People of Color Racial Identity Attitude Scale

Instructions: This questionnaire is designed to measure people’s social and political attitudes concerning race and ethnicity. Since different people have different opinions, there are no right or wrong answers. Use the scale below to respond to each statement according to the way you see things. Be as honest as you can. Beside each item number, circle the number that best describes how you feel.

1 Strongly Disagree 2 Disagree 3 Uncertain 4 Agree 5 Strongly Agree

1. In general, I believe that Anglo-Americans (Whites) are superior to other racial groups.
2. I feel more comfortable being around Anglo-Americans (Whites) than I do being around people of my own race.
3. In general, people of my race have not contributed very much to American society.
4. Sometimes, I am embarrassed to be the race I am.
5. I would have accomplished more in life if I had been born an Anglo-American (White).
6. Anglo-Americans (Whites) are more attractive than people of my race.
7. People of my race should learn to think and act like Anglo-Americans (Whites).
8. I limit myself to White activities.
9. I think racial minorities blame Anglo-Americans (Whites) too much for their problems.
10. I feel unable to involve myself in Anglo-Americans’ (Whites’) experiences, and am increasing my involvement in experiences involving people of my race.
11. When I think about how Anglo-Americans (Whites) have treated people of my race, I feel an overwhelming anger.
12. I want to know more about my culture.
13. I limit myself to activities involving people of my own race.
14. Most Anglo-Americans (Whites) are untrustworthy.
15. American society would be better off if it were based on the cultural values of my people.
16. I am determined to find my cultural identity.
17. Most Anglo-Americans (Whites) are insensitive.
18. I reject all Anglo-Americans (Whites) values.
19. My most important goal in life is to fight the oppression of my people.
20. I believe that being from my cultural background has caused me to have many strengths.
21. I am comfortable where I am.
22. People, regardless of their race, have strengths and limitations.

23. I think people of my culture and the White culture differ from each other in some ways, but neither group is superior.

24. My cultural background is a source of pride to me.

25. People of my culture and White culture have much to learn from each other.

26. Anglo-Americans (Whites) have some customs that I enjoy.

27. I enjoy being around people regardless of their race.

28. Every racial group has some good people and some bad people.

29. Minorities should not blame Anglo-Americans (Whites) for all of their social problems.

30. I do not understand why Anglo-Americans (Whites) treat minorities as they do.

31. I am embarrassed about some of the things I feel about my people.

32. I’m not sure where I really belong.

33. I have begun to question my beliefs.

34. Maybe I can learn something from people of my race.

35. Anglo-American (White) people can teach me more about surviving in this world than people of my own race can, but people of my race can teach me more about being human.

36. I don’t know whether being the race I am is an asset or a deficit.

37. Sometimes I think Anglo-Americans (Whites) are superior and sometimes I think they’re inferior to people of my race.

38. Sometimes I am proud of the racial group to which I belong and sometimes I am ashamed of it.

39. Thinking about my values and beliefs takes up a lot of my time.

40. I’m not sure how I feel about myself.

41. White people are difficult to understand.

42. I find myself replacing old friends with new ones who are from my culture.

43. I feel anxious about some of the things I feel about people of my race.

44. When someone of my race does something embarrassing in public, I feel embarrassed.

45. When both White people and people of my race are present in a social situation, I prefer to be with my own racial group.

46. My values and beliefs match those of Anglo-Americans (Whites) more than they do people of my race.

47. The way Anglo-Americans (Whites) treat people of my race makes me angry.

48. I only follow the traditions and customs of people of my racial group.

49. When people of my race act like Anglo-Americans (Whites) I feel angry.

50. I am comfortable being the race I am.
### Appendix C

**Body Parts Satisfaction Scale – Revised**

Using the scale provided, please rate how satisfied you are with each part of your body. There are no right or wrong answers, so please respond honestly about how you feel about your body.

<table>
<thead>
<tr>
<th>Extremely Dissatisfied</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Extremely Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Weight</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>2. Hair</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>3. Complexion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>4. Overall Face</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>5. Arms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>6. Stomach</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>7. Breasts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>8. Buttocks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>9. Hips</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>10. Upper Thighs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>11. General Muscle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tone</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
<tr>
<td>12. Overall Satisfaction with size and shape of body</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 6</td>
</tr>
</tbody>
</table>
Appendix D

Demographics

1. Which of the following describes your gender?
   a. Man
   b. Transgender or genderfluid
   c. Woman
   d. Other: ______

2. Which of the following describes your sexual orientation?
   a. Heterosexual or Straight
   b. Gay or Lesbian
   c. Bisexual
   d. Transgendered
   e. Other
   f. Don’t know

3. What is your date of birth? (Month/day/year)___________________________

4. In what city and state were you born?____________________________

5. In what Country were you born? ______________________________

6. Which of the following best applies to you?
   a. International student (non-immigrant)
   b. First generation: you were born in another country but live in the USA
   c. Second generation: you were born in the USA; either parent was born in another country
   d. Third generation: you were born in the USA: both parents were born in the USA and all grandparents were born in another country.
   e. Fourth generation: you and your parents were born in the USA and at least one grandparent was born in another country with the remainder born in the USA
   f. Fifth or greater generation: you and your parents were born in the USA and all of your parents were born in the USA
   g. Not applicable/Don’t know

7. If born outside of the US: How many years have you lived in the United States? _______

8. How would you describe your racial/ethnic background? (Choose all that apply)
9. How would you describe your ethnic or cultural background? (Choose all that apply)
a. Bengali
b. Bhutanese
c. Cambodian
d. Chinese
e. Filipino
f. Indian
g. Indonesian
h. Japanese
i. Korean
j. Laotian
k. Malaysian
l. Nepali
m. Pakistani
n. Singaporean
o. Sri Lankan
p. Taiwanese
q. Thai
r. Vietnamese
s. Other:__________________
t. Not applicable

10. Were you adopted?
a. Yes
b. No

11. If you were adopted, what is the racial/ethnic background of your adoptive parents?

(Choose all that apply)

a. African American; Black
b. American Indian or Alaskan Native
c. European American; White
d. Latina or Latina American
e. Middle Eastern or Middle Eastern American
f. Native Hawai’ian or Other Pacific Islander
g. South Asian or South Asian American
h. Other: _______________________
i. Not Applicable

12. If you were adopted, what is the racial/ethnic background of your biological parents?

(Choose all that apply)

a. African American; Black
b. American Indian or Alaskan Native
c. European American; White
d. Latina or Latina American
e. Middle Eastern or Middle Eastern American
f. Native Hawai’ian or Other Pacific Islander
g. South Asian or South Asian American
h. Other: _______________________
i. Not Applicable

13. If you were adopted, what is the ethnic/cultural background of your biological parents?

(Choose all that apply)

a. Bengali
b. Bhutanese
c. Cambodian
d. Chinese
e. Filipino
f. Indian
g. Indonesian
h. Japanese
i. Korean
j. Laotian
k. Malaysian
l. Nepali
m. Pakistani
n. Singaporean
o. Sri Lankan
p. Taiwanese
q. Thai
r. Vietnamese
s. Other: ___________________
t. Not applicable

14. What is your religious orientation?
   a. Agnostic
   b. Atheist
   c. Buddhist
   d. Catholic
   e. Christian Orthodox
   f. Confucian
   g. Jewish
   h. Muslim
   i. Shintoist
   j. Taoist
   k. Unaffiliated
   l. Other:

15. What is your current marital status?
   a. Never married
   b. Divorced
   c. Widowed
d. Separated  
e. Married once  
f. Divorced, remarried  
g. Widowed, remarried  
h. Living with significant other

16. Have you been divorced?  
   a. Yes  
b. No

17. Do you have any children?  
   a. No  
b. Yes  How many sons? ___  How many daughters? ____

18. What is your current primary role?  
   a. Wage earner  
b. Student  
c. Homemaker  
d. Retired  
   e. Other (Specify)_____________________________________

19. What is your occupation? (Be specific) ________________________________________

20. What is the highest level of education or grade in school that you have completed?  
   a. High school graduate  
b. Some college (at least 1 year)  
c. Associate degree  
d. Master’s degree  
   e. Advanced degree (more than 2 years of graduate school. I.e., Ph.D., M.D., J.D., etc.)

21. Approximate average annual combined income of your household:  
   a. Under $20,000  
b. $20,000 - $40,000  
c. $40,000 - $60,000  
d. $60,000 - $100,000  
e. Over $100,000
22. Current Height: _____feet _____inches
23. Current Weight (in lbs): ______
24. When you think about your body right now, would you say you are
   a. Smaller than you want to be
   b. Just the way you want to be
   c. Bigger than you want to be
25. Are you trying to lose weight, gain weight or stay the same weight?
   a. Lose weight
   b. Gain weight
   c. Stay the same weight
   d. Not trying to do anything about your weight
26. Since the COVID-19 pandemic began have you experienced increased instances of discrimination?
   a. No
   b. Yes, if you feel comfortable, please explain
Appendix E

Recruitment Email

Dear Student,

I am currently conducting research regarding the impact of daily lived experiences and identity development on body satisfaction. I am looking for Asian American female college students to complete a brief online survey about their background, experiences with discrimination, identity development, and body satisfaction.

Please follow the link below for a more detailed description of the study and to determine if you would like to participate.

[Link]

Eligibility criteria for the study include identify as an Asian American female, be enrolled in a college or university at least part time, speak English as your primary language, and be at least 18 years of age.

Please share this link with friends who match with the study population if you believe they would be interested in participating.

All participants have the opportunity to be entered into a drawing for 1 of 10, $20 Visa gift cards.

Thank you so much for your time,

Mary (Ellie) Burkhart Polk
Counseling Psychology Doctoral Candidate