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2 Running head: PREDICTORS OF BINGE EATING

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Examining Predictors of Binge Eating Behaviors

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among Racially and Ethnically Diverse College Men

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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

45 Examining Predictors of Binge Eating Behaviors

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49 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, cardiovascular50 disease, and certain types of cancers)^{2,3} and mental health (e.g., depression, anxiety, bipolar51 disorder, and schizophrenia)⁴ comorbidities. Binge eating is defined as eating an unusually large

52 amount of food in a discrete period of time (i.e., about 2 hours) and having a sense of loss of

53 control over eating.⁵ It is estimated that approximately 1.4% to 2.0% of U.S. adult men report a

54 lifetime history of binge eating disorder (BED), defined as recurrent binge eating episodes (at

55 least 4 episodes in a one month period) with associated distress and/or functional impairment;^{6,7}

56 however, limited research has examined BE behaviors and correlates among college men. In one

57 college sample, as many as 24% of men reported at least one occurrence of BE in the past 28

58 days and almost 13% reported regular BE episodes.⁸

59 Binge eating behaviors are relatively stable from emerging adulthood to middle young

60 adulthood (age 18-30 years old). For example, in one study, 40% of emerging adults who

61 reported BE maintained these behaviors 5 years later.⁹ Further, the presence of binge eating

62 among young men (after accounting for BMI and race/ethnicity) is associated with higher rates

63 of medical and psychological comorbidities,¹⁰ suggesting that BE, independent of weight status,

64 is likely to have a lasting impact on the mental and physical health of individuals. Binge eating

65 behaviors are also associated with earlier onset of overweight¹¹ and a history of childhood66 obesity.¹²

67 Despite the high occurrence of BE behaviors among men, this population is

68 underrepresented in research and treatment.¹³ The majority of research examining BE and its

69 associated factors includes largely homogenous samples of White women.¹⁴ For example, men
70 comprise a relatively low proportion of research samples investigating adults seeking treatment
71 for BE (e.g., 25%).¹⁵ Likely, this underrepresentation of men within the literature reflects the
72 commonly held belief that eating disorders are “women’s issues”.¹⁶ This is of concern as men
73 report similar levels of distress associated with BE¹³ and report higher functional impairment
74 (i.e., reduction in workplace and home productivity) compared to women.¹⁷

75 Binge eating has also been identified among men from various racial/ethnic backgrounds.
76 For example, a recent study reported that 23.4% of White, 16.3% of Black, and 36.1% of Asian
77 men reported BE in the prior 28 days.¹⁸ Findings are mixed on whether there are racial/ethnic
78 differences in the frequency of BE behaviors among college men. In one review of the literature,
79 Black, Latino and Asian men, reported a higher frequency of BE behaviors compared to White
80 men.¹⁹ Another study, however, found the opposite, with White men reporting a higher
81 frequency of BE episodes relative to Black men.¹³ This study also found that depression and
82 anxiety were associated with BE behaviors among Black but not White college men; however,
83 the authors of the study acknowledged that these findings should be interpreted with caution due
84 to the small sample sizes of each group.¹³

85 **Correlates of binge eating**

86 The affect regulation theory of BE may provide a foundation for understanding variables
87 related to BE behaviors among men. The theory posits that BE may be used as a method to
88 comfort or distract from negative emotions such as depressed mood, anger, and anxiety^{20,21} that
89 often emerged in the context of interpersonal experiences.²² The theory has been supported by
90 ecological momentary assessment data, which found that negative affect increased prior to BE
91 and then decreased after a BE episode,²³ as well as neuroimaging data indicating increased

92 activation in reward value regions of the brain in response to food when experiencing negative
93 affect.²⁴ This model of BE has been supported among women, with research showing a strong
94 relationship between body dissatisfaction (including concerns about body shape and weight) and
95 BE,²⁵ as well as mediating effects of perceived stress²⁶ and depression.²⁷ However, recent
96 reviews have provided mixed support for this theory, in that some studies did not find reductions
97 in negative emotions following BE,²² and relatively few studies have included men.

98 College students may be at particularly high risk for BE behaviors because of contextual
99 factors and the multiple unique pressures and expectations of this life period that may increase
100 stress and psychological distress. Indeed, college life can significantly impact eating behavior,
101 with frequent access to buffet-style cafeterias and limited influence of family on food choices
102 and restrictions,²⁸ all of which may uniquely increase access to the large amounts of food that are
103 consumed during a BE episode. College is also a stressful time for individuals due to increased
104 academic demands and social pressures.²⁹

105 During this developmental period, concerns about body shape and weight may be
106 magnified as individuals become part of new social groups, which make concerns about body
107 shape and weight more salient. A heightened state of dissatisfaction may intensify stress in
108 situations related to men's bodies or physique, such as when attempting to attract a partner or fit
109 into a social group, if rejected by a desired partner, or if constantly comparing (whether
110 consciously or unconsciously) one's own body to the other men on campus. Indeed, body
111 weight/shape concerns is common among college men, with one study finding that 40% of their
112 male sample reported a desire to lose weight and another 45% indicated a desire to gain weight.³⁰
113 In another study, college men indicated that body image was one of the top 10 "moderate" or
114 "extreme" factors that contributed to stress, as well as depression and anxiety in their lives.³¹

115 Racial/ethnic differences in body weight/shape concerns have also been reported with Black
116 college students reporting lower levels of body dissatisfaction compared to Whites and Latinos.³²
117 Further, previous research indicates that body dissatisfaction, or the negative evaluation of one's
118 body shape, weight, and/or size,³³ may be related to anxiety, stress, and negative affect.^{34,35}
119 These negative emotions, therefore, may increase the risk of BE as men may use this behavior to
120 cope with the distress related to pressures of adhering to cultural conceptions of the ideal male
121 body. The literature also suggests potential ethnic/racial differences in the association between
122 body weight/shape concerns and distress among men, which may, in turn, differentially impact
123 BE behaviors.

124 **Purpose of the Study**

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

132 **Method**

133 **Sample**

134 Participants were recruited via the Psychology Department Research Participant Pool, as
135 well as e-mail and flyer advertisements, at a large university in the southeastern region of the
136 United States.

137 A total of 1111 participants initiated the survey, and 238 participants were excluded from
138 analyses for the following reasons: 173 for missing data (166 for overall incomplete data, such as
139 completing less than 50% of the survey, 4 for missing height and/or weight items, and 3 for
140 missing the binge eating episodes item), 3 outliers on reported binge eating episodes in the past
141 28 days (i.e., 40, 45, and 50 episodes), and 62 participants were older than college-aged (i.e., 27-
142 61 years old). A total of 873 college men aged 18-26 years were retained for the analysis sample.

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

147 **Measures**

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

152 **Binge eating behavior.** The 28-item Eating Disorder Examination Questionnaire with
153 Binge Eating Instructions (*EDE-Q-I*)^{36,37,38} assessed eating behaviors and attitudes over the
154 preceding 28 days. The EDE-Q-I provides the clinical definition of a binge eating episode and
155 provides vignette examples of eating episodes that do and do not meet the definition. Frequency
156 of BE is self-reported (free-response format) as the total number of episodes in the past 28 days.
157 Reports of BE frequency on a semi-structured clinical interview have been shown to be
158 significantly associated with EDE-Q-I but not EDE-Q responses, suggesting that the addition of
159 instructions (with example situations) is a comparable assessment tool to a clinical interview.³⁸

160 **Body weight/shape concerns.** The 28-item Eating Disorder Examination Questionnaire
161 with Binge Eating Instructions (*EDE-Q-I*)^{36,37,38} assesses eating behaviors and attitudes over the
162 preceding 28 days. The shape concerns and weight concerns subscales were used; each item was
163 rated on a 7-point scale (0 = “No days” or “Not at all” to 6 = “Everyday” or “Markedly”), with
164 higher scores indicating higher shape and weight concerns, denoting higher body weight/shape
165 concerns. Items from these subscales been used in previous studies to measure body
166 weight/shape concerns among both men and women³⁹ and research has established EDE-Q
167 norms for college men, which found that internal consistency, using Cronbach’s alpha, was .80
168 and .89 for the weight concerns and shape concerns subscales, respectively.⁴⁰ Internal
169 consistency (for the subscales combined to assess body weight/shape concerns), using
170 Cronbach’s alpha, for this study was .91 for the overall sample, .90 for White, .89 for Black, .92
171 for Asian, .92 for Latino, and .93 Other identified men.

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

181 **Perceived stress.** The Perceived Stress Scale (*PSS*)⁴³ is a 10-item measure that assesses
182 feelings and thoughts related to stressful events, and particularly how often certain stressful

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

206 the presence or absence of BE (while controlling for BMI and income), a logistic regression
207 analysis was conducted in SPSS. The analysis was conducted with the overall sample (all
208 racial/ethnic groups), as well as separately within each of the four racial/ethnic (i.e., White,
209 Black, Asian, Latino) subsamples (separate analysis was not conducted for the group identifying
210 as “Other” because of the small sample size).

211 Results

212 Sample Characteristics

213 Of the total sample ($N = 873$), 41.6% identified as Freshman and 33.2% as Sophomore,
214 followed by 15.6% Junior, 8.6% Senior, and 1.0% Graduate. Participants were an average age of
215 19.66 years old ($SD = 1.71$). The sample included 44.1% White ($n = 385$), 25.5% Black ($n =$
216 223), 14.3% Asian ($n = 125$), 9.6% Latino ($n = 84$), and 6.4% Other racial/ethnically identified
217 college men ($n = 56$; Native Hawaiian or Pacific Islander, Middle Eastern, bi- or multi-racial).
218 The average BMI was 25.20 ($SD = 5.66$), with 28.9% in the overweight and 13.6% obese range.
219 On average, participants reported a household income of \$50,000-\$99,999. ANOVA analyses
220 identified significant racial/ethnic differences in BMI ($F(4, 868) = 3.89, p = .004$) and income,
221 $F(4, 868) = 17.92, p < .001$. Specifically, Black men reported a higher BMI ($M = 26.16, SD =$
222 6.36) than Asian men ($M = 23.76, SD = 3.89; p = .001, d = .46$); all other between-group
223 comparisons of BMI were not significant ($ps = .17-.96$). Regarding income, White college men
224 reported a significantly higher household income ($M = 3.06, SD = 1.01$) than Black ($M = 2.49,$
225 $SD = 1.16, p < .001, d = .52$), Asian ($M = 2.65, SD = 1.07, p = .002, d = .37$), and Latino men (M
226 $= 2.30, SD = 1.07, p < .001, d = .73$), but not Other racial/ethnically identified men ($M = 2.66,$
227 $SD = 1.08, p = .07$); all other between-group comparisons on household income were not
228 significant ($ps = .06-.82$; see Table 1). In addition, an ANOVA analysis identified significant

229 differences among the racial/ethnic groups for body weight/shape concerns ($F(4, 868) = 2.23, p$
230 $= .04$); however, there was only a trend towards significance for Black men reporting lower body
231 weight/shape concerns ($M = 12.02, SD = 13.75$) compared to Latino men ($M = 16.98, SD =$
232 $17.01; p = .07; d = .32$), with no other significant group comparisons ($ps = .18-.99$).

233 Overall, 31.4% of the sample ($n = 274$) reported the presence of BE (at least one BE
234 episode in the past 28 days), with an average of 1.78 episodes ($SD = 4.25$). Approximately,
235 15.2% of the sample ($n = 133$) reported 4 or more episodes in the past 28 days. In addition,
236 32.2% of White ($n = 124$), 28.7% of Black ($n = 64$), 34.4% of Asian ($n = 43$), 35.7% of Latino (n
237 $= 30$), and 23.2% of Other identified ($n = 13$) college men reported at least one episode of BE in
238 the past 28 days. In these groups, 14.5% of White ($n = 56$), 14.8% of Black ($n = 33$), 18.4% of
239 Asian ($n = 23$), 16.7% of Latino ($n = 14$), and 12.5% of Other identified ($n = 7$) men reported
240 four or more BE episodes in the past 28 days. A series of ANOVAs indicated no significant
241 differences between the racial/ethnic groups on perceived stress and psychological distress. Post-
242 hoc analyses did not reveal significant differences in the comparisons among the separate
243 racial/ethnic groups ($ps = .13-.99$). A chi-square analysis indicated that the proportion of those
244 reporting BE did not differ by racial/ethnic group, $\chi^2(4, N = 873) = 3.86, p = .43$. Descriptive
245 statistics for demographic and study variables are shown in Table 1.

246 Primary Analyses

247 A logistic regression analysis was conducted to examine the effects of body weight/shape
248 concerns, perceived stress, and psychological distress on the likelihood that college men reported
249 the presence or absence of BE (while controlling for BMI and income). A preliminary analysis
250 indicated that the assumption of multicollinearity was met (tolerance = .66-.98). The logistic
251 regression model was statistically significant, $\chi^2(5, N = 873) = 171.96, p < .001$, suggesting that

252 the predictor variables were able to distinguish between the presence or absence of BE behavior
253 within the overall sample. The model explained between 17.9% (Cox & Snell R^2) and 25.1%
254 (Nagelkerke R^2) of the variance in BE and correctly classified 75.7% of cases. More specifically,
255 body weight/shape concerns were associated with increased odds of BE, while perceived stress
256 and psychological distress were not significantly associated with BE (see Table 2).

257 Exploratory analyses were also conducted within each racial/ethnic group. Similar results
258 were found among White ($\chi^2(5, N = 385) = 97.43, p < .001$), Black ($\chi^2(5, N = 223) = 39.48, p <$
259 $.001$), and Asian ($\chi^2(5, N = 125) = 25.00, p < .001$) college men, and in these groups, body
260 weight/shape concerns were the only significant predictor (see Tables 3-5). The model explained
261 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
262 R^2 and Nagelkerke R^2 , respectively) for the variance in BE. The model correctly identified cases
263 for 75.8% of White, 75.8% of Black, and 72.8% of Asian college men. In contrast, none of the
264 predictor variables were significantly associated with BE over the past 28 days among Latino
265 men (see Table 6).

266 Discussion

267 To our knowledge, the present study is the first to examine factors contributing to BE
268 behaviors in a large sample of racially/ethnically diverse college men. Nearly one third of
269 participants reported at least one BE episode in the past 28 days, with 15% of the sample
270 reporting four or more episodes. These rates are slightly higher than what has been previously
271 reported in the literature.¹⁸ Notably, we did not find racial/ethnic differences in the total number
272 of BE episodes or proportion of those reporting presence (vs. absence) of BE. Of note, 14.5% of
273 White, 14.8% of Black, 18.4% of Asian, 16.7% of Latino, and 12.5% of Other

274 racially/ethnically identified men met frequency criteria (at least 4 episodes in the past month)
275 for a clinically significant binge eating disorder diagnosis.⁵

276 The study findings indicated that, in the overall sample, body weight/shape concerns was
277 a significant predictor of BE behavior (presence vs. absence) but the effect was modest. This
278 finding is consistent with prior studies with college¹⁸ and adult men,⁵⁰ as well as adult and
279 adolescent women^{51,52} which found that body dissatisfaction (that includes weight/shape
280 concerns) is a significant contributor to disordered eating behaviors. In contrast, perceived stress
281 and psychological distress did not significantly contribute to BE.

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

289 Overall, the study findings indicate the need to consider body weight/shape concerns as
290 an important contributor to BE behaviors among college men. Importantly, future research
291 should also examine the potential (and likely) differences in the way body weight/shape concerns
292 (as well as the broader construct of body dissatisfaction) manifests in different racial/ethnic
293 groups of college men. For instance, Black men (adolescents and adults) consistently report a
294 larger body size ideal, and a higher acceptance of different body types compared to White men.¹⁹
295 Interventions that target BE, therefore, must aim to identify body dissatisfaction, including
296 weight/shape concerns, as a factor that may increase the risk for BE among men. Prevention and

297 treatment programs may also attempt to reduce body weight/shape concerns and promote body
298 positivity, as a way to challenge unrealistic expectations about one's body shape and weight that
299 may contribute to disordered eating. Research has shown that body positivity, acceptance, and
300 appreciation of one's body, is associated with lower negative affect and greater positive affect
301 among college students of diverse ethnic/racial backgrounds.⁵⁴

302 **Limitations and Future Directions**

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

315 In addition, it is important to assess body ideals among men to explore racial/ethnic
316 conceptions of the ideal male body. Given the small sample sizes for some of the racial/ethnic
317 groups included in this study, it is important to replicate these findings with larger samples of
318 college men. Moreover, research is needed assessing race and ethnicity as separate items to allow
319 for more specification of men's identities and to focus attention on men from multiple or mixed

320 racial and/or ethnic backgrounds. Such efforts are necessary to identify the need for adaptations
321 to existing prevention and treatment interventions to improve their acceptability and efficacy.

322 In addition, this study utilized questionnaires to assess body weight/shape concerns and
323 disordered eating behaviors that have been shown to be equally as effective as semi-structured
324 interviews (e.g., EDE-Q-I);³⁸ however, other methodologies could provide additional insights
325 into the factors that contribute to BE among young men. For instance, given the limited literature
326 on BE in college men, particularly those of racial/ethnic minority backgrounds, qualitative
327 methodologies (e.g., in-depth interviews, focus groups) may yield rich and important
328 information. In addition, although the EDE-Q-I has been validated with men, the measure does
329 not assess a desire for muscularity, and other important aspects of body ideals for men. Finally,
330 the cross-sectional design of the study findings does not allow us to determine the temporal
331 directionality of the hypothesized relationships. There is a need for longitudinal research to
332 confirm the study findings.

333 **Conclusions**

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

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348 Declaration of Interest Statement

349 The authors have no conflicts of interest to disclose.

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Table 1

Descriptive Statistics for Demographic and Study Variables

Variable	Group					
	Overall (<i>N</i> = 873)	White Men (<i>n</i> = 385)	Black Men (<i>n</i> = 223)	Asian Men (<i>n</i> = 125)	Latino Men (<i>n</i> = 84)	Other Men (<i>n</i> = 56)
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Age	19.66 (1.71)	19.57 (1.56)	19.71 (1.84)	19.58 (1.71)	19.82 (1.92)	20.00 (1.85)
BMI*	25.19 (5.66)	25.04 (5.63)	26.16 (6.36) ^a	23.76 (3.89) ^a	25.11 (5.60)	25.78 (5.81)
% Underweight	4.4	3.6	4.0	9.6	1.2	3.6
% Normal weight	53.2	53.8	48.9	54.4	59.5	53.6
% Overweight	28.9	31.2	25.1	31.2	28.6	23.2
% Obese	13.6	11.4	22.0	4.8	10.7	19.6
Class year	1.94 (1.00)	1.91 (1.02)	2.00 (1.02)	1.89 (0.99)	1.95 (0.93)	2.04 (1.01)
Household income**	2.76 (1.11)	3.06 (1.01) ^a	2.49 (1.16) ^a	2.65 (1.07) ^a	2.30 (1.07) ^a	2.66 (1.08)
Number of binge eating episodes (past 28 days)	1.78 (4.25)	2.03 (4.99)	1.32 (2.77)	1.85 (3.78)	1.79 (4.02)	1.71 (4.79)
Body weight/shape concerns*	13.63 (14.99)	13.00 (14.24)	12.02 (13.75) ^b	15.26 (16.68)	16.98 (17.01) ^b	15.73 (16.74)
Perceived stress	16.21 (5.93)	15.75 (5.84)	16.77 (6.11)	16.35 (5.51)	16.26 (6.33)	16.73 (6.15)
Psychological distress	28.44 (11.06)	28.41 (10.78)	27.35 (10.79)	29.06 (11.50)	29.32 (12.31)	30.25 (11.04)

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)

	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% CI <i>OR</i>	
							<i>LL</i>	<i>UL</i>
Income	-0.03	0.07	0.19	1	.67	0.97	0.84	1.12
BMI	0.03	0.02	3.69	1	.06	1.03	1.00	1.06
Body weight/shape concerns	0.06	0.01	67.79	1	<.001	1.06	1.04	1.07
Perceived stress	0.02	0.02	0.98	1	.32	1.02	0.98	1.05
Psychological distress	0.01	0.01	2.61	1	.11	1.01	1.00	1.03
Constant	-3.00	0.56	28.83	1	<.001	0.05		

Note. *N* = 873.

Table 3

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

	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% CI <i>OR</i>	
							<i>LL</i>	<i>UL</i>
Income	0.01	0.12	0.01	1	.94	1.01	0.79	1.29
BMI	0.07	0.03	6.22	1	.01	1.07	1.01	1.13
Body weight/shape concerns	0.07	0.01	33.53	1	<.001	1.07	1.04	1.09
Perceived stress	0.03	0.03	1.34	1	.25	1.03	0.98	1.09
Psychological distress	0.00	0.02	0.01	1	.91	1.00	0.97	1.03
Constant	-3.95	0.94	17.72	1	<.001	0.02		

Note. *N* = 385.

Table 4

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

	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% CI <i>OR</i>	
							<i>LL</i>	<i>UL</i>
Income	-0.03	0.15	0.05	1	.82	0.97	0.73	1.29
BMI	0.02	0.03	0.37	1	.54	1.02	0.96	0.11
Body weight/shape concerns	0.07	0.02	18.61	1	<.001	1.07	1.04	1.10
Perceived stress	-0.04	0.03	1.16	1	.28	0.97	0.91	1.03
Psychological distress	0.02	0.02	1.28	1	.26	1.02	0.99	1.06
Constant	-2.15	1.05	4.21	1	.04	0.12		

Note. *N* = 223.

Table 5

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

	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% CI <i>OR</i>	
							<i>LL</i>	<i>UL</i>
Income	-0.09	0.20	0.20	1	.66	0.92	0.62	1.35
BMI	-0.11	0.07	2.59	1	.11	0.90	0.79	1.02
Body weight/shape concerns	0.06	0.02	11.30	1	<.001	1.06	1.02	1.09
Perceived stress	0.03	0.05	0.39	1	.53	1.03	0.93	1.15
Psychological distress	0.02	0.02	1.06	1	.30	1.02	0.98	1.07
Constant	-0.07	1.84	0.002	1	.97	0.93		

Note. *N* = 125.

Table 6

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

	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% CI <i>OR</i>	
							<i>LL</i>	<i>UL</i>
Income	-0.07	.24	0.08	1	.77	0.93	0.58	1.50
BMI	0.08	.07	1.35	1	.25	1.09	0.95	1.25
Body weight/shape concerns	0.00	.02	0.00	1	.99	1.00	0.96	1.04
Perceived stress	0.06	.05	1.30	1	.25	1.06	0.96	1.18
Psychological distress	0.04	.03	1.61	1	.20	1.04	0.98	1.10
Constant	-4.66	2.09	4.98	1	.03	0.01		

Note. *N* = 84.