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Weight Perceptions, Misperceptions, and Dating Violence Victimization Among U.S. Adolescents

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Abstract

Dating violence is a major public health issue among youth. Overweight/obese adolescents experience peer victimization and discrimination and may be at increased risk of dating violence victimization. Furthermore, given the stigma associated with overweight/obesity, perceptions and misperceptions of overweight may be more important than actual weight status for dating violence victimization. This study examines the association of three weight indices (weight status, perceived weight, and weight perception accuracy) with psychological and physical dating violence victimization. The 2010 baseline survey of the 7-year NEXT Generation Health Study used a three-stage stratified clustered sampling design to select a nationally representative sample of U.S. 10th-grade students ($n = 1,983$). Participants who have had a boyfriend/girlfriend reported dating violence victimization and perceived weight. Weight status was computed from measured height/weight. Weight perception accuracy (accurate/underestimate/overestimate) was calculated by comparing weight status and perceived weight. Gender-stratified regressions examined the association of weight indices and dating violence victimization. Racial/ethnic differences were also examined. The association of weight indices with dating violence victimization significantly differed by gender. Overall, among boys, no associations were observed. Among girls, weight status was not associated with dating violence victimization, nor with number of dating violence victimization acts; however, perceived weight and weight perception accuracy were significantly associated with dating violence victimization, type of victimization, and number of victimization acts. Post hoc analyses revealed significant racial/ethnic differences. White girls who perceive themselves (accurately or not) to be overweight, and Hispanic girls who are overweight, may be at increased risk of dating violence victimization. These findings suggest a targeted approach to dating violence victimization prevention.

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Keywords

dating violence; adolescents; obesity; weight perceptions; gender

Introduction

Dating violence is a major public health issue affecting at least a third of U.S. high school students (Haynie et al., 2013); dating violence victimization is associated with several adverse health consequences, sometimes with lifelong implications. Adolescents who experience dating violence victimization are more likely to engage in physical fights and are at an increased risk of physical injury, binge drinking, suicide attempts, and unhealthy sexual behaviors that may lead to unintended pregnancy, sexually transmitted diseases, and HIV infections (Ackard, Eisenberg, & Neumark-Sztainer, 2007; Exner-Cortens, Eckenrode, & Rothman, 2012). They are also more likely to experience psychosocial maladjustment, including depression (Ackard et al., 2007), delinquency (Roberts, Klein, & Fisher, 2003), suicidal behaviors (Ackard et al., 2007), eating disorders (Ackard et al., 2007), and unhealthy weight control behaviors (Silverman, Raj, Muchi, & Hathaway, 2001), and to carry the patterns of violence into future relationships (Exner-Cortens et al., 2012).

Another public health concern in this age group is that a third of U.S. youth aged 12 to 19 years are overweight or obese (Ogden, Carroll, Kit, & Flegal, 2012). Complications of obesity are well-documented and include physical, behavioral, and psychosocial problems (Farhat, Iannotti, & Simons-Morton, 2010; Ludwig, 2007). Overweight/obese youth are also more likely to be victimized, discriminated against (Puhl & Latner, 2007), and socially isolated by their peers (Ludwig, 2007). However, no information exists on overweight/obese youth's victimization within the context of their romantic relationships. Studies suggest that overweight adolescents are less likely to experience romantic relationships because of the socially accepted belief that overweight/obese individuals are less attractive (Cheng & Landale, 2011; Pearce, Boergers, & Prinstein, 2002). They are also more prone to sexual risk behavior (Akers et al., 2009).

Misperceptions of weight status are widespread among adolescents, with a third of adolescents overestimating or underestimating their weight (Martin, Frisco, & May, 2009). Perceptions of being overweight have been associated with psychosocial malfunctioning (e.g., depressive symptoms; Gray, Crawford, Follansbee-Junger, Dumont-Driscoll, & Janicke, 2012). Studies have investigated the association of weight perceptions and stigma with other risk behaviors. Results indicate that weight perceptions, rather than weight status, are critical predictors of adverse outcomes for youth. For example, perception of being overweight, rather than overweight status, was associated with more sexual risk behaviors including early sexual debut and lower likelihood of condom use among a U.S. national sample of girls (Akers et al., 2009). Weight overestimation was also associated with alcohol, tobacco and drug use, binge drinking, depressive symptoms, and physical fighting in a cross-sectional analysis of a sample of early adolescents (Pasch et al., 2011). It is plausible that weight overestimation may also be related to dating violence victimization, given the stigma associated with overweight/obesity (Puhl & Latner, 2007). To our knowledge, no

previous studies have examined the association of weight indices with dating violence victimization. This is an important line of research that has implications for public health and clinical practice. Findings could inform dating violence prevention programs as well as school administrators, teachers, parents, and clinicians who work with adolescents.

This study's primary purpose is to examine associations between three weight indices (weight status, perceived weight, and weight perception accuracy) and dating violence victimization. More specifically, we address the following research questions:

Research Question 1: Are overweight/obese adolescents, those with overweight perceptions and those who overestimate their weight more likely to experience dating violence victimization compared with non-overweight/obese adolescents, those with no overweight perceptions and those who do not overestimate their weight, respectively?

Research Question 2: Do the type and severity of dating violence victimization (psychological only or physical and psychological) vary by weight status, perceived weight, and weight perception accuracy?

Research Question 3: Do the above relationships vary by gender and race/ethnicity?

Method

Sample and Procedures

The NEXT Generation Health Study is a 7-year longitudinal assessment of the biological, genetic, environmental, and social predictors of adolescent/young adult health and health behaviors. A three-stage stratified clustered sampling design, with classes as the sampling units, was used to select a nationally representative sample of students in grade 10 during the 2009-2010 school year (93.5% participation rate). African American students were oversampled to provide better population estimates for this minority group. Self-reports of health status, health behaviors, and health attitudes were collected by in-school surveys. Anthropometrics were gathered on all participants by trained research assistants. Respondents provided written consent for participation in the study. Their confidentiality was ensured throughout the data collection process. The Institutional Review Board at the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development approved the study. More information on the study could be found elsewhere (Haynie et al., 2013).

Out of the total number of students who participated in the study ($n = 2,541$), we excluded those who were underweight ($n = 35$) because they constituted only 1.4% of the sample, and those who did not report having been in a romantic relationship in the last 12 months ($n = 273$), for a final eligible sample of 2,221. After further restricting the analysis to students with complete data, the final sample included 1,983 students (90% of eligible), 56% of whom were girls.

Measures

Dating violence victimization—This measure was assessed with items from the revised Conflict Tactics Scale (CTS; Straus, Hamby, Boney-McCoy, & Sugarman, 1996).

Respondents reported if, in any romantic relationship in the past 12 months, their boyfriend/girlfriend: (a) called them names, (b) swore at them, (c) threatened them with violence, (d) pushed them, or (e) threw something at them. The selected items are similar to those used in another national study, the *National Longitudinal Study of Adolescent Health*, to measure dating violence (Halpern, Oslak, Young, Martin, & Kupper, 2001). Three indices of dating violence victimization were calculated:

Any victimization: A dichotomous variable: at least one “yes” to any of items 1 to 5 versus none.

Type of victimization: A categorical summary variable with three mutually exclusive categories: *no victimization* (did not report any of items 1-5), *psychological-only victimization* (reported at least one of items 1-3, but not 4 or 5), *only physical or both physical and psychological victimization* (referred to as *physical/psychological*; reported any of items 4 or 5 regardless of reports on 1 or 3). This last category has been used in previous studies, given that very few respondents report only physical dating violence victimization (2.7% in our sample; Halpern et al., 2001; Halpern, Young, Waller, Martin, & Kupper, 2004).

Total number of acts of victimization experienced: Total count of “yes” for all five items of the CTS (range = 0-5).

Weight status—Trained research assistants measured students' height and weight at school. Body mass index percentiles (BMI-for-age percentiles for each gender) were derived using the Centers for Disease Control and Prevention (CDC) 2000 growth chart. BMI-for-age weight status categories and the corresponding percentiles were as follows: adolescents were considered *underweight* if their BMI was <5th percentile; *normal weight* if their BMI was 5th but <85th percentile; *overweight* if their BMI was 85th but <95th percentile; and *obese* if their BMI was 95th percentile (Kuczmarski et al., 2002).

Perceived weight—This measure refers to respondents' perception of their weight. Adolescents were asked “do you think your body is ...?” Response options included (a) much too thin, (b) a bit too thin, (c) about the right size, (d) a bit too fat, and (e) much too fat. For both thin and fat responses, the options “much too” and “a bit too” were combined to yield *too thin* and *too fat* categories, because very few students reported extreme options (5%).

Weight perception accuracy—This measure refers to respondents' perception of their weight in relation to their BMI. Adolescents were classified as *accurate* if their weight perception corresponded to their BMI (e.g., perceived weight “about the right size” and normal BMI). They were considered to have *underestimated* their weight if their perceived weight was lower than their BMI (e.g., perceived weight “about the right size” and overweight BMI), and *overestimated* their weight if their perceived weight was higher than their BMI (e.g., perceived weight “too fat” and normal BMI).

Sociodemographics—This measure included race/ethnicity (White/Black/Hispanic/Other), age, family structure (two biological parents/step-families/single parent/other), and

the Family Affluence Scale, an indicator of adolescents' socioeconomic status (SES) constructed from questions about family wealth and categorized into tertiles. A review indicated that the scale has good content and external validity (Currie et al., 2008).

Analysis

All analyses were conducted using Stata, version 11, and adjusted for the cluster-based sampling design of NEXT using the survey commands. Weights were applied to provide nationally representative estimates. Descriptive statistics were computed for all variables. Bivariate statistics (chi-squares, *t* tests) identified associations between weight indices and individual and composite measures of dating violence victimization. Logistic, multinomial (with “no victimization” as the referent group), and linear regression models, stratified by gender, were fitted to obtain adjusted estimates of the association between weight indices with measures of dating violence victimization controlling for age, family structure, race/ethnicity, and SES. These sociodemographic measures were controlled for in the multivariable regression models because of their associations with dating violence victimization (Offenhauer & Buchalter, 2011; Vezina & Hebert, 2007).

Given the differential normative views of overweight by race/ethnicity (Akers et al., 2009; Leech, 2012), post hoc analyses were conducted to examine racial differences in associations between weight indices and dating violence victimization. Only White, Black, and Hispanic subgroups were included in these additional analyses, given the small number of respondents in the other racial/ethnic groups. The analyses were stratified because the large number of interactions prevented the multinomial models from converging. To account for multiple testing, we applied a Bonferroni adjustment and considered these results significant at $p < .017$.

Results

Sample

The majority of respondents were girls, non-Hispanic Whites (57.2%), lived with two biological parents (50.8%), and were of moderate family affluence (49.1%); mean age was 16.19 years (Table 1). About 62% of the sample was of normal weight, 18% was overweight, and 20% was obese. More than half of respondents perceived their weight to be about right, greater than a third perceived themselves as too fat, and less than 10% as too thin. Most respondents (68.4%) had accurate weight perceptions, 21.1% underestimated their weight, and 10.5% overestimated it. Gender differences were noted in perceived weight and weight perceptions accuracy: Perceptions of being “too fat” were almost twice as prevalent among girls as boys. Weight overestimation was almost 3 times more prevalent in girls than in boys.

Gender differences were also noted in the prevalence, type, and severity of dating violence victimization, with girls experiencing worse prevalence: 41% of girls, but only 28% of boys reported any victimization in the past 12 months. About twice as many girls as boys reported psychological-only victimization, and girls reported experiencing greater number of victimization acts than boys. The prevalence of physical/psychological victimization was

approximately the same among girls as that for boys. Psychological-only victimization was more prevalent than physical/psychological victimization among boys and girls.

Prevalence of Victimization by Weight Indices

Among boys, the prevalence of dating violence victimization, type of victimization, and total number of acts of victimization did not significantly vary by weight indices (Table 2). Among girls, no significant differences in the prevalence of victimization were noted by BMI-based weight status. In contrast, the prevalence of any victimization was higher among girls who perceived themselves as “too fat” and girls who overestimated their weight. Regarding types of victimization, 1 in 4 girls who overestimated their weight reported physical/psychological victimization, compared with less than 1 in 10 of those with accurate perceptions. Similarly, twice as many girls who perceived themselves as “too fat” reported physical/psychological victimization compared with girls who perceived themselves “about right.” Regarding the individual acts of victimization, being pushed or shoved was 3 times more prevalent among girls who overestimated their weight compared with those with accurate perceptions (21.3% vs. 7.4%), whereas having something thrown at them that could hurt was 6 times more prevalent (6.6% vs. 1.3%).

Associations of Victimization With Weight Indices

In adjusted regressions, no significant relationships were noted among weight indices and victimization for boys (Table 3). Among girls, weight status was negatively associated with type of victimization: Obese girls had lower odds of physical/psychological victimization compared with normal-weight girls. In contrast, girls who perceived themselves as “too fat” reported more acts of victimization, compared with girls who perceived their weight about right; and those who overestimated their weight were more likely to report any victimization, to experience physical/psychological victimization, and to report more acts of victimization, than those who had accurate perceptions. Furthermore, girls who perceived themselves as too fat had higher odds of psychological victimization compared with girls who perceived themselves as “about right.”

Among control variables (results not shown), only family structure and race/ethnicity showed significant associations with victimization. Among boys, Black boys had higher odds of any victimization and of physical/psychological victimization than White boys, and reported more acts of victimization. Among girls, family structure was associated with any victimization, type of victimization, and number of acts of victimization. Girls from two-parent step-families, single-parent families, and other family arrangements had higher odds of any victimization and of psychological-only victimization, compared with families with two biological parents. Furthermore, girls from single-parent families had higher odds of physical/psychological victimization, and reported more acts of victimization compared with families with two biological parents.

Racial/Ethnic Differences

Among boys, no racial differences were observed in the association of weight indices with victimization except in two cases: Black boys who overestimated their weight were more likely to be victims of physical/psychological violence (odds ratio [OR] = 6.41; 95%

confidence interval [CI] = [2.76, 14.83]) and to experience more acts of victimization, B (SE) = 0.88 (.20); p = .000, than Black boys with accurate weight perceptions (data not shown).

Significant racial/ethnic differences were noted among girls (Table 4). No associations between weight indices and victimization were noted among Black girls. Overweight status, but not weight perceptions, was associated with victimization and a higher likelihood of psychological-only victimization among Hispanic girls. Among White girls, perceptions of being “too fat” and weight overestimation were associated with victimization, physical/psychological victimization, and a higher number of acts of victimization.

Discussion

This is the first study examining the association of weight status, perceived weight, and weight perception accuracy with dating violence victimization. Findings from this national sample of 10th graders indicate significant differences by weight indices, gender, and race/ethnicity. Among girls, weight status was not associated with victimization; however, perceptions were. Girls who perceived themselves as too fat and those who overestimated their weight were more likely to be victimized, to experience physical/psychological victimization, and more victimization acts. Girls who perceived themselves as too fat were also more likely to experience more psychological victimization. None of the weight indices were associated with victimization among boys.

The association of perceptions of being overweight, rather than actual overweight status, with victimization may point to the increasingly pervasive effect of social norms related to weight-based stigma. Younger individuals (children and adolescents) are less accepting of overweight/obese peers than older ones (Latner, Stunkard, & Wilson, 2005; Rand & Wright, 2000). Thus, deviations from ideal body size, such as overweight/obesity, are likely to trigger discrimination and weight bias from peers. Adolescents who perceive themselves (accurately or not) as being overweight may internalize weight-based stigma, therefore leading to psychological problems such as depression and low self-esteem (Goldfield et al., 2010; Perrin, Boone-Heinonen, Field, Coyne-Beasley, & Gordon-Larsen, 2010), which are associated with violence within the context of relationships (Shorey, Cornelius, & Bell, 2008).

Overweight status in adolescence has been associated with sexual risk behavior (Akers et al., 2009), social exclusion (Chen & Brown, 2005), peer victimization (Pearce et al., 2002), and a lower likelihood of establishing romantic relationships (Chen & Brown, 2005; Halpern, King, Oslak, & Richard Udry, 2005; Pearce et al., 2002), all developmental milestones particularly salient for adolescence. Difficult peer relationships and social exclusion in adolescence may be precursors to difficult romantic relationships (Werner & Crick, 1999) and intimate partner violence (Linder, Crick, & Collins, 2002) in adulthood. With few exceptions (e.g., Akers et al., 2009), weight perceptions were not examined in these studies; it is therefore unclear how their inclusion would affect the association of being overweight with risk behavior and social adjustment, although research suggests that adverse

psychosocial adjustment may be more related to weight perceptions rather than measured weight status (Lenhart, Daly, & Eichen, 2011).

The gender differences observed may reflect differential effects of weight stigma for boys and girls. Overweight-related stigma toward girls is more prevalent than that toward boys and men have lower tolerance for overweight women than vice versa (Puhl, Andreyeva, & Brownell, 2008). For example, college students were least likely to choose an obese partner as a sexual partner from six drawings representing six potential partners with various physical or mental disabilities (Chen & Brown, 2005). Young men were more likely than young women to rank the obese partner as the last choice, suggesting that overweight status and perceptions of being overweight may be perceived more unfavorably by boys than girls. Previous studies have shown that overweight/obesity were not as extensively related to problem behavior or psychosocial adjustment among boys as they were among girls (Farhat et al., 2010).

Post hoc analyses point to significant racial/ethnic differences. The association of weight overestimation with dating violence victimization among Black boys was surprising. While this relationship might be mediated by poor self-esteem as discussed previously for girls, it is not clear why this association occurred only in this racial group. Our results also confirm previous findings of greater adverse outcomes associated with overweight/perceptions of being overweight among White than among Black girls (Akers et al., 2009; Leech, 2012). These racial/ethnic differences reinforce the possible role of weight-related social norms. Most studies have reported that Black females have more favorable body images and are less frequently discriminated against than White females, despite their higher body weights (Gray, Simon, Janicke, & Dumont-Driscoll, 2011; Latner et al., 2005; Roberts, Auinger, & Klein, 2006). Research on Hispanics is more limited but suggests that Hispanics, as Whites, experience more weight-related body dissatisfaction than Blacks (Cheng & Landale, 2011).

These findings should be interpreted in light of the limitations and strengths of this study. First, these analyses are cross-sectional, precluding testing for the temporal sequence of the events. Although it was found that perceived weight and weight perception accuracy predicted dating violence victimization, it is possible that girls who experience victimization develop poor body image. Both pathways have supporting theoretical evidence, and additional longitudinal analyses are needed to disentangle causality. It should further be noted that while BMI is extensively used to determine individuals' weight status (e.g., overweight or obese), it does not reveal much about body composition. Athletes, for example, may have a high BMI due to their high muscle mass rather than body fat. Third, our dating violence victimization instrument only measured psychological and physical victimization. Yet, dating violence includes additional dimensions. Sexual violence, for example, has been added to future waves of NEXT for a more comprehensive assessment of dating violence victimization. Finally, NEXT data are nationally representative of adolescents who were in 10th grade at baseline. Results may therefore not be generalizable to other age groups. In particular, although weight perceptions are established at a young age and remain relatively stable during adolescence (Mikolajczyk, Iannotti, Farhat, & Thomas, 2012), weight bias is higher among younger adolescents (Rand & Wright, 2000).

Associations between weight perceptions and dating violence victimization may therefore be stronger among younger adolescents.

A notable strength of this study is the assessment of measured, rather than self-reported weight, thereby precluding potential confounding of weight status with perceived weight. Other strengths include the use of a nationally representative sample of U.S. adolescents to examine relationships that were previously seldom tested: the comparison of several weight indices, including weight status, perceived weight, and weight perception accuracy; the investigation of boys' dating violence victimization; and more generally, the examination of the association of weight indices with dating violence victimization among various population subgroups (gender, race/ethnicity).

Future research should investigate mechanisms that could further our understanding of the differential association of weight indices with dating violence victimization, including investigating mediators of the relationship between weight indices and victimization.

These findings have implications for public health and clinical practice. Current dating violence programs address modifiable factors that have been associated with dating violence, including dating violence norms, gender-role norms, and conflict management skills (Foshee et al., 2005). Our findings suggest the importance of also addressing body image concerns (perceptions and misperceptions of overweight status) in dating violence prevention programs, especially for White girls. School administrators and teachers should focus on educating adolescents about healthy body image, possibly during school-based health education programs. Clinicians may consider inquiring about body image concerns during their encounters with adolescents in a health care setting. Finally, parents should be aware of the potential added risk of victimization within a romantic relationship among teens who perceive themselves, accurately or inaccurately, as being overweight. Increased awareness among professionals who work with adolescents about the detrimental associations of weight perceptions/misperceptions with dating violence victimization would enable effective screening and prevention efforts.

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Table 1
Respondents' Sociodemographic Characteristics, Measures of Weight Indices, and Dating Violence Victimization

	% Total (<i>n</i> = 1,983)	% Boys (<i>n</i> = 881)	% Girls (<i>n</i> = 1,102)
Sociodemographics			
Age, <i>M</i> (<i>SE</i>) **	16.19 (0.03)	16.24 (0.04)	16.15 (0.03)
Family affluence			
Low	24.1	24.3	24.0
Moderate	49.1	50.7	47.8
High	26.8	25.0	28.2
Race/ethnicity *			
White	57.2	62.3	53.0
Black	17.9	12.9	21.9
Hispanic	20.3	19.5	20.9
Other	4.7	5.3	4.2
Family structure			
Two biological parents	50.8	55.4	47.1
Two parents, step-families	20.2	20.5	20.0
Single parent	19.5	17.1	21.4
Other	9.5	7.0	11.5
Weight			
Weight status			
Normal	61.8	61.4	62.0
Overweight	18.4	17.6	19.1
Obese	19.8	21.0	19.0
Perceived weight ***			
About right	54.4	62.1	48.2
Too thin	9.0	12.4	6.3
Too fat	36.6	25.5	45.5
Weight perception accuracy ***			
Accurate	68.4	64.0	72.0
Underestimate	21.1	30.6	13.4
Overestimate	10.5	5.4	14.6
Dating violence victimization			
Been a victim of dating violence in past 12 months ***			
No	64.7	72.4	58.6
Yes	35.3	27.6	41.4
Type of dating violence victimization ***			
Not a victim	64.7	72.3	58.6
Psychological	24.8	16.7	31.3
Physical and psychological	10.5	11.0	10.1

	% Total (<i>n</i> = 1,983)	% Boys (<i>n</i> = 881)	% Girls (<i>n</i> = 1,102)
Total number of victimization acts (<i>SE</i>) [*]	0.61 (0.04)	0.51 (0.05)	0.70 (0.05)

^{*}
 $p < .05$.

^{**}
 $p < .01$.

^{***}
 $p < .001$.

Table 2
Prevalence of Dating Violence Victimization, by Gender of the Victim and Measure of Victimization

	Weight Status (%)			Perceived Weight (%)			Weight Perception Accuracy (%)		
	Normal	Overweight	Obese	About Right	Too Thin	Too Fat	Accurate	Underestimate	Overestimate
Boys (<i>n</i> = 881)									
Psychological									
Insulted	13.7	10.2	11.0	12.2	17.7	10.6	12.0	13.4	12.9
Sworn at	21.9	18.9	23.2	21.6	26.3	19.2	19.8	25.2	23.3
Threatened	5.0	3.9	3.4	3.8	7.7	4.4	3.7	5.2	8.7
Physical									
Pushed	11.4	9.4	6.7	10.8	12.7	7.0	9.2	10.4	12.3
Had something thrown at him or her	2.6	4.1	2.8	2.4	2.7	4.2	3.0	2.6	4.2
Any victimization									
Yes	26.4	25.5	33.0	27.0	31.1	27.2	26.4	30.8	24.0
No	73.6	74.5	67.0	73.0	68.9	72.8	73.6	69.2	76.0
Types of victimization									
None	73.6	74.5	67.0	73.0	68.9	72.8	73.6	69.2	76.0
Psychological only	14.6	14.5	24.4	16.0	18.3	17.3	15.8	19.4	10.9
Physical only/both	11.8	11.0	8.6	11.0	12.8	9.9	10.6	11.4	13.1
Total number of victimization acts (<i>SE</i>)	0.54 (0.08)	0.46 (0.07)	0.46 (0.06)	0.50 (0.07)	0.65 (0.17)	0.44 (0.08)	0.47 (0.06)	0.57 (0.09)	0.61 (0.25)
Girls (<i>n</i> = 1,102)									
Psychological									
Insulted	18.0	18.6	10.5	12.9	17.5	20.6	14.7	12.6	30.2**
Sworn at	37.4	36.6	36.0	31.5	34.2	43.3*	36.1	27.3	50.4*
Threatened	5.1	5.8	10.8	4.9	3.0	8.3	6.1	5.7	8.2
Physical									
Pushed	10.6	10.0	5.3	6.4	11.0	12.5	7.4	7.8	21.3**
Had something thrown at him or her	2.6	1.0	1.3	1.4	1.3	2.8	1.3	1.3	6.6*
Any victimization									
No	58.2	60.0	58.5	66.0	58.2	50.8	60.3	68.0	41.7

	Weight Status (%)				Perceived Weight (%)				Weight Perception Accuracy (%)		
	Normal	Overweight	Obese	About Right	Too Thin	Too Fat	Accurate	Underestimate	Overestimate		
Yes	41.8	40.0	41.5	34.0	41.8	49.2*	39.7	32.0	58.3**		
Types of victimization											
None	58.2	60.0	58.5	66.0	58.2	50.8	60.3	68.0	41.7		
Psychological only	30.2	30.2	36.2	27.6	30.9	35.4	32.3	24.3	32.7		
Physical only/both	11.6	9.8	5.3	6.4	10.9	13.8*	7.4	7.6	25.6***		
Total number of victimization acts (SE)	0.73 (0.07)	0.70 (0.08)	0.62 (0.12)	0.56 (0.08)	0.66 (0.10)	0.85 (0.05)***	0.64 (0.06)	0.54 (0.09)	1.14 (0.14)**		

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3
Adjusted Estimates for the Association of Weight Indices With Measures of Dating Violence Victimization, by Gender

	Type of Dating Violence Victimization						Total No. of Acts of Victimization Experienced	p Value
	Been a Victim of Dating Violence			Physical/Psychological vs. None				
	OR	95% CI		OR	95% CI			
Boys (n = 881)								
Weight status								
Normal	Referent		Referent	Referent		Referent		
Overweight	0.99	[0.53, 1.87]		0.93	[0.40, 2.14]	1.07	[0.47, 2.45]	.623
Obese	1.41	[0.70, 2.83]		1.83	[0.91, 3.67]	0.84	[0.36, 1.97]	.664
Perceived weight								
About right	Referent		Referent	Referent		Referent		
Too thin	1.21	[0.58, 2.51]		1.17	[0.51, 2.72]	1.27	[0.44, 3.66]	.433
Too fat	1.04	[0.54, 1.99]		1.05	[0.53, 2.08]	1.01	[0.40, 2.51]	.873
Weight perception accuracy								
Accurate	Referent		Referent	Referent		Referent		
Underestimate	1.28	[0.69, 2.37]		1.32	[0.65, 2.66]	1.21	[0.67, 2.20]	.379
Overestimate	0.97	[0.43, 2.19]		0.74	[0.31, 1.77]	1.37	[0.33, 5.59]	.449
Girls (n= 1,102)								
Weight status								
Normal	Referent		Referent	Referent		Referent		
Overweight	0.92	[0.55, 1.54]		0.95	[0.51, 1.78]	0.82	[0.44, 1.54]	.722
Obese	0.89	[0.43, 1.86]		1.11	[0.48, 2.55]	0.38	[0.17, 0.85]	.349
Perceived weight								
About right	Referent		Referent	Referent		Referent		
Too thin	1.37	[0.59, 3.17]		1.26	[0.56, 2.84]	1.90	[0.45, 8.02]	.536
Too fat	1.81	[1.17, 2.80]		1.61	[1.00, 2.60]	2.72	[1.40, 5.26]	.004
Weight perception accuracy								
Accurate	Referent		Referent	Referent		Referent		
Underestimate	0.70	[0.40, 1.23]		0.66	[0.39, 1.13]	0.90	[0.32, 2.54]	.326

	Type of Dating Violence Victimization						Total No. of Acts of Victimization Experienced
	Been a Victim of Dating Violence			Psychological vs. None			
	OR	95% CI		OR	95% CI		
Overestimate	2.16	[1.26, 3.71]		1.47	[0.85, 2.52]		
				OR	95% CI		<i>B(SE)</i>
							<i>p</i> Value
							.003

Note. Models control for family affluence, race/ethnicity, age, and family structure. Bolded estimates are significant at $p < .05$. OR = odds ratio; CI = confidence interval.

Table 4
Adjusted Associations of Weight Indices With Measures of Dating Violence Victimization, by Race/Ethnicity, for Girls

	Type of Dating Violence Victimization			Total No. of acts of Victimization Experienced		
	Been a Victim of Dating Violence		Psychological vs. None		Physical/Psychological vs. None	
	OR	95% CI	OR	95% CI	OR	p Value
White (<i>n</i> = 460)						
Weight status						
Overweight	0.72	[0.36, 1.46]	0.91	[0.44, 1.90]	0.19	[0.05, 0.75]
Obese	0.92	[0.37, 2.29]	1.18	[0.44, 3.18]	0.19	[0.05, 0.72]
Perceived weight						
Too thin	1.70	[0.59, 4.91]	1.68	[0.50, 5.67]	1.86	[0.34, 10.04]
Too fat	1.78	[1.14, 2.80]	1.49	[0.86, 2.56]	3.90	[1.51, 10.08]
Weight perception accuracy						
Underestimate	0.79	[0.37, 1.68]	0.79	[0.35, 1.78]	0.83	[0.32, 2.16]
Overestimate	2.34	[1.04, 5.25]	1.27	[0.52, 3.12]	11.61	[3.85, 34.97]
Black (<i>n</i> = 250)						
Weight status						
Overweight	0.87	[0.29, 2.60]	0.57	[0.10, 3.15]	1.38	[0.45, 4.22]
Obese	1.58	[0.71, 3.50]	1.88	[0.59, 5.99]	1.05	[0.42, 2.63]
Perceived weight						
Too thin	1.57	[0.55, 4.45]	1.61	[0.52, 4.93]	1.48	[0.36, 6.08]
Too fat	2.26	[1.01, 5.06]	2.22	[0.84, 5.81]	2.28	[0.98, 5.28]
Weight perceptions						
Underestimate	0.63	[0.18, 2.25]	0.58	[0.16, 2.14]	0.76	[0.16, 3.64]
Overestimate	1.99	[0.87, 4.54]	1.52	[0.38, 6.16]	2.58	[1.14, 5.84]
Hispanic (<i>n</i> = 333)						
Weight status						
Overweight	1.67	[1.16, 2.38]	1.93	[1.14, 3.28]	1.12	[0.66, 1.91]
Obese	0.43	[0.07, 2.43]	0.60	[0.10, 3.72]	0.10	[0.01, 1.11]
Perceived weight						

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	Type of Dating Violence Victimization						Total No. of acts of Victimization Experienced
	Been a Victim of Dating Violence		Psychological vs. None		Physical/Psychological vs. None		
	OR	95% CI	OR	95% CI	OR	95% CI	
Too thin	0.82	[0.20, 3.42]	0.53	[0.14, 1.93]	1.91	[0.12, 31.32]	.948
Too fat	1.42	[0.48, 4.27]	1.44	[0.50, 4.11]	1.39	[0.25, 7.79]	.662
Weight perception accuracy							
Underestimate	0.88	[0.35, 2.25]	0.63	[0.24, 1.66]	2.00	[0.20, 20.12]	.933
Overestimate	2.71	[0.91, 8.11]	2.16	[0.81, 5.73]	5.31	[0.68, 41.67]	.091

Note. Models control for family affluence, age, and family structure. Referent groups: weight status (normal), perceived weight (about right), and weight perception accuracy (accurate). Bolded estimates are significant at $p < .017$. OR = odds ratio; CI = confidence interval.