Stephen F. Austin State University

SFA ScholarWorks

Electronic Theses and Dissertations

4-2022

Double Consciousness and Unhealthy Weight Control Behaviors in Young Black and White Adults

Priscillia Ihionkhan Stephen F Austin State University, priscilliaihionkhan@gmail.com

Follow this and additional works at: https://scholarworks.sfasu.edu/etds

Part of the African American Studies Commons, Life Sciences Commons, Mental Disorders Commons, and the Other Psychiatry and Psychology Commons

Tell us how this article helped you.

Repository Citation

Ihionkhan, Priscillia, "Double Consciousness and Unhealthy Weight Control Behaviors in Young Black and White Adults" (2022). *Electronic Theses and Dissertations*. 436. https://scholarworks.sfasu.edu/etds/436

This Thesis is brought to you for free and open access by SFA ScholarWorks. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of SFA ScholarWorks. For more information, please contact cdsscholarworks@sfasu.edu.

Double Consciousness and Unhealthy Weight Control Behaviors in Young Black and White Adults

Creative Commons License



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License.

Double Consciousness and Unhealthy Weight Control Behaviors in Young Black and White Adults

By

Priscillia Ihionkhan, Bachelor of Arts

Presented to the Faculty of the Graduate School of
Stephen F. Austin State University
In Partial Fulfillment
Of the Requirements

For the Degree of

Masters of Arts in Psychology

STEPHEN F. AUSTIN STATE UNIVERSITY

May 2022

Double Consciousness and Unhealthy Weight Control Behaviors in Young Black and White Adults

By

Priscillia Ihionkhan, Bachelor of Arts

APPROVED: Dr. Sarah Savoy, Thesis Director Dr. Sylvia Middlebrook, Committee Member Dr. Catherine Pearte, Committee Member Dr. Nina Ellis-Hervey, Committee Member

Freddie Avant, Ph.D.
Interim Dean of Research and Graduate Studies

ABSTRACT

The present study examined the previously understudied notion that Black individuals are buffered against being dissatisfied with their bodies and in turn developing unhealthy eating and weight control behaviors. Double consciousness, a racially/ethnically sensitive measure of body dissatisfaction, was tested as a mediator of the relation between ethnic identity and unhealthy eating and weight control behaviors in Black and White adults. It was anticipated that unhealthy weight control behaviors would be more common in Black women compared to White women and that double consciousness would mediate the association between ethnic identity and unhealthy weight control behaviors among Black women, but not White women. The same hypotheses were tested in men. Unhealthy eating and weight control behaviors were significantly less common in Black compared to White participants (regardless of gender) and double consciousness did not mediate the association between ethnic identity and unhealthy weight control behaviors in Black women, White women, or White men. For Black men, however, double consciousness did mediate the association between ethnic identity and unhealthy weight control behaviors. This finding warrants further exploration, perhaps pointing to a culturally unique experience of appearance-related distress among Black men with unhealthy eating concerns.

Keywords: double consciousness, body image, disordered eating, ethnicity, race, gender.

Acknowledgement

First, I would like to express the deepest appreciation to my committee chair, Dr. Sarah Savoy who guided me to conduct meaningful research. Dr. Savoy stayed late with me on weekdays and sacrificed some of her weekends so she could help me analyze my data. Without her patience, encouragement, and expertise, this project would not have been possible. I could not have asked for a better mentor/thesis chair. I also would like to thank Dr. Middlebrook for her constructive feedback, attention to detail, and unfailing support; Dr. Pearte for her high expectations, motivation, and demand for greatness; Dr. Nina Ellis-Hervey for her expertise in cultural factors and for asking the questions that I overlooked. This project would not be the same without each of these committee members. I would also like to thank my family and friends for their support during graduate school. Finally, I would like to acknowledge myself for my hard work and for completing my thesis during an incredibly stressful semester.

Table of Content

Abstract	
Acknowledgement	i
List of Figures.	V
Body Image and Body Dissatisfaction	3
Double Consciousness	4
Hypotheses	6
Method.	8
Participants	8
Measures	8
Ethnic Identity	
Double Consciousness	9
Unhealthy Eating Behaviors	9
Body Image Concerns	10
Investment in One's Appearance	11
Functional Impairment	11
Attention Check	11
Demographics	11
Procedure	11
Plan for analyses	13

Results	18
Discussion	26
References	33
Appendix A	38
Appendix B	40
Appendix C	41
Appendix D	43
Appendix E	45
Appendix F	48
Appendix G	49
Appendix H	50
Appendix I	51
Appendix J	52
Appendix K	53
Vita	54

List of Figures

Figure 1. Means for Eating Concern Across Gender
Figure 2. Mediation Model of Ethnic Identity as A Predictor of Unhealthy Eating and
Weight Control Behaviors, Mediated by Double Consciousness in Black/African
American Males21
Figure 3. Mediation Model of Ethnic Identity as A Predictor of Unhealthy Eating and
Weight Control Behaviors, Mediated by Double Consciousness in White Males22
Figure 4. Mediation Model of Ethnic Identity as A Predictor of Unhealthy Eating and
Weight Control Behaviors, Mediated by Double Consciousness in Black/African
American Females23
Figure 5. Mediation Model of Ethnic Identity as A Predictor of Unhealthy Eating and
Weight Control Behaviors, Mediated by Double Consciousness in White Female24

Double Consciousness and Unhealthy Eating and Weight Control Behaviors in Young Black and White Adults

Body Image and Body Dissatisfaction

According to the APA, body image is the picture an individual makes of their body mentally. This mental picture includes their body's physical characteristics and their attitudes towards those characteristics. Heightened body image concerns are common among individuals who engage in unhealthy eating and weight control behaviors such as binge eating, restrictive eating, or self-induced vomiting due to body dissatisfaction (e.g., Hooper et al., 2021; Neumark-Sztainer et al., 2002 a, b, c). Body dissatisfaction, according to Cash & Szymanski 1995, is an individual's negative evaluation of their body that involves an assumed inconsistency between the individual's gauging of their actual and ideal body. People may use maladaptive behaviors in attempt to suppress, avoid, or diminish body image concerns (e.g., Simone et al., 2019). Disordered eating is used to refer to risk behaviors associated with eating disorders. (Leal et al., 2020). Body image concerns also are well-documented precursors to eating disorders such as anorexia nervosa, binge eating disorder, and bulimia nervosa (Klump et al., 2009). Body image concerns have implications for other health risks beyond disordered eating e.g., body dysmorphic disorder, social anxiety, and excessive exercise. A notable drawback that scholarly work on body image and unhealthy eating and weight control behaviors has only begun to address, however, is inadequate recognition of cultural diversity.

Unhealthy eating and weight control behaviors are characterized by behaviors such as fasting, eating little amounts of food or restricting food intake, using meal substitutes such as powders or drinks, taking diet pills, smoking, and skipping meals all with the intention of controlling eating and weight (Leal et al., 2020). Historically, eating disorders were considered quite uncommon among ethnically diverse populations (Smith, 1995). More recent research, however, has shown that there is a high rate of disordered eating and unhealthy weight control behaviors in minority ethnic groups (e.g., Hooper et al., 2021). This has led to many scholars reconsidering the widely held, but misguided assumption that body image and eating concerns are White women's issues (Watson et al., 2018), and that other ethnic groups are out of danger when it comes to body image concerns and unhealthy eating and weight control behaviors.

One problem that must be overcome involves measurement, with the most widely used assessments of body image being insensitive to gender or racial/ethnic differences.

Race is defined in terms of physical characteristics such as hair type, physical features (eyes, nose, mouth, body shape, and body size). Ethnicity, on the other hand, is characterized in terms of culture and it is the ethnic affiliation of a group. It includes the cultural traditions like language and religion (Betancourt & Lopez, 1993). Because much of the research on Black women's body image concerns has neglected the unique body image concerns facing Black women, for example, our understanding of how their risks for eating pathology may develop is not well informed. Rakhkovskaya and Warren (2016) compared correlations between ethnic identity and body dissatisfaction in African

American women and European American women. Ethnic identity, according to Phinney (1996), is the identification of an individual's culture and acceptance of their culture's behaviors and practices. Documenting a negative association between ethnic identity and body dissatisfaction in African American women, they concluded African American identity might protect against body dissatisfaction by making body ideals popular in White culture less applicable and increasing acceptance for curvier body types (Rakhkovskaya & Warren, 2016). However, Rakhkovskaya and Warren's measure of body dissatisfaction included shape and weight concerns (e.g., having a desire for a flat stomach; feeling uncomfortable about others seeing your shape or figure in communal changing rooms, when swimming, or wearing tight clothes). They did not specifically measure appearance concerns that have been identified in Black culture (e.g., desire for straighter hair or bigger buttocks; Capodilupo, 2015).

Another problem involves representation, with many samples tending to be too homogenous in terms of gender, race, and ethnicity. White women are disproportionately represented among participants recruited for body image and eating disorder research. Mikhail and Klump (2021) made recommendations for making this body of work more inclusive. A minimal solution they proposed was reporting ethnic/racial representation for samples so that readers can make accurate conclusions about the generalizability of findings. A second solution they proposed was examining whether predictors of disordered eating differ (e.g., body image concerns) across race. Notably, Mikhail and Klump endorsed reporting these differences even when racial/ethnic subsamples are too

small to detect significant differences. They argued that effect size can be informative in these cases and further that findings can be combined with others in subsequent metanalyses (Mikhail & Klump, 2021). The proposed study aims to heed and build on these recommendations. Black women and men are underrepresented in body image studies; thus, the current study will examine both race and gender as moderators of body image concerns using a culturally sensitive measure of body image concerns.

Double Consciousness

Double consciousness is a term coined by W. E. B. Dubois in 1903 to describe the difficulty Black individuals experience in juggling expectations of White culture and Black culture. Several recent studies have examined this dilemma in Black women focusing particularly on cultural standards for body image (e.g., Capodilupo, 2015; Capodilupo & Forsyth, 2014; Wilfred & Lundgren, 2021). Many Black women seem to evaluate themselves using the White gaze while still retaining ideals tied to their own ethnic identity (Wilfred & Lundgren, 2021). Within our society and especially for women, being thin is usually equated with being attractive (Ricciardelli & McCabe, 2001). This ideal will be hard to reconcile for a Black woman who grew up seeing a curvier body shape on women belonging to their race and ethnicity. Double consciousness can also be present in other appearance related features like hair, skin, and nose. A Black man with a wider nose might find it hard to reconcile their physical characteristics with physical characteristics that have been associated with White culture like more narrow noses. According to Parker et al. (1995), when African American girls

were asked about an ideal body image, they requested more explanation, as they were not sure if the researchers were asking about the ideal body image for an African American girl or a White girl. This suggests that even from an early age, double consciousness already exists among people from ethnic minority groups and that appearance-related standards are not universal. Wilfred and Lundgren (2021) recently developed a self-report scale to assess double consciousness as pressure to embody Black and White cultural ideals for body image. They observed that Black women who scored higher on this measure also report higher levels of restraint and binge eating (Wilfred & Lundgren, 2021). Their sample, however, only included Black women. No comparisons were made to White women or men and no comparisons were made to Black men. Documenting differences between White women's and Black women's scores on this double consciousness scale would support its validity. Adapting the measure to assess men's cultural ideals for body image, and recruiting men and women as participants could also allow for a more comprehensive understanding of double consciousness in the domain of body image.

Wilfred and Lundgren (2021) also concluded that their findings pointed to unaddressed eating pathology in Black women, yet their measures did not specifically address eating or weight control behaviors. In a recent longitudinal study of ethnically/racially diverse sample of adolescents followed into early adulthood, higher rates of unhealthy eating and weight control behaviors were identified in participants from minority ethnic groups (Hooper et al., 2021). This study also revealed that rates of

weight teasing were similar across participants from majority and minority ethnic groups, suggesting minority groups are not protected from pressures to fit weight ideals. Hooper et al. (2021) focused primarily on group differences in unhealthy eating and weight control behaviors in their study, as opposed to exploring culturally diverse body image pressures and their relation to unhealthy eating and weight control behaviors. Therefore, an aim of the proposed study is to examine the relationship between ethnic identity and unhealthy eating and weight control behaviors, as well as double consciousness as one aspect of body image that may underlie this association in Black women but not White women. Even though body image concerns have other implications and are associated with other forms of psychological distress (Thompson, 1996), this study primary focuses on unhealthy eating and weight control behaviors. This is because body image issues are usually presented as a main feature of individuals with eating disorders (Smolak & Thompson, 2009).

Hypotheses

Previous research has understudied body image concerns and unhealthy eating and weight control behaviors in Black individuals. We argue it is shortsighted, given the state of the literature, to assume that Black individuals are buffered against being dissatisfied with their bodies and then developing unhealthy weight control behaviors. Extending previous research documenting higher levels of disordered eating in ethnic minority women compared to White women and double consciousness in Black women (Hooper et al., 2021; Wilfred & Lundgren, 2021), the present study tested the hypothesis

that (a) certain unhealthy eating and weight control behaviors would be more common in Black women compared to White women, and (b) double consciousness would mediate the association between ethnic identity and unhealthy weight control behaviors among Black women but not White women. Double consciousness has yet to be examined in men, thus the same mediational hypotheses were examined in Black men and White men.

Method

Participants

Participants included 200 adults recruited from the Stephen F. Austin State

University psychology subject pool and Amazon Mechanical Turk (MTurk). In

preparation for the proposed study, a measure that was adapted for males was piloted. To

pilot, the measure was administered to a pilot sample of no more than 30 men and 30

women. The pilot sample was recruited using social media, the Stephen F. Austin State

University psychology subject pool, and Amazon Mechanical Turk (MTurk). All

participants from the psychology subject pool were compensated for participation with

credit towards fulfillment of research requirements. Participants recruited through MTurk

were paid \$0.25 for their participation.

Measures

The following measures will be included in the Qualtrics surveys:

Ethnic Identity

Ethnic identity was measured using the Multigroup Ethnic Identity Measure-Revised (MEIM-R) by Phinney and Ong (2007; see Appendix B). The MEIM-R is a six-item self-report scale that assesses how affiliated an individual is with their ethnic group. Sample items include "I feel a strong attachment towards my own ethnic group" and "I have often talked to other people in order to learn more about my ethnic group." Research

in college samples show good reliability with internal consistency (α s ranging from .81 to .89; Phinney & Ong, 2007; Yoon, 2011). For the current study, the MEIM-R had an acceptable internal consistency (Cronbach's alpha = .885).

Double Consciousness

Double consciousness was assessed using the Double Consciousness Body Image Scale (DCBIS) (Wilfred & Lundgren, 2021) (see Appendix C). The DCBIS is a 34-item ethnically relevant body image assessment that centers on Black women experiences and highlights pressures that have a link to individual and societal based physically attractive attributes. Sample items include "I feel pressure from the opposite sex to have a big butt", "I feel pressure from society to have a small nose," and "I feel pressure from my family to have a flat stomach." Reliability estimates were acceptable across the full scale (α =.96) (Wilfred & Lundgren, 2021). A composite was created by summing all the items. Higher scores indicate greater pressure. The DCBIS had an acceptable internal consistency (Cronbach's alpha = .960).

Unhealthy Eating Behaviors

Unhealthy eating and weight control behaviors was measured using the Eating Disorder Examination Questionnaire (EDE-Q) (Fairburn & Cooper, 1993) (see Appendix E). The EDE-Q is a 28-item self-report measure. It has four subscales: Eating Concern, Shape Concern, Weight Concern, and Restraint which are all focused on an individual's eating habits/concerns in the past 28 days. Questions on the EDE-Q include, "Over the past 28 days, how many times have you made yourself sick (vomit) as a means of

controlling your shape or weight?", and "Have you gone for long periods of time (8 waking hours or more) without eating anything at all in order to influence your weight or shape?" Previous work has shown that the internal consistency is acceptable for the four subscales. Cronbach's α ranged from .74 (Restraint) to .89 (Shape Concern) for men and from .75 (Restraint) to .93 (Shape Concern) for women (Rose et al., 2013). Because body image concerns will be addressed in another measure, the Weight and Shape concerns subscale items will not be completed. A composite was created by taking a mean of the items. Higher scores indicate a greater degree of eating concerns and restraint. For the current study, the restraint and eating concerns scales had acceptable internal consistencies (Cronbach's alpha for restraint = .846, and for eating concerns = .752).

Body Image Concerns

Body Image concerns was assessed using the Body Shape Questionnaire (BSQ) (Cooper et al., 1987; see Appendix F). The BSQ-8C is a one-dimensional, shorter assessment of the BSQ which measures behaviors relating to body dissatisfaction. Some questions on the questionnaire include "Have you felt excessively large and rounded?" and "Have you been afraid that you might become fat (or fatter)?". The BSQ-8c has a Cronbach's alpha of .92. (Welch et al., 2012). The BSQ in the current study had an acceptable internal consistency (Cronbach's alpha = .891).

Investment in One's Appearance

To assess how much time men and women are willing to invest in their appearance, and how much they are willing to sacrifice for their own appearance, participants were asked 2 questions which will be assessed using the Investment in One's Appearance scale (Quittkat et al.,2019; see Appendix G)

Functional Impairment

A modified version of the Short-Form Disability Scale by Ware et al., 1996 was used to assess functional health and well-being. See appendix H.

Attention Check

To ensure attention, participants were presented with two attention check items.

Items were presented in the first and second half of the survey (Appendix I).

Demographic Information

Participants then reported basic demographic information including gender, race/ethnicity, weight, height, and age (see Appendix J). Height and weight were used to compute Body Mass Index (BMI) as a potential control variable.

Procedure

The survey was administered using the Qualtrics survey distribution website. Participants signed up to participate in the study through the SONA system which will give the participants access to a link to the survey. Participants from MTurk and social media had access to the survey link which sent them straight to Qualtrics. First, participants read the consent form (see Appendix A) in Qualtrics and choose if they

wanted to participate in the study or not. During the informed consent process, participants were told that the goal of the study is to gather information on young adults' perceptions about themselves and their eating behavior. The consent form let the participants know they might become slightly distressed when completing the survey due to the nature of the survey and that they are free to skip any questions or withdraw their participation anytime. If the participants chose to not participate, Qualtrics automatically directed them to an end of study page skipping over the survey items. If the participants chose to participate, they clicked the "I consent, begin the study."

Then, participants began the survey by completing the Multigroup Ethnic Identity Measure-Revised (MEIM-R). The Double Consciousness Body Image Scale (DCBIS), Eating Disorder Examination Questionnaire (EDE-Q), Body Shape Questionnaire (BSQ), the Investment in One's Appearance Questionnaire, and the Functional Impairment Questionnaire. Survey measures were presented in a counterbalanced order to minimize order effects. There were two attention check items embedded among the survey items to make sure that participants were paying attention to the survey. At the end of the survey, participants were asked to complete demographic items. Finally, participants were presented with a statement thanking them for their participation (see Appendix G). The statement also included contact information for the National Eating Disorders helpline and the National Suicide Prevention Lifeline if they felt they needed any counselling or support as questions about sensitive areas could potentiate triggers related to

Plan of Analyses

To test the hypothesis that certain unhealthy eating and weight control behaviors would be more common in Black participants compared to White participants, a multivariate analysis of covariance was run with ethnic/racial group and gender entered as the independent variables and the EDE-Q subscales for eating concerns and restriction were entered as the dependent variables. Age was entered as the covariate in this analysis. To test the hypothesis that double consciousness would mediate the association between ethnic identity and unhealthy weight control behaviors among Black women, but not White women, separate hierarchical regression analyses were used to assess the direct and indirect relationships between ethnic identity and each of the dependent variables (one regression for Black women and one regression for White women). Double consciousness was entered in a second step following ethnic identity. Two separate double consciousness measures were administered (the original measured designed for women, and a new measure adapted for men), thus two additional regression analyses were used to compare the mediational model across Black men and White men. To explore convergent and predictive validity, Pearson's correlations were run to examine the double consciousness scales' associations with the BSQ as well as investment in one's appearance and appearance concern-related functional impairment. A power analysis was conducted to determine sample size. The smallest relationship of interest was $f^2 = 0.15$. Using G*Power, with power at 0.80, an α of .05, and 3 predictors a sample size of 77 is required.

Data Screening and Cleaning

Data was tested for assumptions, cleaned, and analyzed using IBM's SPSS statistical software. 19 participants who did not complete more than 10% of the items were removed from the dataset. Nine participants were removed for failing one or more attention checks. Two participants were removed for not meeting the age requirement of being 18 and older. Five participants were removed for having duplicate IP addresses. Ten participants were removed for non-differential responding (i.e., straight lining). Two participants were removed for not replying to the race and ethnicity items. There were 45 missing values for the male version of the DCBIS, 35 missing values for the female version of the DCBIS, 27 missing values for the MEIM-R, 21 missing values for the EDE-Q, 31 missing values for the BSQ, and nine missing values for the FI. All missing values were replaced with the series mean (i.e., the sample mean for the raw item was computed and this score was used to replace each missing value, Donders et al., 2006). There were 14 missing BMI values, these missing values were replaced with a series mean. The MANCOVA and regression analyses excluded participants who are from races/ethnicities other than White (non-Hispanic) and Black (African or African American).

Univariate and multivariate outliers were screened for before running the multiple regression analyses. Normality, linearity, homoscedasticity, multicollinearity, and independence assumptions were tested. There were seven univariate outliers for the MEIM-R predictor variable, and the outliers were replaced with Winsorized values

(Ghosh & Vogt, 2012). There was one outlier for the female version of the DCBIS predictor variable, and the outlier was replaced with a Winsorized value. There were two univariate outliers for BMI and these outliers were Winsorized. There were no multivariate outliers for predictor variables included in the regression for male participants and no multivariate outliers for predictor variables included in the regression for female participants (Mahalanobis distance values were all within range). There was univariate normality for the regression predictor variables as skew and kurtosis statistics were not below -2 and not above 2. Multivariate normality was confirmed using skew and kurtosis statistics computed for the predictor variables' standardized residual. Collinearity statistics (Tolerance and VIF) were checked for each regression model. Black and African American men had a tolerance of .541 and a VIF of 1.847. Tolerance values were above .2 VIF values were all below 4. Scatter plots of the residuals against the predicted values revealed no evidence of heteroscedasticity. Durbin-Watson tests supported independence of errors as no score was under one or more than three (Field, 2009). Bivariate correlations were run to determine whether BMI correlated with the dependent variables (ethnic identity and double consciousness) and the predictor variables (EDE-Q eating concerns and restriction). There was a significant correlation between BMI with ethnic identity (MEIM; Pearson's r = .231). Because BMI was only correlated with one of the predictor variables but none of the dependent variables, it was ruled out as a confound and thus not controlled for in the multiple regression analyses. Bivariate correlations were also run to determine whether age was correlated with ethnic

identity, double consciousness, restraint, and eating concerns. There was a correlation between age and ethnic identity (r = -.226, p < .001) as well as age and the female version of the double consciousness measure (r = .288, p < .001), however age was not correlated with the dependent variable (the unhealthy eating and weight control behavior sum). Age was thus not controlled for in the regression analyses.

When the data was screened for MANCOVA, there were five univariate outliers and they were Winsorized. 12 missing values for year of birth were replaced with the series mean. Two participants were removed from the dataset because their responses were multivariate outliers for dependent variables included in the MANCOVA (Mahalanobis distance values were out of range). Univariate and multivariate normality was confirmed with skewness and kurtosis values for mean predicted values of the dependent measures and their standardized residual.

Bivariate correlations were run to check for correlations between BMI, the MANCOVA dependent variables (EDE-Q eating concerns and restriction), and predictor variables (race and gender). BMI was not significantly correlated with any of these variables. This is likely due to the fact that the double consciousness scale measures several aspects of body image other than weight (e.g., shape, facial features, hair). The EDE-Q scales (eating concerns and restriction) also did not include questions concerning weight or shape. Bivariate correlations were also run to check for associations between age and the MANCOVA dependent variables and predictor variables. Age was significantly correlated with eating concerns (.120, p = .039), race (.291, p < .001), and gender (-.312,

p < .001). Age was thus entered as a covariate in the MANCOVA. After the data cleaning and screening, and removal of the participants from race/ethnic groups other than Black and White, there were 240 participants (20 Black/African American men, 49 Black/African American women, 67 White men, and 104 White women). A Levene's test and a Box's M test were run to check for homogeneity of variances and covariances in the MANCOVA. The Box's M test was nonsignificant, however the Levene's test was significant.

Due to the significant Levene's test indicating an overrepresentation of White males and females, participants were randomly selected to allow for approximately equal representation of Black and White males and Black and White females (Puhl & Brownell, 2006). When the Levene's test was re-run on this smaller sample with more equivalent representation, the Levene's test was no longer significant. The results reported below are for the smaller sample.

Results

Demographics

Within the 240 participants included in the analyses, there was a total of 87 males and 153 females with 69 of the participants identifying as Black/African American and 171 identifying as White (20 Black/African American males, 67 White males, 49 Black/African American females and 104 White females; $M_{\rm age} = 30.679$, SD = 10.732; $M_{\rm BMI} = 25.769$, SD = 5.589). The smaller sample created to achieve more equal representation for race/ethnicity and gender included 20 Black/African American males, 30 White males, 30 Black/African American females, and 30 White females.

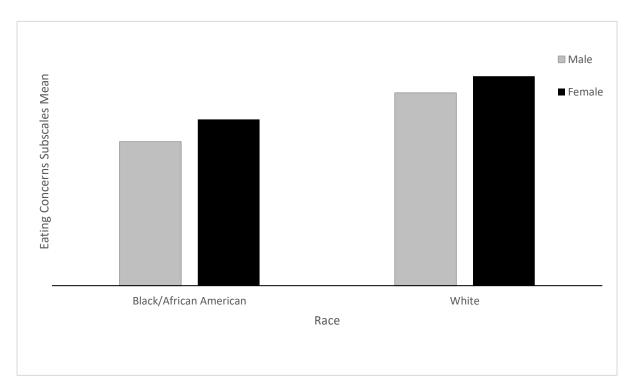
Hypothesis One

To test the hypothesis that certain unhealthy eating and weight control behaviors would be more common in Black participants compared to White participants, a Multivariate Analysis of Covariance (MANCOVA) was run with race and gender entered as the independent variables, the EDEQ restraint and eating concerns subscale means were entered as the dependent variables, and age was entered as the covariate.

The multivariate tests using Pillai's Trace indicated that there was a significant effect for race, V = .075, F(2, 104) = 4.225, p = .017, $\eta_p^2 = .075$, but no significant effect for gender (p = .584. There was also no significant interaction between race and gender (p = .651). Separate univariate tests on the dependent variables revealed a non-significant race effect on restriction, F(1, 105) = .025, p = .874, but a significant race effect on

eating concerns, F(1, 105) = 5.498, p = .021, $\eta_p^2 = .050$. Inconsistent with the first hypothesis, regardless of gender, participants who identified as Black or African American reported significantly lower levels of eating concerns (M = 2.487, SE = .229) compared to White participants (M = 3.223, SE = .205; See Figure 1).

Figure 1Means for Eating Concern across Gender



Though we report the results for the smaller sample with more equal race/ethnicity representation, it should be noted that the pattern of results (only a race main effect, with no main effect for gender, and no interaction) was the same for the

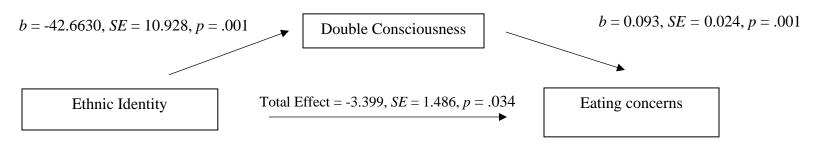
larger sample include all Black participants and all White participants. The Levene's test results was the only difference across these two analyses.

Hypothesis Two

To test the second hypothesis that double consciousness would mediate the association between ethnic identity and unhealthy weight control behaviors among Black participants but not to White participants, a mediation analysis was run using linear regression and PROCESS version 4.0 (Hayes, 2018). The indirect effects and associated confidence intervals were bootstrapped based on 10,000 samples. These analyses were run separate by race/ethnicity and gender. Ethnic identity was entered as the primary predictor variable, unhealthy weight control behavior was entered as the dependent variable and double consciousness was entered as the mediator variable in each analysis. In Black and African American males, the analysis showed that double consciousness had a mediated effect on unhealthy eating behaviors (95% CI for indirect effect [-6.523, -1.524]; see Figure 2). This indicates that in Black males, ethnic identity predicts double consciousness and double consciousness mediates the relationship between ethnic identity and unhealthy eating and weight control behavior. Mediation was not supported for White males (95% CI for indirect effect [-1.154, 0.587]; see Figure 3), Black and African American females (95% CI for indirect effect [-1.996, 0.406]; see Figure 4), or White females (95% CI for indirect effect [-1.157, 0.068]; see Figure 5).

Figure 2

Mediation Model of Ethnic Identity as a Predictor of Unhealthy Eating and Weight Control Behaviors, Mediated by Double Consciousness in Black/African American Males

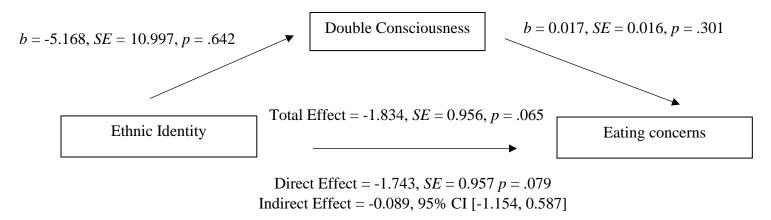


Direct Effect, b = 5.789, SE = 1.512, p = .707Indirect Effect = -3.978, 95% CI [-6.523, -1.524]

Note. The confidence interval for the indirect effect is a bootstrapped CI based on 10,000 resamples

Figure 3

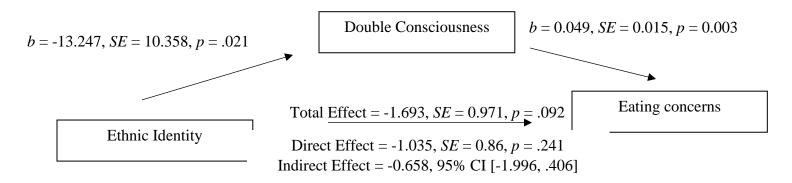
Mediation Model of Ethnic Identity as A Predictor of Unhealthy Eating and Weight Control Behaviors, Mediated by Double Consciousness in White Males.



Note. The confidence interval for the indirect effect is a bootstrapped CI based on 10,000 resamples.

Figure 4

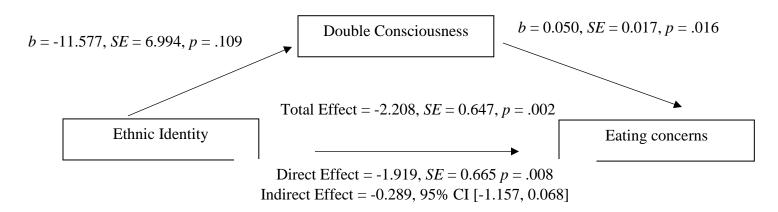
Mediation Model of Ethnic Identity as A Predictor of Unhealthy Eating and Weight Control Behaviors, Mediated by Double Consciousness in Black/African American Females



Note. The confidence interval for the indirect effect is a bootstrapped CI based on 10,000 resamples.

Figure 5

Mediation Model of Ethnic Identity as A Predictor of Unhealthy Eating and Weight Control Behaviors, Mediated by Double Consciousness in White Females



Note. The confidence interval for the indirect effect is a bootstrapped CI based on 10,000 resamples.

Convergent and Predictive Validity

Bivariate correlations supported the convergent and predictive validity of the double consciousness scales for women and men. For women, double consciousness was significantly positively correlated with BSQ sum scores (r = .481, p < .001), investment in one's appearance (r = .421, p < .001) and appearance concern-related functional impairment (r = .512, p < .001). For men, double consciousness was significantly positively correlated with BSQ sum scores (r = .726, p < .001), investment in one's appearance (r = .489, p < .001) and appearance concern-related functional impairment (r = .490, p < .001).

Discussion

Body image concerns and unhealthy eating and weight control behaviors have not been studied comprehensively in Black individuals. Despite this limitation in the literature, Rakhkovskaya and Warren (2016) suggested that Black individuals are buffered against body dissatisfaction and developing unhealthy weight control behaviors. On the other hand, recent research conducted by Hopper et al. (2021) has documented higher levels of disordered eating in ethnic minority females compared to White females. Further, double consciousness has been identified as a form of body dissatisfaction unique to Black women (Wilfred & Lundgren, 2021). The goal of the present study was to test the hypothesis that (a) certain unhealthy eating and weight control behaviors would be more common in Black women compared to White women, and (b) double consciousness would mediate the association between ethnic identity and unhealthy weight control behaviors among Black women but not White women. Because double consciousness has yet to be examined in Black men, we examined whether or not the same mediational hypothesis could be supported in men.

The first hypothesis was not supported. Regardless of gender, participants who identified as Black or African American reported significantly lower levels of eating concerns compared to White participants. This could be due to the fact that in Southern American culture, food is often a central component of social gatherings. Historically, this is particularly emphasized in Black and African American culture. Moreover,

because the dietary habits, food choices, and cooking methods of African Americans evolved from a long history of slavery, persecution, and segregation, food and how plentiful food is may take on a unique meaning (e.g., soothing, comfort, union). These are influences that warrant further exploration in relation to eating concerns and dietary consciousness. Also, the present study included the EDEQ subscales of eating restraint and eating concerns as measures of unhealthy eating and weight control behaviors. Items on these subscales differ substantially (both in content and breadth) from the items Hooper et al. used to measure unhealthy eating and weight control behaviors (e.g., chronic dieting, skipping meals, vomiting, and taking diet pills, laxatives, or diuretics). Assessing a similar or wider range of behaviors could have resulted in the expected racial/ethnic differences in the present study. In addition, the sample for the present study comprised a wide age range of adults, whereas Hooper et al. surveyed teens and young adults. Pressures for unhealthy eating and weight control behaviors could thus be more extreme in younger Black individuals.

The second hypothesis was partially supported with double consciousness mediating the association between ethnic identity and unhealthy eating and weight control behaviors in Black males but not White males. Double consciousness did not however mediate the association between ethnic identity and weight control behaviors in females, regardless of race. Given this was the first study to include a male version of the double consciousness measure, future work should explore this new measure's factor structure. However, results of the present study suggest there may be a culturally unique

experience of appearance-related distress among Black men who engage in restrictive eating or experience eating concerns. Perhaps efforts to promote body positivity and acceptance of diverse body types are not well developed in male culture as there might be a different perspective with more emphasis musculature and fitness than the "slender" ideal. Black men who experience these concerns may instead resort to unhealthy eating behaviors to cope. Longitudinal research designs, testing directionality, would be a logical next step to test this proposal. The lack of mediation for Black females could indicate that double consciousness is not a risk factor for restriction or eating concerns among Black women who strongly identify with their ethnic group. It is also possible that this mediational pathway would be supported with different unhealthy eating or weight control behaviors (e.g., binge eating, or vomiting, use of diet pills, laxatives, or diuretics). Another factor to consider is that stronger ethnic identity might weaken appearance ideals-related turmoil experienced by Black and African American women with restrictive eating or other eating concerns. An unexpected finding in the present study was that ethnic identity did not positively predict double consciousness in Black and African American women. Perhaps Black and African American women who are strongly committed to their ethnic identity are more likely to reject White appearance ideals and embrace Black appearance ideals. This could result in overall lower scores on the double consciousness measure. Alternatively, strong ethnic identity might encourage Black and African American women to appreciate their bodies, accept diverse body

types, and in turn reject rigid appearance ideals or rigid rules or beliefs regarding eating behavior.

Convergent and predictive validity was supported for the double consciousness scale. Women and men with higher scores on the double consciousness scale had higher levels of body dissatisfaction as measured by the BSQ. This finding was consistent with Wilfred and Lundgren's (2021) finding for women. Women and men with higher scores on the double consciousness scale also reported stronger investment in one's appearance and a higher degree of appearance concern-related functional impairment. Notably, the present study was the first to develop a male version of the double consciousness scale and the first to document its convergent and predictive validity. These findings support the continued use of the double consciousness scale to understand body image concerns in Black and African American individuals.

Limitations

Research on unhealthy weight behaviors in ethnic minority groups is socially significant and useful, but this study is not without limitations. While the homogeneity of variance was addressed in this study by achieving more equivalent subsample sizes for blacks and whites and men and women, future studies should aim for larger sample sizes representing race, gender, and age groups so that the generalizability of body image findings can be expanded. The informed consent indicated that the study related to individuals' perceptions of themselves and their eating behaviors and the disparity in the number of Black individuals vs White individuals who participated might be due to

individuals feeling that they had a choice regarding which studies they selected. This may be due to avoidance of discomfort associated with body image research for Black participants, or heightened interest by White participants due to the emphasis of body image in the United States White culture. While the double consciousness scale aims to tap into the unique distress that Black individuals experience in juggling White and Black appearance ideals, it could be argued that summing concerns associated with each of these ideals does not address an important issue that may evolve for Black individual, managing or prioritizing appearance goals when White and Black appearance ideals fall in opposition to one another. In other words, the present scoring technique used for the double consciousness measure may not fully account for body image-related distress that may arise when Black and White appearance ideals conflict with one another. In the current study, age was not explored as a moderator, it was only examined as a control variable. There could be an age by race and gender interactions to explore in larger samples.

Directions for Future Research

Future research should continue to examine body dissatisfaction and double consciousness, and a wide range of unhealthy eating and weight control behaviors in adolescents and young adults from minority ethnic groups. The results of the present study point to a need for persistence in recruiting Black and African American males for studies focusing on body image and expanded investigation of culture specific stressors

that may explain restriction or other eating concerns in this understudied group. Using supplements, steroids, and excessive weight lifting to achieve an "ideal" body image could also be explored as correlates of double consciousness in Black and African American males. Future studies should aim to understand the influences of athletic role models in Black and African American males. There are many Black and African American males represented in college and professional football, basketball, and other sports, and this could influence the ideals for body function and appearance in young Black and African American males. A potential solution to the limitation of the double consciousness scale described would be dividing the scale into a subscale that addresses concerns regarding White ideals and a subscale that addresses concerns regarding Black ideals. This would allow researchers to examine how the two types of concerns interact in predicting adjustment outcomes (e.g., unhealthy eating or weight control behaviors, exercise, depression, anxiety). This could be particularly useful in determining whether the experience of both types of concerns results in additional distress. The relationship between double consciousness and ethnic identity needs further exploration. Examining these constructs in younger samples may be useful for understanding recent trends in appearance concerns. Future work should consider further expanding the measurement tools and procedures used to explore the body image concerns and ideals of Black and African American individuals. Implicit measures and computer-based tasks have been employed to assess the thin ideal and related appearance-related concerns (e.g., word stem completion tasks, and Stroop tasks). These tasks need to be adapted to examine

ideals and concerns for more diverse populations. Finally, future work examining the mediational pathways explored in the present study should include longitudinal designs. Longitudinal design and cross-lagged analyses are necessary to confirm the direction of the mediational paths proposed in the present study.

References

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (4th ed.).
- Betancourt, H., & López, S. R. (1993). The study of culture, ethnicity, and race in American psychology. *American psychologist*, 48(6), 629.
- Bulik, C. M., Klump, K. L., Thornton, L., Kaplan, A. S., Devlin, B., Fichter, M. M., & Kaye, W. H. (2004). Alcohol use disorder comorbidity in eating disorders: a multicenter study. *The Journal of Clinical Psychiatry*, 65(7),0-0 https://doi.org/10.4088/JCP.v65n0718
- Cachelin, F. M., Rebeck, R., Veisel, C., & Striegel-Moore, R. H. (2001). Barriers to treatment for eating disorders among ethnically diverse women. *International Journal of Eating Disorders*, 30(3), 269-278. https://doi.org/10.1002/eat.1084
- Capodilupo, C. M. (2015). One size does not fit all: Using variables other than the thin ideal to understand Black women's body image. *Cultural Diversity and Ethnic Minority Psychology*, 21(2), 268–278. https://doi.org/10.1037/a0037649
- Capodilupo, C. M., & Forsyth, J. M. (2014). Consistently inconsistent: A review of the literature on eating disorders and body image among women of color. In M. L. Miville & A. D. Ferguson (Eds.), *Handbook of Race-Ethnicity and Gender in Psychology* (pp. 343–359). New York, NY: Springer Science + Business Media. https://doi.org/10.1007/978-1-4614-8860-6_16.
- Cash, T. F., & Szymanski, M. L. (1995). The development and validation of the Body-Ideals Questionnaire. Journal of Personality Assessment, 64, 466–477.

- Cassin, S. E., & von Ranson, K. M. (2005). Personality and eating disorders: a decade in review. *Clinical Psychology Review*, 25(7), 895-916.https://doi.org/10.1016/j.cpr.2005.04.012
- Donders, A. R. T., Van Der Heijden, G. J., Stijnen, T., & Moons, K. G. (2006). A gentle introduction to imputation of missing values. *Journal of clinical epidemiology*, 59(10), 1087-1091.
- Faul, F., Erdfelder, E., Lang, A.G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191. doi: 10.3758/BF03193146
- Field, A. (2009). *Discovering statistics using SPSS: Book plus code for E version of text* (p. 896). London, UK: SAGE Publications Limited.
- Franko, D. L. (2007). Race, ethnicity, and eating disorders: Considerations for DSM-V. *International Journal of Eating Disorders*, 40, S31–S34. https://doi.org/10.1002/eat.20455
- Franko, D. L., Thompson-Brenner, H., Thompson, D. R., Boisseau, C. L., Davis, A.,
 Forbush, K. T., Roehrig, J. P., Bryson, S. W., Bulik, C. M., Crow, S. J., Devlin,
 M. J., Gorin, A. A., Grilo, C. M., Kristeller, J. L., Masheb, R. M., Mitchell, J. E.,
 Peterson, C. B., Safer, D. L., Striegel, R. H., Wilson, G. T. (2012). Racial/ethnic
 differences in adults in randomized clinical trials of binge eating disorder. *Journal*of Consulting and Clinical Psychology, 80(2), 186–
 195. https://doi.org/10.1037/a0026700
- Ghosh, D., & Vogt, A. (2012, July). Outliers: An evaluation of methodologies. In *Joint statistical meetings* (Vol. 2012).
- Goode, R. W., Cowell, M. M., Mazzeo, S. E., Cooper-Lewter, C., Forte, A., Olayia, O. I., & Johnson, J. G., Spitzer, R. L., & Williams, J. B. W. (2001). Health problems, impairment and illnesses associated with bulimia nervosa and binge eating

- disorder among primary care and obstetric gynaecology patients. *Psychological Medicine*, 31(8), 1455. https://doi.org/10.1017/S0033291701004640
- Klump, K. L., Bulik, C. M., Kaye, W. H., Treasure, J., & Tyson, E. (2009). Academy for eating disorders position paper: Eating disorders are serious mental illnesses. *The International Journal of Eating Disorders*, 42(2), 97-103. https://doi.org/10.1002/eat.20589
- Leal, G. V. D. S., Philippi, S. T., & Alvarenga, M. D. S. (2020). Unhealthy weight control behaviors, disordered eating, and body image dissatisfaction in adolescents from São Paulo, Brazil. *Brazilian Journal of Psychiatry*, 42, 264-270.
- Lock, J. (2015). An update on evidence-based psychosocial treatments for eating disorders in children and adolescents. *Journal of Clinical Child & Adolescent Psychology*, 44(5), 707-721. https://doi.org/10.1080/15374416.2014.971458
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2nd edition). The Guilford Press.
- Hoek, H. W. (2002). Distribution of eating disorders. *Eating Disorders and Obesity: A Comprehensive Handbook*, 2, 233-237.
- Hooper, L., Puhl, R., Eisenberg, M. E., Crow, S., & Neumark-Sztainer, D. (2021). Weight teasing experienced during adolescence and young adulthood: Cross-sectional and longitudinal associations with disordered eating behaviors in an ethnically/racially and socioeconomically diverse sample. *International Journal of Eating Disorders*, 54, 1449-1462. https://doi.org/10.1002/eat.23534
- Marchi, M., & Cohen, P. (1990). Early childhood eating behaviors and adolescent eating disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29(1), 112.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224.

- Neumark-Sztainer, D., Story, M., Hannan, P., Moe, J., 2002a. Overweight status and eating patterns among adolescents: where do youth stand in comparison to the Healthy People 2010 Objectives? *American Journal of Public Health*. 92, 844–851.
- Neumark-Sztainer, D., Croll, J., Story, M., Hannan, P.J., French, S.A., Perry, C., 2002b. Ethnic/racial differences in weight-related concerns and behaviors among adolescent girls and boys: findings from Project EAT. *Journal of Psychosomatic Research*, 53, 963–974.
- Neumark-Sztainer, D., Falkner, N., Story, M., Perry, C., Hannan, P.J., Mulert, S., 2002c. Weight-teasing among adolescents: correlations with weight status and disordered eating behaviors. *International Journal of Obesity*, 26, 123–131.
- Polivy, J., & Herman, C. P. (2002). Causes of Eating Disorders. *Annual Review of Psychology*, 53(1), 187-213. doi:10.1146/annurev.psych.53.100901.135103
- Puhl, R. M., & Brownell, K. D. (2006). Confronting and coping with weight stigma: an investigation of overweight and obese adults. *Obesity*, *14*(10), 1802-1815.
- Quittkat, H. L., Hartmann, A. S., Düsing, R., Buhlmann, U., & Vocks, S. (2019). Body dissatisfaction, importance of appearance, and body appreciation in men and women over the lifespan. *Frontiers in psychiatry*, 10, 864.
- Ricciardelli, L. A., & McCabe, M. P. (2001). Children's body image concerns and eating disturbance: A review of the literature. *Clinical psychology review*, 21(3), 325-344.
- Rodgers, R. F., Berry, R., & Franko, D. L. (2018). Eating disorders in ethnic minorities: An update. *Current psychiatry reports*, 20(10), 1-11.
- Rose, J. S., Vaewsorn, A., Rosselli-Navarra, F., Wilson, G. T., & Weissman, R. S. (2013). Test-retest reliability of the eating disorder examination-questionnaire (EDE-Q) in a college sample. *Journal of Eating Disorders*, *1*(1), 1-10.

- Schneider, M. (2003). Bulimia nervosa and binge-eating disorder in adolescents. *Adolescent Medicine*, *14*(1), 119-131. Retrieved from https://search.proquest.com/docview/215204794?accountid=6444
- Simone, M., Hooper, L., Eisenberg, M. E., & Neumark-Sztainer, D. (2019). Unhealthy weight control behaviors and substance use among adolescent girls: The harms of weight stigma. *Social Science & Medicine*, 233, 64-70.
- Smith, D. E. (1995). Binge eating in ethnic minority groups. *Addictive Behaviors*, 20(6), 695-703.https://doi.org/10.1016/0306-4603(95)00093-3
- Smolak, L., & Thompson, J. K. (Eds.). (2009). (2nd ed.). American Psychological Association. https://doi.org/10.1037/11860-000
- Thompson, J. K. (Eds.). (1996). (1st ed.). American Psychological Association. https://doi.org/10.1037/11860-000
- Walsh, J. M., Wheat, M. E., & Freund, K. (2000). Detection, evaluation, and treatment of eating disorders. *Journal of General Internal Medicine 15*(8), 577-590. https://doi.org/10.1046/j.1525-1497.2000.02439.x
- Ware Jr, J. E., Kosinski, M., & Keller, S. D. (1996). A 12-Item Short-Form Health Survey: construction of scales and preliminary tests of reliability and validity. *Medical care*, 220-233.
- Welch, E., Lagerström, M., & Ghaderi, A. (2012). Body Shape Questionnaire: Psychometric properties of the short version (BSQ-8C) and norms from the general Swedish population. *Body Image*, *9*(4), 547-550.
- Wilfred, S. A., & Lundgren, J. D. (2021). The Double Consciousness Body Image Scale: A body image assessment centering the experiences of Black women. *International Journal of Eating Disorders*, 54(10), 1771-1781.

APPENDICES

Appendix A

Project Title: "The Relationship between Ethnic Identity (i.e. Double consciousness and Family and Peer Weight Teasing) and Unhealthy Weight Control Behaviors in Young Black and White Adults."

Principal Investigators: Priscillia Ihionkhan and Dr. Sarah Savoy. If you have any questions or concerns about this study, please contact Priscillia Ihionkhan at ihionkhape@jacks.sfasu.edu or Dr. Savoy at savoysc@sfasu.edu. You can also contact the Stephen F. Austin State University Psychology Department at (936) 468-4402. In addition, you can contact the Stephen F. Austin State University Office of Research and Sponsored Programs at orsp@sfasu.edu or (936) 468-6606 if you would like to know more about your rights as a research participant.

Description of Project: The purpose of this study is to investigate how young adults think about their bodies. This study is also designed to gather information on ethnic identity and how it relates to body image and weight control behaviors.

Risks and Discomfort: There are a number of possible discomforts associated with participation. This survey requires that you reflect on thoughts, behaviors, and memories that might be unpleasant. There is no physical risk that is beyond what would be experienced in your daily life. Contact information of counseling and support centers are provided upon completion of survey. Please try to contact the centers if any extreme mental discomfort is experienced.

Compensation: You will receive 2 research credits for 1 hour of participation. If you should decide to no longer participate in the study, you will not be penalized and you will still receive credit.

Research Procedure

You will be asked to complete an online survey in which you would be asked about ethnic identity and body image. There are no right or wrong answers to any of the survey questions. The length of time you will be involved in the study will be approximately 30 minutes.

No one but the researcher on the project will see your answers and no identifying information will be recorded with your answers. You may become slightly distressed when completing the survey items. Weight control behavior can be an uncomfortable topic and can stir memories or feelings which may cause minimal discomfort. Should you become distressed in any way, I want you to know that you are free to skip any questions or withdraw your participation at any time. This will take about 20-30 minutes. If you want to answer these types of questions, please indicate below.

o Yes, I agree to participate

o No, I do not agree to participate

Appendix B Minority Ethnic Identity Measure- Revised (Phinney & Ong, 2007)

Item no.	Item
1	I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.
2	I have a strong sense of belonging to my own ethnic group.
3	I understand pretty well what my ethnic group membership means to me.
4	I have often done things that will help me understand my ethnic background better.
5	I have often talked to other people in order to learn more about my ethnic group
6	I feel a strong attachment towards my own ethnic group.

Appendix C

Double Consciousness Body Image Scale (Wilfred & Lundgren, 2021)

This survey assesses how you have felt about your body and the pressures you have experienced in relation to your body over the past 4 weeks. Please read each question and select the appropriate response from "never" over the past 4 weeks to "always" over the past 4 weeks. Please answer all questions.

Over the past 4

weeks	Never	Rarely	Sometimes	Often	Always	
		1	2 3		4	5

- 1. I have considered plastic surgery to reconstruct my nose.
- 2. I have avoided going out because I did not have extensions or weave in.
- 3. I have spent several hours making sure my natural hair curls have a certain hair curl pattern before going to social events.
- 4. I have exercised to make my butt bigger
- 5. I have had of have seriously considered surgery to make my butt bigger.
- 6. I have had or have seriously considered surgery to lose fat in my stomach.
- 7. I feel pressure from society to have light skin.
- 8. I feel pressure from society to have a small waist.
- 9. I feel pressure from society to have to have a flat stomach.
- 10. I feel pressure from society to have a big butt.
- 11. I feel pressure from society to have a small nose.
- 12. I feel pressure from society to have straight hair.
- 13. I feel pressure from society to have a certain hair curl pattern.
- 14. I feel pressure from my same sex peers to have light skin.
- 15. I feel pressure from my same sex peers to have a small waist.
- 16. I feel pressure from my same sex to have a flat stomach.
- 17. I feel pressure from my same sex peers to have a big butt.
- 18. I feel pressure from my same sex peers to have a small nose.
- 19. I feel pressure from my same sex peers to have straight hair.
- 20. I feel pressure from my same sex peers to have a certain hair curl pattern.
- 21. I feel pressure from the opposite sex to have light skin.
- 22. I feel pressure from the opposite sex to have a small waist.

- 23. I feel pressure from the opposite sex to have a flat stomach.
- 24. I feel pressure from the opposite sex to have a big butt.
- 25. I feel pressure from the opposite sex to have a small nose.
- 26. I feel pressure from the opposite sex to have straight hair.
- 27. I feel pressure from the opposite sex to have a certain hair curl pattern.
- 28. I feel pressure from my family to have light skin.
- 29. I feel pressure from my family to have a small waist.
- 30. I feel pressure from my family to have a flat stomach.
- 31. I feel pressure from my family to have a big butt.
- 32. I feel pressure from my family to have a small nose.
- 33. I feel pressure from my family to have straight hair.
- 34. I feel pressure from my family to have a certain hair curl pattern.

Appendix D

Double Consciousness Items for Men

This survey assesses how you have felt about your body and the pressures you have experienced in relation to your body over the past 4 weeks. Please read each question and select the appropriate response from "never" over the past 4 weeks to "always" over the past 4 weeks. Please answer all questions.

Over the past 4						
weeks	Never	Rarely	Sometimes	Often	Always	
		1	2 3	3	4	5

- 1. I have exercised to be muscular
- 2. I have had or have seriously considered surgery to fix my baldness
- 3. I have considered getting facial hair implants
- 4. I feel self-conscious about not having clear skin
- 5. I have considered becoming more athletic
- 6. I feel bad about not being tall enough
- 7. I feel pressure from society to be muscular
- 8. I feel pressure from society to fix my baldness
- 9. I feel pressure from society to have more facial hair
- 10. I feel pressure from society to have clear skin
- 11. I feel pressure from society to be more athletic
- 12. I feel pressure from society to be taller
- 13. I feel pressure from my same sex peers to be muscular
- 14. I feel pressure from my same sex peers to fix my baldness
- 15. I feel pressure from my same sex peers to have more facial hair
- 16. I feel pressure from my same sex peers to have clear skin
- 17. I feel pressure from my same sex peers to be more athletic
- 18. I feel pressure from my same sex peers to be taller
- 19. I feel pressure from women to be more muscular
- 20. I feel pressure from women to fix my baldness
- 21. I feel pressure from women to have more facial hair
- 22. I feel pressure from women to have clear skin
- 23. I feel pressure from women to be more athletic
- 24. I feel pressure from women to be taller
- 25. I feel pressure from my family to be more muscular
- 26. I feel pressure from my family to fix my baldness
- 27. I feel pressure from my family to have more facial hair
- 28. I feel pressure from my family to have clear skin

- 29. I feel pressure from my family to be more athletic 30. I feel pressure from my family to be taller

Appendix E

Eating Disorder Examination Questionnaire (EDE-Q) (Fairburn & Beglin, 1994) The following questions are concerned with the past four weeks (28 days) only. Please read each question carefully. Please answer all questions. Thank you.

Questions 1 to 12: Please select the appropriate response for each question. Remember that the questions only refer to the past four weeks (28 days).

On how many of the past 28 days	No days				16-22 days		Every day
1. Have you been deliberately trying to limit the amount of food you eat to influence your shape or weight (whether or not you have succeeded)?	0	1	2	3	4	5	6
2. Have you gone for long periods of time (8 waking hours or more) without eating anything at all in order to influence your weight or shape?	0	1	2	3	4	5	6
3. Have you tried to exclude from your diet any foods that you like in order to influence your shape or weight (whether or not you have succeeded)?	0	1	2	3	4	5	6
4. Have you tried to follow definite rules regarding your eating (for example, a calorie limit) in order to influence your shape or weight (whether or not you have succeeded)?	0	1	2	3	4	5	6
5. Have you had a definite desire to have an empty stomach with the aim of influencing your shape or weight?	0	1	2	3	4	5	6
6. Has thinking about food, eating, or calories made it very difficult to concentrate on things you are interested in (for example, working, following a conversation, or reading)?	0	1	2	3	4	5	6
7. Have you had a definite fear of losing control over eating?	0	1	2	3	4	5	6

.1 . 1				boxes to	ine mg	;iii. ixcii	
that the questions only refer to the pas			-).			
Over the past four		-					
8. Over the past 28 days, how many ti people would regard as an unusually lecircumstances)?		•					
O. How many of these times did you have a sense of having lost control over your eating (at the time that you were eating)?							
10. Over the past 28 days, on how may overeating occurred (i.e., you have eat food AND have had a sense of loss of	ten an u	ınusuall	y large	-			
food AND have had a sense of loss of control at the time)? 11. Over the past 28 days, how many times have you made yourself sick (vomit) as a means of controlling your shape or weight?							
12. Over the past 28 days, how many to means of controlling your shape or we	eight?	·					
13. Over the past 28 days, how many to "driven" or "compulsive" way as a me shape, or amount of fat or to burn off of the shape.	ans of	controll					
Questions 14 to 16: Please select the a that for these questions, the term "bing as an unusually large amount of food flaving lost control over eating.	ge eatin	ıg" mear	ns eatin	g what	others v	would re	egard
	N	No 1-5	10				
	da	iys day				23-27 days	Every day
14. Over the past 28 days, on how mandays have you eaten in secret (i.e., furtively)? [Do not count episodes of binge eating]	ny		s days				•
days have you eaten in secret (i.e., furtively)? [Do not count episodes of binge eating]	ny (ays day	s days 2 Less	s days	days 4	days 5	day

```
0
         (Not
                         2
                                    3
                                                            5
          at (Slightly) (Slightly) (Moderately) (Moderately) (Markedly)
         all)
16. Over
the past
28 days,
how
concerned
have you
been
about
          0
                         2
                 1
                                                            5
other
                                    3
                                                4
                                                                       6
people
seeing
you eat?
[Do not
count
episodes
of binge
eating]
```

Appendix F

Body Shape Questionnaire (BSQ-8C) (Cooper et al., 1987)

We would like to know how you have been feeling about your appearance over the **PAST FOUR WEEKS**. Please read each question and circle the appropriate number to the right. Please answer <u>all</u> the questions.

Over the past 4 weeks
Often Always

Never Rarely Sometimes Often Very

1 2 3 4

- 1. Have you been afraid that you might become fat (or fatter)?
- 2. Has feeling full (e.g. after eating a large meal) made you feel fat?
- 3. Has thinking about your shape interfered with your ability to concentrate (e.g. while watching television, reading, listening to conversations)?
- 4. Have you imagined cutting off fleshy areas of your body?
- 5. Have you felt excessively large and rounded?
- 6. Have you thought that you are in the shape you are because you lack self-control?
- 7. Has seeing your reflection (e.g. in a mirror or shop window) made you feel bad about your shape?
- 8. Have you been particularly self-conscious about your shape when in the company of other people?

Appendix G

Investment in One's Appearance (Quittkat et al., 2019)

- 1. How many years of your life would you be willing to sacrifice if you could look the way you want? _____
- 2. How many hours a day would you invest in your appearance if you could look the way you want? _____

Appendix H

Functional Impairment (Modified from Short-Form disability scale; Ware et al., 1996)

0 (Not at 1 2 3 4 5 6

all) (Slightly) (Slightly) (Moderately) (Moderately) (Markedly)

- 1. During the past four weeks have you accomplished less than you would like as a result of concerns about your appearance?
- 2. During the past four weeks, were you limited in the kind or work or other activities undertaken as a result of concerns about your appearance?

Appendix I

Attention Check

- 1. If you are paying attention, which of these is a fruit?
 - o Grass
 - o Apple
 - o Clock
- 2. If you are paying attention, 1+1+?
 - 0 (
 - 0 9
 - 0 2

Appendix J

Demographic Information

I. Birth Dat	e		
Month	Day	Year	
2. Gender	-		
	Male		
	Female		
	Other Plea	ise Specify: _	
3. Height Fe	eetIn	iches	_
4. Current v	veight (in pou	nds)	_
5. Race/Eth	nicity (select a	all that apply	y):
Whi	te/Caucasian		
Lati	na/o/Hispanic	;	
Blac	k/African An	nerican	
Ame	erican Indian/l	Native Ameri	rican/Alaska Native/Indigenous
Haw	aiian Native/l	Pacific Island	der
Asia	n/Asian Ame	rican	
Mid	dle Eastern		
Othe	er (please desc	cribe):	

Appendix K

Debriefing

Thank you for participating in this study. Your time and effort are appreciated. As part of this survey, you completed several items that assess eating and body image related concerns. Positive responses to the eating disorder behavior items may indicate a need for referral. If you would like counseling or support, please see the contact information below for helplines and counseling services.

National Eating Disorders Association

The NEDA Helpline is open Monday through Thursday 9am-9pm Eastern Time and Friday 9am-5pm Eastern Time. To speak to a Helpline Volunteer, live please call 800.931.2237 or chat online at www.nationaleatingdisorders.org/helplinechat.

National Suicide Prevention Lifeline

The Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for you or your loved ones, and best practices for professionals.

1-800-273-TALK.

Lifeline Chat is a service of the National Suicide Prevention Lifeline, connecting individuals with counselors for emotional support and other services via web chat. All chat centers in the Lifeline network are accredited by CONTACT USA. Lifeline Chat is available 24/7 across the U.S.

Burke Center

The Burke Center is a mental health services provider located in Nacogdoches. Burke Center, 3824 N University Dr, Nacogdoches, TX 75965. 936-558-6200

Priscillia Ihionkhan

Curriculum Vitae

Stephen F. Austin State University, PO Box 13046 SFA Station, Nacogdoches, TX 75965 (903) 806-8787

priscilliaihionkhan@gmail.com

EDUCATION

Bachelor of Arts, Psychology

May, 2019

University of Texas, Arlington

CURRENT STATUS

Master's Degree Candidate, Psychology

August 2020 - Current

Stephen F. Austin State University, Nacogdoches, TX

PROFESSIONAL HISTORY

Behavior Therapist – Consulting for the Spectrum

August 2019 - July 2020

- Collected, recorded, and summarized data on observable client behavior
- Provided direct client care in 1:1 and group settings utilizing a combination of intensive teaching and natural environment training arrangements
- Followed the prescribed behavioral skill acquisition and behavior reduction protocol

RESEARCH/WORK EXPERIENCE

Graduate Research/Teaching Assistant

August 2020 - Current

Stephen F. Austin State University, Nacogdoches, TX

- Assisted with collection of Electroencephalogram (EEG) data for EEG study on Loneliness and Recognition Memory
- Researched articles and selected survey measures
- Wrote IRB applications for Fitspiration Image Validation study, Gender and Eating Stereotype study, and The Effects of COVID-19 on Mental Health and Sleep Quality study
- Created questionnaires using Qualtrics survey software
- Wrote abstract and made poster for presentation at Southwestern Psychological Association Conference
- Managed survey on SONA
- Graduate Student Assistant for the 2021 Graduate Research Conference

 Teaching assistant for general psychology, clinical interviewing and counseling, social psychology, health psychology, developmental psychology, scientific literacy, and human sexuality.

Undergraduate Research Assistant

August 2017- May 2019

University of Texas, Arlington

- Interviewed participants for Smartphone and Social Media Use study
- Facilitated surveys for Nutrition and Health Behaviors study
- Entered data on Smartphone and Social Media Use and its Health Association study on SPSS
- Interviewed participants at the Fort-Worth Museum of Arts for the Studying Self-Regulation using wearable Technology study

RESEARCH INTERESTS

- Eating and weight disorders in adolescents and young adults
- Body image in adolescents and young adults in Black and minority ethnic groups
- Weight stigma
- Effects of body imagine on self-perception
- Mental health and well-being of adolescents
- Mood and personality disorders
- How families from minority ethnic groups respond to mental health in their children/adolescents, Psychological and behavioral assessment
- Adolescent and adult development

CONFERENCES

Schaeffer, J.D. & Ihionkhan, P. (2021). *The effects of COVID-19 on mental health and sleep quality*. Southwestern Psychological Association Annual Convention. San Antonio, TX

Poster Presentation

Ihionkhan, P., Hummell, H., Parsons, H., & Savoy, S. (2022). *Gender-Based Eating Stereotypes and Disordered Eating in Adolescents*. Southwestern Psychological Association Annual Convention. Baton Rouge, LA Poster Presentation

MANUSCRIPTS UNDER PREPARATION

Savoy, S., Farago, F., Scheinfeld, E., Tan, C. C., Nielson, M., Ihionkhan, P., Branch, S. *Adolescent gender identity and eating stereotypes*.

ORGANIZATIONS

SFA Organization for Women's Leadership & Equity (OWLE) April 2021- present
Psychology Club August 2017 - December 2019

SKILLS

SPSS, Advanced MS Office, Advanced CITI Trained

AWARDS

Stephen F. Austin State University Department of Psychology Outstanding Graduate Assistant Award
Stephen F. Austin State University Department of Psychology Distinguished Graduate Student Award

REFERENCES

Dr. Sarah Savoy Associate Professor, Department of Psychology Stephen F. Austin State University savoysc@sfasu.edu

Dr. Lauren Brewer Assistant Professor, Department of Psychology Stephen F. Austin State University brewerle@sfasu.edu

Dr. James Schaeffer Assistant Professor, Department of Psychology Stephen F. Austin State University schaeffejd@sfasu.edu