Examining Predictors of Binge Eating Behaviors
among Racially and Ethnically Diverse College Men

Alyssa M. Minnick, PhD\textsuperscript{a}, Fary M. Cachelin, PhD\textsuperscript{b} and Virginia Gil-Rivas, PhD\textsuperscript{c}

\textsuperscript{a}Division of Sleep Medicine, and Affiliated with the Center for Weight and Eating Disorders, Department of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, USA;

\textsuperscript{b}Faculty of Wellbeing, Education and Language Studies, The Open University, Milton Keynes, England, UK;

\textsuperscript{c}Health Psychology Ph.D. Program, and Department of Psychological Science, University of North Carolina at Charlotte, Charlotte, North Carolina, USA
Abstract

Objective: College men may be at risk for binge eating (BE) but are underrepresented in research. This study aimed to examine if body weight/shape concerns, perceived stress, and psychological distress significantly contributed to the likelihood of BE over the past 28 days.

Participants: A racially/ethnically diverse sample (N = 873) of college men. Method: An anonymous online survey was administered. Logistic regression analysis was conducted to examine the hypothesized associations for the entire sample and exploratory analyses were conducted within each racial/ethnic group. Results: The model explained approximately 25% of the variance in BE, with body weight/shape concerns as the only significant predictor in the overall sample and for the White, Black, and Asian subsamples; none of the variables were significant among Latino men. Conclusions: Body weight/shape concerns predict BE among diverse college men. Findings have implications for future research, as well as for prevention and intervention for college men.

Keywords: college men; race; ethnicity; binge eating; weight/shape concerns
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Previous research has suggested that binge eating (BE) is an important risk factor for excess weight and obesity,\(^1\) which contributes to multiple physical (e.g., diabetes, cardiovascular disease, and certain types of cancers)\(^2,3\) and mental health (e.g., depression, anxiety, bipolar disorder, and schizophrenia)\(^4\) comorbidities. Binge eating is defined as eating an unusually large amount of food in a discrete period of time (i.e., about 2 hours) and having a sense of loss of control over eating.\(^5\) It is estimated that approximately 1.4% to 2.0% of U.S. adult men report a lifetime history of binge eating disorder (BED), defined as recurrent binge eating episodes (at least 4 episodes in a one month period) with associated distress and/or functional impairment;\(^6,7\) however, limited research has examined BE behaviors and correlates among college men. In one college sample, as many as 24% of men reported at least one occurrence of BE in the past 28 days and almost 13% reported regular BE episodes.\(^8\)

Binge eating behaviors are relatively stable from emerging adulthood to middle young adulthood (age 18-30 years old). For example, in one study, 40% of emerging adults who reported BE maintained these behaviors 5 years later.\(^9\) Further, the presence of binge eating among young men (after accounting for BMI and race/ethnicity) is associated with higher rates of medical and psychological comorbidities,\(^10\) suggesting that BE, independent of weight status, is likely to have a lasting impact on the mental and physical health of individuals. Binge eating behaviors are also associated with earlier onset of overweight\(^11\) and a history of childhood obesity.\(^12\)

Despite the high occurrence of BE behaviors among men, this population is underrepresented in research and treatment.\(^13\) The majority of research examining BE and its
associated factors includes largely homogenous samples of White women. For example, men comprise a relatively low proportion of research samples investigating adults seeking treatment for BE (e.g., 25%). Likely, this underrepresentation of men within the literature reflects the commonly held belief that eating disorders are “women’s issues”. This is of concern as men report similar levels of distress associated with BE and report higher functional impairment (i.e., reduction in workplace and home productivity) compared to women.

Binge eating has also been identified among men from various racial/ethnic backgrounds. For example, a recent study reported that 23.4% of White, 16.3% of Black, and 36.1% of Asian men reported BE in the prior 28 days. Findings are mixed on whether there are racial/ethnic differences in the frequency of BE behaviors among college men. In one review of the literature, Black, Latino and Asian men, reported a higher frequency of BE behaviors compared to White men. Another study, however, found the opposite, with White men reporting a higher frequency of BE episodes relative to Black men. This study also found that depression and anxiety were associated with BE behaviors among Black but not White college men; however, the authors of the study acknowledged that these findings should be interpreted with caution due to the small sample sizes of each group.

Correlates of binge eating

The affect regulation theory of BE may provide a foundation for understanding variables related to BE behaviors among men. The theory posits that BE may be used as a method to comfort or distract from negative emotions such as depressed mood, anger, and anxiety that often emerged in the context of interpersonal experiences. The theory has been supported by ecological momentary assessment data, which found that negative affect increased prior to BE and then decreased after a BE episode, as well as neuroimaging data indicating increased
activation in reward value regions of the brain in response to food when experiencing negative affect. This model of BE has been supported among women, with research showing a strong relationship between body dissatisfaction (including concerns about body shape and weight) and BE, as well as mediating effects of perceived stress and depression. However, recent reviews have provided mixed support for this theory, in that some studies did not find reductions in negative emotions following BE, and relatively few studies have included men.

College students may be at particularly high risk for BE behaviors because of contextual factors and the multiple unique pressures and expectations of this life period that may increase stress and psychological distress. Indeed, college life can significantly impact eating behavior, with frequent access to buffet-style cafeterias and limited influence of family on food choices and restrictions, all of which may uniquely increase access to the large amounts of food that are consumed during a BE episode. College is also a stressful time for individuals due to increased academic demands and social pressures.

During this developmental period, concerns about body shape and weight may be magnified as individuals become part of new social groups, which make concerns about body shape and weight more salient. A heightened state of dissatisfaction may intensify stress in situations related to men’s bodies or physique, such as when attempting to attract a partner or fit into a social group, if rejected by a desired partner, or if constantly comparing (whether consciously or unconsciously) one’s own body to the other men on campus. Indeed, body weight/shape concerns is common among college men, with one study finding that 40% of their male sample reported a desire to lose weight and another 45% indicated a desire to gain weight. In another study, college men indicated that body image was one of the top 10 “moderate” or “extreme” factors that contributed to stress, as well as depression and anxiety in their lives.
Racial/ethnic differences in body weight/shape concerns have also been reported with Black college students reporting lower levels of body dissatisfaction compared to Whites and Latinos. Further, previous research indicates that body dissatisfaction, or the negative evaluation of one’s body shape, weight, and/or size, may be related to anxiety, stress, and negative affect. These negative emotions, therefore, may increase the risk of BE as men may use this behavior to cope with the distress related to pressures of adhering to cultural conceptions of the ideal male body. The literature also suggests potential ethnic/racial differences in the association between body weight/shape concerns and distress among men, which may, in turn, differentially impact BE behaviors.

**Purpose of the Study**

Given the gaps in knowledge about contributors to BE among men in general and those of diverse racial/ethnic backgrounds, we aimed to examine whether body weight/shape concerns, perceived stress, and psychological distress were associated with the likelihood of reporting BE behaviors. Additionally, we conducted exploratory, post-hoc analyses to examine the contribution of these variables within each racial/ethnic group (i.e., White, Black, Asian, and Latino men). To our knowledge, this study is the first to examine factors contributing to BE behaviors in a large sample of racially/ethnically diverse college men.

**Method**

**Sample**

Participants were recruited via the Psychology Department Research Participant Pool, as well as e-mail and flyer advertisements, at a large university in the southeastern region of the United States.
A total of 1111 participants initiated the survey, and 238 participants were excluded from analyses for the following reasons: 173 for missing data (166 for overall incomplete data, such as completing less than 50% of the survey, 4 for missing height and/or weight items, and 3 for missing the binge eating episodes item), 3 outliers on reported binge eating episodes in the past 28 days (i.e., 40, 45, and 50 episodes), and 62 participants were older than college-aged (i.e., 27-61 years old). A total of 873 college men aged 18-26 years were retained for the analysis sample.

Participants were compensated with either course credit or chose to be entered into a drawing for a $100 gift card. Participation in the study lasted approximately 1 hour. The study was approved by the University IRB, and all requirements for the ethical treatment of human subjects in research were followed.

**Measures**

**Demographic characteristics.** Participants self-reported their sex, age, height, weight, household income, and class year. Race and ethnicity were assessed in a single question, with the following response options: White, Black/African American, Asian, Latino, Hawaiian/ Pacific Islander, or Other: please specify.

**Binge eating behavior.** The 28-item Eating Disorder Examination Questionnaire with Binge Eating Instructions ($EDE-Q-I$) assessed eating behaviors and attitudes over the preceding 28 days. The EDE-Q-I provides the clinical definition of a binge eating episode and provides vignette examples of eating episodes that do and do not meet the definition. Frequency of BE is self-reported (free-response format) as the total number of episodes in the past 28 days. Reports of BE frequency on a semi-structured clinical interview have been shown to be significantly associated with EDE-Q-I but not EDE-Q responses, suggesting that the addition of instructions (with example situations) is a comparable assessment tool to a clinical interview.³⁸
**Body weight/shape concerns.** The 28-item Eating Disorder Examination Questionnaire (EDE-Q)\textsuperscript{160-162} with Binge Eating Instructions (EDE-Q-I)\textsuperscript{36,37,38} assesses eating behaviors and attitudes over the preceding 28 days. The shape concerns and weight concerns subscales were used; each item was rated on a 7-point scale (0 = “No days” or “Not at all” to 6 = “Everyday” or “Markedly”), with higher scores indicating higher shape and weight concerns, denoting higher body weight/shape concerns. Items from these subscales been used in previous studies to measure body weight/shape concerns among both men and women\textsuperscript{39} and research has established EDE-Q norms for college men, which found that internal consistency, using Cronbach’s alpha, was .80 and .89 for the weight concerns and shape concerns subscales, respectively.\textsuperscript{40} Internal consistency (for the subscales combined to assess body weight/shape concerns), using Cronbach’s alpha, for this study was .91 for the overall sample, .90 for White, .89 for Black, .92 for Asian, .92 for Latino, and .93 Other identified men.

**Psychological distress.** The Brief Symptom Inventory-18 (BSI-18)\textsuperscript{41} is an 18-item measure that assessed psychological distress over the preceding 7 days. It includes three subscales: depression, anxiety, and somatization; participants respond using a 5-point Likert scale (0 = “not at all” to 4 = “extremely”). Total scores range from 0 to 72, with higher scores indicating higher psychological distress. The BSI-18 has been used widely with clinical and community samples, including with racial/ethnically diverse populations.\textsuperscript{42} Internal consistency (\(\alpha = .89\)) and test-retest reliability (.90) are acceptable.\textsuperscript{41} Internal consistency, using Cronbach’s alpha, for the present study was .93 for the overall sample, as well as .93 for White, Black, Asian, Latino men, and .92 for Other identified men.

**Perceived stress.** The Perceived Stress Scale (PSS)\textsuperscript{43} is a 10-item measure that assesses feelings and thoughts related to stressful events, and particularly how often certain stressful
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183 events occurred, during the past two weeks. Individuals respond using a 5-point scale (0 =
184 “never” to 4 = “very often”); higher scores indicate higher perceived stress. The PSS has been
185 used with college samples,44 as well as with diverse populations.45 It has demonstrated good
186 internal reliability, test-retest reliability, concurrent validity, and predictive validity in the general
187 population.46,47 Internal consistency, using Cronbach’s alpha, was .78 in the measure’s validation
188 study,43 and for the present study was .76 for the overall sample. Cronbach’s alpha was .77 for
189 White, .75 for Black, .70 for Asian, .81 for Latino, and .84 for Other identified men.

190 Plan of Analysis

191 Data Management and Missing Data. The Statistical Package for Social Sciences
192 version 27 (SPSS)48 was used for analyses. First, data quality was assessed by examining missing
193 data and outliers. Participants who responded to at least 80% of the items for each of the
194 questionnaires were retained and mean imputation was used for the missing data. Mean
195 imputation procedures were completed with two participants on body weight/shape concerns
196 with one participant on perceived stress.

197 Descriptive statistics were calculated for each of the variables of interest. ANOVA
198 analyses were utilized to examine significant differences between racial/ethnic groups on the
199 study variables. Previous research has shown an inverse relationship between income and BE
200 behavior;49 therefore, income was also included as a covariate.

201 A majority of participants did not report BE (68.6%). Of the men who did report BE, a
202 majority of them (69.3%) reported between 1-5 episodes in the past 28 days, with an average of
203 1.78 (SD = 4.25) episodes. As such, BE frequency was dichotomized to indicate either presence
204 or absence of these behaviors over the past 28 days. To examine the effects of body weight/shape
205 concerns, perceived stress, and psychological distress on the likelihood that college men reported
the presence or absence of BE (while controlling for BMI and income), a logistic regression analysis was conducted in SPSS. The analysis was conducted with the overall sample (all racial/ethnic groups), as well as separately within each of the four racial/ethnic (i.e., White, Black, Asian, Latino) subsamples (separate analysis was not conducted for the group identifying as “Other” because of the small sample size).

Results

Sample Characteristics

Of the total sample ($N = 873$), 41.6% identified as Freshman and 33.2% as Sophomore, followed by 15.6% Junior, 8.6% Senior, and 1.0% Graduate. Participants were an average age of 19.66 years old ($SD = 1.71$). The sample included 44.1% White ($n = 385$), 25.5% Black ($n = 223$), 14.3% Asian ($n = 125$), 9.6% Latino ($n = 84$), and 6.4% Other racial/ethnically identified college men ($n = 56$; Native Hawaiian or Pacific Islander, Middle Eastern, bi- or multi-racial).

The average BMI was 25.20 ($SD = 5.66$), with 28.9% in the overweight and 13.6% obese range. On average, participants reported a household income of $50,000-$99,999. ANOVA analyses identified significant racial/ethnic differences in BMI ($F(4, 868) = 3.89, p = .004$) and income, $F(4, 868) = 17.92, p < .001$. Specifically, Black men reported a higher BMI ($M = 26.16, SD = 6.36$) than Asian men ($M = 23.76, SD = 3.89; p = .001, d = .46$); all other between-group comparisons of BMI were not significant ($ps = .17-.96$). Regarding income, White college men reported a significantly higher household income ($M = 3.06, SD = 1.01$) than Black ($M = 2.49, SD = 1.16, p < .001, d = .52$), Asian ($M = 2.65, SD = 1.07, p = .002, d = .37$), and Latino men ($M = 2.30, SD = 1.07, p < .001, d = .73$), but not Other racial/ethnically identified men ($M = 2.66, SD = 1.08, p = .07$); all other between-group comparisons on household income were not significant ($ps = .06-.82$; see Table 1). In addition, an ANOVA analysis identified significant
differences among the racial/ethnic groups for body weight/shape concerns ($F(4, 868) = 2.23, p = .04$); however, there was only a trend towards significance for Black men reporting lower body weight/shape concerns ($M = 12.02, SD = 13.75$) compared to Latino men ($M = 16.98, SD = 17.01; p = .07; d = .32$), with no other significant group comparisons ($ps = .18-.99$).

Overall, 31.4% of the sample ($n = 274$) reported the presence of BE (at least one BE episode in the past 28 days), with an average of 1.78 episodes ($SD = 4.25$). Approximately, 15.2% of the sample ($n = 133$) reported 4 or more episodes in the past 28 days. In addition, 32.2% of White ($n = 124$), 28.7% of Black ($n = 64$), 34.4% of Asian ($n = 43$), 35.7% of Latino ($n = 30$), and 23.2% of Other identified ($n = 13$) college men reported at least one episode of BE in the past 28 days. In these groups, 14.5% of White ($n = 56$), 14.8% of Black ($n = 33$), 18.4% of Asian ($n = 23$), 16.7% of Latino ($n = 14$), and 12.5% of Other identified ($n = 7$) men reported four or more BE episodes in the past 28 days. A series of ANOVAs indicated no significant differences between the racial/ethnic groups on perceived stress and psychological distress. Post-hoc analyses did not reveal significant differences in the comparisons among the separate racial/ethnic groups ($ps = .13-.99$). A chi-square analysis indicated that the proportion of those reporting BE did not differ by racial/ethnic group, $\chi^2 (4, N = 873) = 3.86, p = .43$. Descriptive statistics for demographic and study variables are shown in Table 1.

**Primary Analyses**

A logistic regression analysis was conducted to examine the effects of body weight/shape concerns, perceived stress, and psychological distress on the likelihood that college men reported the presence or absence of BE (while controlling for BMI and income). A preliminary analysis indicated that the assumption of multicollinearity was met (tolerance = .66-.98). The logistic regression model was statistically significant, $\chi^2 (5, N = 873) = 171.96, p < .001$, suggesting that
the predictor variables were able to distinguish between the presence or absence of BE behavior within the overall sample. The model explained between 17.9% (Cox & Snell $R^2$) and 25.1% (Nagelkerke $R^2$) of the variance in BE and correctly classified 75.7% of cases. More specifically, body weight/shape concerns were associated with increased odds of BE, while perceived stress and psychological distress were not significantly associated with BE (see Table 2).

Exploratory analyses were also conducted within each racial/ethnic group. Similar results were found among White ($\chi^2 (5, N = 385) = 97.43, p < .001$), Black ($\chi^2 (5, N = 223) = 39.48, p < .001$), and Asian ($\chi^2 (5, N = 125) = 25.00, p < .001$) college men, and in these groups, body weight/shape concerns were the only significant predictor (see Tables 3-5). The model explained 22.4 to 31.3% in White, 16.2 to 23.2% in Black, and 18.1 to 25.0% in Asian men (Cox & Snell $R^2$ and Nagelkerke $R^2$, respectively) for the variance in BE. The model correctly identified cases for 75.8% of White, 75.8% of Black, and 72.8% of Asian college men. In contrast, none of the predictor variables were significantly associated with BE over the past 28 days among Latino men (see Table 6).

Discussion

To our knowledge, the present study is the first to examine factors contributing to BE behaviors in a large sample of racially/ethnically diverse college men. Nearly one third of participants reported at least one BE episode in the past 28 days, with 15% of the sample reporting four or more episodes. These rates are slightly higher than what has been previously reported in the literature. Notably, we did not find racial/ethnic differences in the total number of BE episodes or proportion of those reporting presence (vs. absence) of BE. Of note, 14.5% of White, 14.8% of Black, 18.4% of Asian, 16.7% of Latino, and 12.5% of Other
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racially/ethnically identified men met frequency criteria (at least 4 episodes in the past month) for a clinically significant binge eating disorder diagnosis.\(^5\)

The study findings indicated that, in the overall sample, body weight/shape concerns was a significant predictor of BE behavior (presence vs. absence) but the effect was modest. This finding is consistent with prior studies with college\(^{18}\) and adult men,\(^5\) as well as adult and adolescent women\(^{51,52}\) which found that body dissatisfaction (that includes weight/shape concerns) is a significant contributor to disordered eating behaviors. In contrast, perceived stress and psychological distress did not significantly contribute to BE.

Similar to the findings in the overall sample, in the exploratory models by racial/ethnic group, body weight/shape concerns was the only significant predictor of BE among White, Black, and Asian men. In contrast, none of the hypothesized predictors, including body weight/shape concerns, were significant among Latino men. It is possible that these null findings may be explained by the low subsample size for this group given that previous research has found an association between body weight/shape dissatisfaction and binge eating among Latino adults.\(^{53}\) Additional research, therefore, is needed to replicate these findings.

Overall, the study findings indicate the need to consider body weight/shape concerns as an important contributor to BE behaviors among college men. Importantly, future research should also examine the potential (and likely) differences in the way body weight/shape concerns (as well as the broader construct of body dissatisfaction) manifests in different racial/ethnic groups of college men. For instance, Black men (adolescents and adults) consistently report a larger body size ideal, and a higher acceptance of different body types compared to White men.\(^{19}\) Interventions that target BE, therefore, must aim to identify body dissatisfaction, including weight/shape concerns, as a factor that may increase the risk for BE among men. Prevention and
treatment programs may also attempt to reduce body weight/shape concerns and promote body positivity, as a way to challenge unrealistic expectations about one’s body shape and weight that may contribute to disordered eating. Research has shown that body positivity, acceptance, and appreciation of one’s body, is associated with lower negative affect and greater positive affect among college students of diverse ethnic/racial backgrounds.\textsuperscript{54}

**Limitations and Future Directions**

Although this study adds to our understanding of BE among college men from diverse ethnic and racial backgrounds, certain limitations must be considered. For instance, representativeness of the sample and generalizability of the study findings may be influenced by the college men who self-selected into this study advertised as one that examined eating behaviors and health among men. It is possible, therefore, that these findings may not be representative of all college men and particularly those who may not have a specific interest in eating and health factors. Further, Asian, and Latino men were represented with relatively low subsample sizes, which limit conclusions drawn from the current data. It may have contributed to the null findings among Latino men specifically, given that they were represented with the smallest subsample size, and therefore, the analysis may have been underpowered to detect the significant predictors. Future research should focus on including larger sample sizes.\textsuperscript{55} Our exploratory findings serve as a foundation for these future investigations.

In addition, it is important to assess body ideals among men to explore racial/ethnic conceptions of the ideal male body. Given the small sample sizes for some of the racial/ethnic groups included in this study, it is important to replicate these findings with larger samples of college men. Moreover, research is needed assessing race and ethnicity as separate items to allow for more specification of men’s identities and to focus attention on men from multiple or mixed
racial and/or ethnic backgrounds. Such efforts are necessary to identify the need for adaptations to existing prevention and treatment interventions to improve their acceptability and efficacy. In addition, this study utilized questionnaires to assess body weight/shape concerns and disordered eating behaviors that have been shown to be equally as effective as semi-structured interviews (e.g., EDE-Q-I); however, other methodologies could provide additional insights into the factors that contribute to BE among young men. For instance, given the limited literature on BE in college men, particularly those of racial/ethnic minority backgrounds, qualitative methodologies (e.g., in-depth interviews, focus groups) may yield rich and important information. In addition, although the EDE-Q-I has been validated with men, the measure does not assess a desire for muscularity, and other important aspects of body ideals for men. Finally, the cross-sectional design of the study findings does not allow us to determine the temporal directionality of the hypothesized relationships. There is a need for longitudinal research to confirm the study findings.

Conclusions

The current study’s findings add to the limited literature that examines factors contributing to BE among college men from diverse racial and ethnic backgrounds. Body weight/shape concerns is an important correlate of BE among young men. Future studies must further examine predictors of BE with larger samples to replicate these findings. The improved understanding will enhance conceptualizations of the development and maintenance of eating disorders in men specifically, thus leading to improved evidence-based programs to prevent and treat BE as one important risk factor for obesity and overall health outcomes.
Acknowledgments

The authors would like to thank the Health Psychology Ph.D. Program at the University of North Carolina at Charlotte for providing funding to this research project.
The authors have no conflicts of interest to disclose.
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### Table 1

**Descriptive Statistics for Demographic and Study Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall (N = 873)</th>
<th>White Men (n = 385)</th>
<th>Black Men (n = 223)</th>
<th>Asian Men (n = 125)</th>
<th>Latino Men (n = 84)</th>
<th>Other Men (n = 56)</th>
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<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Age</td>
<td>19.66 (1.71)</td>
<td>19.57 (1.56)</td>
<td>19.71 (1.84)</td>
<td>19.58 (1.71)</td>
<td>19.82 (1.92)</td>
<td>20.00 (1.85)</td>
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<td>BMI*</td>
<td>25.19 (5.66)</td>
<td>25.04 (5.63)</td>
<td>26.16 (6.36)</td>
<td>23.76 (3.89)</td>
<td>25.11 (5.60)</td>
<td>25.78 (5.81)</td>
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<tr>
<td>% Underweight</td>
<td>4.4</td>
<td>3.6</td>
<td>4.0</td>
<td>9.6</td>
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<td>3.6</td>
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<td>% Normal weight</td>
<td>53.2</td>
<td>53.8</td>
<td>48.9</td>
<td>54.4</td>
<td>59.5</td>
<td>53.6</td>
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<td>% Overweight</td>
<td>28.9</td>
<td>31.2</td>
<td>25.1</td>
<td>31.2</td>
<td>28.6</td>
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<tr>
<td>% Obese</td>
<td>13.6</td>
<td>11.4</td>
<td>22.0</td>
<td>4.8</td>
<td>10.7</td>
<td>19.6</td>
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<td>Class year</td>
<td>1.94 (1.00)</td>
<td>1.91 (1.02)</td>
<td>2.00 (1.02)</td>
<td>1.89 (0.99)</td>
<td>1.95 (0.93)</td>
<td>2.04 (1.01)</td>
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<td>Household income**</td>
<td>2.76 (1.11)</td>
<td>3.06 (1.01)</td>
<td>2.49 (1.16)</td>
<td>2.65 (1.07)</td>
<td>2.30 (1.07)</td>
<td>2.66 (1.08)</td>
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<tr>
<td>Number of binge eating episodes (past 28 days)</td>
<td>1.78 (4.25)</td>
<td>2.03 (4.99)</td>
<td>1.32 (2.77)</td>
<td>1.85 (3.78)</td>
<td>1.79 (4.02)</td>
<td>1.71 (4.79)</td>
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<td>Body weight/shape concerns*</td>
<td>13.63 (14.99)</td>
<td>13.00 (14.24)</td>
<td>12.02 (13.75)</td>
<td>15.26 (16.68)</td>
<td>16.98 (17.01)</td>
<td>15.73 (16.74)</td>
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<td>Perceived stress</td>
<td>16.21 (5.93)</td>
<td>15.75 (5.84)</td>
<td>16.77 (6.11)</td>
<td>16.35 (5.51)</td>
<td>16.26 (6.33)</td>
<td>16.73 (6.15)</td>
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<tr>
<td>Psychological distress</td>
<td>28.44 (11.06)</td>
<td>28.41 (10.78)</td>
<td>27.35 (10.79)</td>
<td>29.06 (11.50)</td>
<td>29.32 (12.31)</td>
<td>30.25 (11.04)</td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01 on ANOVA to examine between group comparisons. "a" significant difference between groups. "b" trend toward significance for difference between groups. Class year: 1 = freshman; 2 = sophomore; 3 = junior; 4 = senior. Household income level: 1 = less than $25,000 yearly household income; 2 = $25,000-$49,999; 3 = $50,000-$99,999; 4 = $100,000 or more.
Table 2

*Logistic Regression Predicting the Likelihood of Binge Eating Behavior in the Overall Sample (Controlling for BMI and Income)*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>OR</th>
<th>95% CI OR</th>
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<tr>
<td>Income</td>
<td>-0.03</td>
<td>0.07</td>
<td>0.19</td>
<td>1</td>
<td>.67</td>
<td>0.97</td>
<td>0.84</td>
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<tr>
<td>BMI</td>
<td>0.03</td>
<td>0.02</td>
<td>3.69</td>
<td>1</td>
<td>.06</td>
<td>1.03</td>
<td>1.00</td>
</tr>
<tr>
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<td>1</td>
<td>&lt;.001</td>
<td>1.06</td>
<td>1.04</td>
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<td>0.98</td>
<td>1</td>
<td>.32</td>
<td>1.02</td>
<td>0.98</td>
</tr>
<tr>
<td>Psychological distress</td>
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<td>2.61</td>
<td>1</td>
<td>.11</td>
<td>1.01</td>
<td>1.00</td>
</tr>
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<td>28.83</td>
<td>1</td>
<td>&lt;.001</td>
<td>0.05</td>
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Note. N = 873.
### Table 3

**Logistic Regression Predicting the Likelihood of Binge Eating Behavior among White Men (Controlling for BMI and Income)**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>OR</th>
<th>95% CI OR</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LL</td>
</tr>
<tr>
<td>Income</td>
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<td>0.12</td>
<td>0.01</td>
<td>1</td>
<td>.94</td>
<td>1.01</td>
<td>0.79</td>
</tr>
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<td>0.03</td>
<td>6.22</td>
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<td>.01</td>
<td>1.07</td>
<td>1.01</td>
</tr>
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<td>Body weight/shape concerns</td>
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<td>0.01</td>
<td>33.53</td>
<td>1</td>
<td>&lt;.001</td>
<td>1.07</td>
<td>1.04</td>
</tr>
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<td>0.03</td>
<td>1.34</td>
<td>1</td>
<td>.25</td>
<td>1.03</td>
<td>0.98</td>
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<tr>
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<td>0.02</td>
<td>0.01</td>
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<td>.91</td>
<td>1.00</td>
<td>0.97</td>
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<td>&lt;.001</td>
<td>0.02</td>
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Note. N = 385.
Table 4

Logistic Regression Predicting the Likelihood of Binge Eating Behavior among Black Men (Controlling for BMI and Income)

<table>
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<tr>
<th>Predictor</th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>OR</th>
<th>95% CI OR LL</th>
<th>95% CI OR UL</th>
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<tbody>
<tr>
<td>Income</td>
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<td>0.15</td>
<td>0.05</td>
<td>1</td>
<td>.82</td>
<td>0.97</td>
<td>0.73</td>
<td>1.29</td>
</tr>
<tr>
<td>BMI</td>
<td>0.02</td>
<td>0.03</td>
<td>0.37</td>
<td>1</td>
<td>.54</td>
<td>1.02</td>
<td>0.96</td>
<td>0.11</td>
</tr>
<tr>
<td>Body weight/shape concerns</td>
<td>0.07</td>
<td>0.02</td>
<td>18.61</td>
<td>1</td>
<td>&lt;.001</td>
<td>1.07</td>
<td>1.04</td>
<td>1.10</td>
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<tr>
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<td>-0.04</td>
<td>0.03</td>
<td>1.16</td>
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<td>.28</td>
<td>0.97</td>
<td>0.91</td>
<td>1.03</td>
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<td>0.02</td>
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<td>.26</td>
<td>1.02</td>
<td>0.99</td>
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<td>0.12</td>
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Note. N = 223.
Table 5

_Logistic Regression Predicting the Likelihood of Binge Eating Behavior among Asian Men (Controlling for BMI and Income)_

<table>
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<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>OR</th>
<th>95% CI OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
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<td>0.20</td>
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<td>0.92</td>
<td>0.62 1.35</td>
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<tr>
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<td>0.79 1.02</td>
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<tr>
<td>Body weight/shape concerns</td>
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<td>0.02</td>
<td>11.30</td>
<td>1</td>
<td>&lt;.001</td>
<td>1.06</td>
<td>1.02 1.09</td>
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<tr>
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<td>0.05</td>
<td>0.39</td>
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<td>.53</td>
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<td>0.93 1.15</td>
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<td>0.02</td>
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<td>1</td>
<td>.30</td>
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<td>0.98 1.07</td>
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<td>.97</td>
<td>0.93</td>
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</table>

Note. N = 125.
**Table 6**

*Logistic Regression Predicting the Likelihood of Binge Eating Behavior among Latino Men (Controlling for BMI and Income)*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
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<th>p</th>
<th>OR</th>
<th>95% CI OR</th>
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</thead>
<tbody>
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<td></td>
<td></td>
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<td>0.96</td>
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<td>1.30</td>
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<td>.25</td>
<td>1.06</td>
<td>0.96</td>
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<td>.20</td>
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<td>0.98</td>
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<tr>
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<td>4.98</td>
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Note. *N = 84.*