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The Role of Body Size in Mate Selection among African American Young Adults

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Abstract

A profusion of studies have demonstrated that body size is a major factor in mate selection for both men and women. The particular role played by weight, however, has been subject to some debate, particularly with respect to the types of body sizes deemed most attractive, and scholars have questioned the degree to which body size preferences are constant across groups. In this paper, we drew from two perspectives on this issue, Sexual Strategies Theory and what we termed the cultural variability perspective, and used survey data to examine how body size was associated with both casual dating and serious romantic relationships. We used a United States sample of 386 African American adolescents and young adults between ages 16 and 21, living in the Midwest and Southeast, and who were enrolled in either high school or college. Results showed that overweight women were more likely to report casually dating than women in the thinnest weight category. Body size was not related to dating status among men. Among women, the results suggest stronger support for the cultural variability argument than for Sexual Strategies Theory. Potential explanations for these findings are discussed.

Keywords

Dating; Body Weight; Evolutionary psychology; Social psychology; Race

Introduction

Research on the association between body size and romantic relationships has long been of interest to feminist scholars because of the deeply gendered nature of this association (Bordo 1993; Smith et al. 1990). Among high school and college age women living in the United States, physical attractiveness is often seen as synonymous with extreme slenderness and as a necessary precursor to romantic relationships (Paxton et al. 2005). The importance of a slender physique for men has received far less attention. One group widely thought to be an

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exception to these patterns, however, is African Americans, particularly African American women, to whom a different set of body size standards may apply (Lovejoy 2001). Research with African Americans across a broad age spectrum suggests they are relatively unconcerned about weight as an element of attractiveness and consider a wide variety of body styles to be attractive (Freedman et al. 2004; Wade and DiMaria 2003). Further, some evidence suggests African Americans consider very thin body styles to be unattractive (Ali et al. 2013). Much of this research, however, has focused on attractiveness preferences only and has compared African Americans' preferences to those of other groups. Very few papers have looked at African Americans as a free standing group or examined the association between body size and dating status itself. Further, the association between body size and dating status among African American men has received almost no attention. In this paper, we examine the body size and dating association among African American women and men attending either high school or college. We also examine two types of dating statuses: casual dating and serious relationships (i.e., stable romantic partnerships in which the partners are unmarried). In building our arguments, we rely primarily on literature conducted with U.S. samples of high school and college students. Where samples differ, we note it specifically in the text.

Better understanding of the dynamics of body size and romantic relationship status among African Americans is important because it adds to knowledge about how gender and weight influence romantic status. Also, dating patterns formed in young adulthood tend to presage patterns across the adult life course. Thus, work in this area can contribute to better understanding the dynamics of romance, dating, and relationships generally and among African Americans specifically.

The study of body size and romantic relationships is deeply intertwined with ideas about gender and gender roles (Beauboeuf-Lafontant 2003; Lovejoy 2001) and has become even more so as evolutionary theories of sexual attraction such as Sexual Strategies Theory (Buss 1994, 1998; Buss and Schmitt 1993) have become popular. Theories such as Sexual Strategies Theory posit a biological and evolutionary basis for sexual and romantic attraction and emphasize the consistency of weight standards for physical attractiveness across cultures, nations, and groups (Buss et al. 1990). At the same time, Sexual Strategies Theory has also been criticized for oversimplifying the association between biology and attraction and doing so in ways that reify traditional gender roles (Eagly and Wood 2013). Theorists working in Sexual Strategies Theory and related traditions have acknowledged that culture and other factors may bring about some variation in attractiveness standards but have yet to incorporate this into their theoretical models (Buss et al. 1990).

African Americans are a group for whom variation in attractiveness preferences has been well documented (Jackson and McGill 1996; Thompson et al. 1996) and some scholars have suggested the relative unimportance of body weight and the greater flexibility in weight attractiveness standards shown by African American men stems not from biology but from a unique culture and history (Ali et al. 2013; Lovejoy 2001). This literature does not represent a formal theory but does constitute a viewpoint about body size and attractiveness recognized and applied by many researchers (Jackson and Mc-Gill 1996; Thompson et al.

1996; Webb et al. 2004). For this reason, we term this literature the “cultural variability perspective”.

In this paper, we analyze the association between body size and relationship status among a cohort of African American high school and college students. We consider the predictions of both Sexual Strategies Theory and the cultural variability perspective and offer hypotheses derived from both. Our goal is not to pit these theories against one another but rather to produce a more nuanced and specific analysis of the way body size is associated with dating among a community sample of African American young adults. We begin by discussing the links between our research question and gender roles and gender ideology among African Americans. From there we examine the literature on body size, attractiveness, and dating from both Sexual Strategies Theory and the cultural variability perspective and offer a set of hypotheses drawn from these literatures.

Gendered Ideology and the Gendered Division of Labor among African Americans

Throughout U.S. history, African Americans and their enslaved ancestors have countered the stereotypical pattern of gender roles, that of a nuclear family in which the husband works outside the home while the wife bears and raises children and maintains the household (Collins 1990; Lawrence-Webb et al. 2004; Lovejoy 2001). Instead, African Americans lived within a system of gender arrangements reflecting the social and economic structure of their lives. Enslaved women, for example, were always identified first as workers and only secondarily as wives and mothers (Lawrence-Webb et al. 2004). Enslaved men were not permitted to act as either protector or provider since both roles threatened the authority of their owners. These dynamics continued in the decades following emancipation, particularly after reconstruction, when it was often much easier for African American women to find stable work than for their husbands (Staples 2007). This was especially true among African American men who were literate or who had building or other skills as they were not permitted to compete with Caucasians for highly paid positions.

The interaction of race and gender combined with the legacy of the slave system to reshape gender relations among African Americans and the impacts of this system are still visible today (McDaniel et al. 2011; Moras et al. 2007). African American men and women experience greater economic equality than any other racial group in the United States with African American women earning 90 cents for every dollar earned by African American men (Nobles 2007). Over the past 70 years, African American women have also completed college at higher numbers than African American men (McDaniel et al. 2011). In the year 2000, for example, African American women earned 66 % of all bachelor’s degrees, 70 % of all Masters degrees, and 64 % of all doctoral degrees given to African Americans (Chapman 2007). In addition, there is evidence the economic position of African American women is more stable than that of African American men, even for those with equivalent credentials (Kane 2000). The cumulative result of these historical and demographic forces is such that African American women are much less likely to be economically dependent on their husbands or male partners than are Caucasian women (Kane 2000; Nobles 2007).

The current and historic economic equity between African American men and women is also visible in patterns of gender ideology (Davis and Greenstein 2009). In particular, support for women in the workplace and awareness of gender discrimination is higher among African American men than among men in other racial or ethnic groups in the United States (Hunter and Sellers 1998). Further, the gender gap in these attitudes among African Americans is smaller than that found among Caucasian Americans (Scott Carter et al. 2009).

Taken as a whole, the present state of economic and social capital held by African American women suggests they should command considerable resources and it would not be surprising if this altered the bases upon which men evaluated their attractiveness. At the same time, however, there are areas of African American life where traditional gender roles and ideologies prevail (Davis and Greenstein 2009). In particular, social arenas such as the church encourage conformity with more traditional ideals of appropriate gender relations (Hunter and Sellers 1998). Some scholars have also reported many African American women experience a tension between being independent and supporting their families and the need to “elevate and honor manhood” (Burton and Tucker 2009, p. 142). Such factors may curb the impact of African American women’s economic power. Finally, the higher rates of incarceration and death among African American men has skewed the gender ratio such that there are approximately 80 African American men available for every 100 African American women (Chapman 2007). This could lead to competition among women for the relatively few eligible men and again limit the impact of women’s economic power. Thus, while some elements of gender relations and ideologies appear to empower African American women, others may work in the opposite direction.

We next assess attractiveness and dating literatures from Sexual Strategies Theory and the cultural variability perspective. We consider the degree to which each perspective combines with gender stratification and gender ideology among African Americans and develop hypotheses about the association between body size and dating status. Given our populations of interest, we focus on literature looking at African Americans of high school or college age and also assess evidence for the attractiveness preferences of both men and women.

Sexual Strategies Theory

One of the most widely used theoretical frameworks for understanding the association between physical appearance and mating is Sexual Strategies Theory (Buss 1998). Sexual Strategies Theory hypothesizes men and women form attractions and act on them with the goal of maximizing the likelihood they will produce offspring that can survive into adulthood. The theory emphasizes the biological and evolutionary roots of traditional gender roles, highlighting ways men and women differ in their priorities, behaviors, and bases of attraction (Buss and Schmitt 2011).

As a “general” theory of romantic and sexual attraction, Sexual Strategies Theory makes claims that are intended to be applied across cultures and thus are not specific to any particular group (Smiler 2011). Perhaps for this reason, very few studies have assessed its predictions among African Americans in particular and we are aware of no studies assessing Sexual Strategies Theory’s predictions about attractiveness among high school students of

any race. Given the paucity of papers focusing on our populations of interest, we will review Sexual Strategies Theory's general predictions about the role of weight in attractiveness ratings and discuss the extent to which those predictions may be expected to apply to African American high school and college students.

Sexual Strategies Theory argues body weight is a crucial component of attractiveness because it signals both health and fertility and Sexual Strategies Theory researchers cite work done across both time and culture to support this finding (Buss et al. 2001; Furman and Shaffer 2003; Grogan 2007). Men place greater emphasis on attractiveness and body size, the theory argues, because they maximize their reproductive advantage by mating with as many healthy and fertile women as possible (Gangestad and Scheyd 2005) and weight is a valid and visible indicator of both. Sexual Strategies Theory does not formally specify the particular body size range men should prefer but instead states it would be the range most strongly associated with health and reproductive fitness. A review of studies on physical attractiveness and health conducted in a range of western nations suggest that among women, a "low normal" body size, one that is thin but not underweight is most strongly correlated with health and fertility and thus should be most attractive (Weeden and Sabini 2005). Almost no Sexual Strategies Theory studies have explicitly examined African American men and their preferences or dating decisions. One exception is a study examining preferred waist-to-hip ratio among a group of African American male college students; it concluded average sized women with a low waist to hip ratio were most attractive (Singh 1994). A review of literature using Sexual Strategies Theory to examine attractiveness preferences in general noted African Americans had body size preferences similar to other U.S. racial groups (Singh and Singh 2011).

Sexual strategies theory hypothesizes a more limited role for men's weight in the attractiveness standards of women (Buss 1994). Women carry and nurse their offspring and so are hypothesized to emphasize both reproductive fitness and indicators of a man's ability to provide for and protect a partner and children (Buss and Schmitt 2011). Nonetheless, weight is an important signal of a man's health and Sexual Strategies Theory researchers do acknowledge it is relevant to a man's attractiveness (Singh 1995). No Sexual Strategies Theory research has explicitly examined the preferences of African American women but a review of research on the association between male attractiveness and health among western societies noted that both very thin and very overweight men are considered unattractive. This suggests the ideal body size would fall in the "high normal" range, neither very thin nor overweight.

Sexual Strategies Theory also draws attention to the importance of context when making predictions about the role of body weight in definitions of attractiveness (Buss and Schmitt 2011). In particular, Sexual Strategies Theory hypothesizes body weight should be most important when individuals are looking for short term mates where information is limited and there is no expectation of a permanent relationship and will be less important to long term serious relationships (Buss 1994), a contention that has been tested among U.S. undergraduates and found support (Confer et al. 2010). To our knowledge, it has never been examined among African American undergraduates or in samples including high school students.

As discussed here, Sexual Strategies Theory literature has generated a substantial framework for studying the bases of attractiveness. Sexual Strategies Theory researchers have acknowledged the potential that local conditions can influence attractiveness standards (Buss and Schmitt 2011) but have not studied the phenomena in depth nor incorporated it into their overall theoretical model. Thus, our interpretation is that Sexual Strategies Theory's general arguments should apply to African Americans. This suggests the following hypotheses:

H1: Women in the low normal body size category will be more likely to casually date or be in a serious relationship relative to women in the high normal or overweight, body size categories.

H2: Men in the high normal body size category will be more likely to casually date or be in a serious relationship relative to men in the low normal body size category.

H3: Among both men and women, the association between body size and dating status should be stronger for casual dating than for serious romantic relationships.

Body Weight and Partner Preferences among African Americans: Evidence of Cultural Variability?

Although Sexual Strategies Theory is one of the most widely applied theories of attraction and mate selection, it has also been the subject of critique (Pedersen et al. 2011; Smith and Konik 2011). The criticisms most relevant to this study are that it has received little testing outside of undergraduate populations in the U.S. and Europe or with members of racial minorities (Smiler 2011). The substantial literature documenting body size preferences among African Americans makes them a particularly important group to consider. In this section, we review this literature focusing on those studies with African American participants attending either high school or college; from this we derive a hypothesis.

Based on our review, the most extensive research in this area has looked at college students and primarily examined the female body size African American men find most attractive. When asked about this ideal, African American undergraduate males tend to select body sizes in the "high normal" range. For example, three studies using 9-point figure rating scales used to rate "ideal" women reported preferences for bodies that correspond to mid- to high normal weight range (BMI of 21 to 25; Greenberg and LaPorte 1996; Jackson and McGill 1996; Patel and Gray 2001). Three other studies used alternate scales but also found African American college men identified female bodies that were "average," "medium," or "moderate" in size as most attractive (Greenberg and LaPorte 1996; Rosenblum and Lewis 1999; Webb et al. 2004). Finally, one study concluded African American men found overweight female bodies most attractive (Harris et al. 1991).

Two papers have looked at the preferences of African American college women regarding the body size of the men they date. One reported that African American women preferred a male body style that was "slightly thin" to "average" and specified a man who was 6' 2" in height and 177 pounds as "ideal" (Jackson and McGill 1996). Women using a 9-point rating scale to specify the male figure they found most attractive chose an average of 5.19 out of 9 which again corresponds to a body that is neither thin nor overweight (Patel and Gray 2001).

These studies suggest that undergraduate college women prize a male body that falls in the “high normal” range.

Taken as a whole, research on the body size preferences of college age African American men and women suggest that both genders consider bodies that are “medium” or “average” and neither overweight nor extremely thin to be ideal. For women’s preferences about men, this is consistent with the expectations of Sexual Strategies Theory. For men’s preferences about women, however, this literature differs from Sexual Strategies Theory’s predictions.

Only one paper has examined body size preferences among high school aged African Americans and this paper focused only on the preferences of males (Thompson et al. 1996). This study also employed a 9-point figure rating scale and determined that the mean ideal female body size was 3.78 which corresponds to a body in the “high normal” range – neither very thin nor overweight. We are aware of no research that has examined what body size high school age African American women believe is ideal in the men they date.

A second arena of research has looked specifically at the association between weight status and dating among African American high school students and focused largely on the dating statuses of women. This work has produced mixed results. One study focused solely on the dating status of African American high school women and reported no association between obesity and dating (Ali et al. 2014). Importantly, though, this study only compared obese to non-obese women and did not look at ranges of body size (e.g., low versus high normal). Two other studies examined associations between weight and dating for multi-racial samples of U.S. high school students (Cawley 2001; Halpern et al. 2005). Both found, for girls of all racial groups, the probability of dating dropped as body size increased. The one study to date that has examined the association between body size and dating among African American high school males found an insignificant association (Cawley 2001).

Taking these findings as a whole, the literature suggests there is evidence both high school and college men hold attractiveness preferences about women that suggest a high normal or overweight body size would be considered ideal. Consequently we anticipate that African American women in the “high normal” or overweight body size categories will be the most likely to casually date and be involved in serious relationships. The limited research available on the preferences of African American women about men suggests results consistent with the expectations of Sexual Strategies Theory. Thus, with respect to this literature, we offer only a hypothesis for women.

H4: Women in the high normal or overweight body size categories will be more likely to casually date or be in a serious relationship relative to women in the low normal body size category.

High School versus College

As discussed above, high school and college students have been the subjects of most research on dating and body size. Sexual Strategies Theory predicts that low normal body size women and high normal body size men should be most attractive in all cultural contexts (Buss et al. 1990) and thus the theory should not be expected to predict differences between

high school and college. Research from the cultural variability perspective has been done in both high school and college populations (Jackson and McGill 1996; Webb et al. 2004) but no consensus has emerged regarding expected differences between these groups. Other research, however, suggests that body size should be a more important factor in high school dating than in college. First, the relatively recent experience of puberty makes bodies more salient during the high school years (Pearce et al. 2002). A panel study following German high school and college aged adolescents over 8 years suggests that during the high school years concerns with status are paramount when selecting a romantic partner (Seiffge-Krenke 2003). As individuals leave high school and enter college, in contrast, research from both Germany and the U.S. suggest that romantic relationships take on a more pragmatic tone which should lessen the focus on physical attractiveness (Milbrath et al. 2009; Seiffge-Krenke 2003). These patterns suggest that the association between body size and dating should be especially strong during high school, among both males and females.

The unique economic status of African American men and women adds an additional layer of complexity to this association particularly, we argue, in the college setting (Collins 1990; Kane 2000; Lovejoy 2001). Given the well documented positive association between education and income, African American collegiate women should be in considerable demand and thus weight might be less strongly associated with their romantic prospects (Nobles 2007). On the other hand, the gender ratio in collegiate settings, especially among African Americans, is skewed such that there are many more African American women attending college than African American men (Chapman 2007). This could increase competition among women for the available pool of men and thus would suggest a woman's weight may continue to be an important element of her romantic attractiveness.

Among African American college men, in contrast, we expect that weight may not be related to romantic status for two reasons. First, the skewed gender ratio among collegiate African Americans acts in favor of men. Within the context of a college dating arena, they would be the "rarer" group and thus should have more dating opportunities regardless of weight. Second, they should be attractive both to women in college and women not in college, thus we expect their economic prospects would balance out their weight status.

Nothing in the literature on Sexual Strategies Theory or the cultural variability perspective leads to specific hypotheses regarding differences between high school and college dating contexts and thus we do not offer any formal hypotheses. However, given the considerable evidence suggesting that body size may differ in its importance in these two contexts and evidence that the importance of body size evolves as individuals mature, we assess differences between high school and college respondents.

Method

Sample

Our research questions are addressed using data from the Family and Community Health Study (FACHS). Begun in 1997, FACHS is a multi-wave, multi-site panel study of over 800 African American children and their parents (Simons et al. 2002). The study was designed to assess how interpersonal, family and neighborhood contexts influence the health and well-

being of African American youth and their families. Most research on the effects of social context on African American parents and children has centered on families living in the impoverished inner core of large metropolitan areas, a focus that fails to acknowledge the diversity of African American families (Simons et al. 2011). Towards that end, FACHS families were recruited from neighborhoods in both Iowa and Georgia that varied on racial composition (percent of African American residents) and economic status (percent of families with children living below the poverty line).

Neighborhoods qualifying for FACHS recruitment were identified using 1990 census block groups. In Iowa, all the qualifying block groups were located in and around two mid-size communities: Waterloo (a Metropolitan Statistical Area of 164,000) and Des Moines (a Metropolitan Statistical Area of 480,000). In Georgia respondents were recruited from communities in suburban Atlanta (a Metropolitan Statistical Area of 5 million), Athens (a Metropolitan Statistical Area of 166,000), and from several towns in central and eastern counties in the state. Once block groups were determined, households were randomly selected from a sampling frame consisting of rosters of fifth graders in the public school systems. Research staff contacted parents to determine their interest in participating in the study. Candidates who declined were removed from the rosters, and other households were randomly selected until the required number of households from each block group was recruited (Simons et al. 2002). Eighty percent of the contacted families agreed to participate.

Before data collection began, researchers conducted focus groups with African American women living in neighborhoods that were similar to those of the study respondents. These focus groups reviewed and critiqued the survey instruments and suggested modifications for items they viewed to be culturally insensitive, intrusive, or unclear. Instruments were also pilot tested with 16 families prior to beginning data collection.

Data were collected primarily during home visits conducted by trained field interviewers though interviewers also met respondents at locations such as libraries or community centers if respondents requested it. To enhance rapport and understanding, all interviewers were African American. In all waves, respondents were interviewed without parents present and entered their answers using a private key pad. For all respondents, interviewers read each question aloud in order to account for differences in respondents' reading comprehension.

This analysis uses data from wave 4 of FACHS which was collected during 2005 and 2006. This was the first wave in which both a measure of weight and questions regarding respondents' romantic activities were available. Approximately 700 youth in total participated in Wave 4. Five percent of these cases were excluded due to missing data on key independent or dependent variables or because respondents were already married and thus not involved in the dating market. We also excluded respondents who were classified as underweight as underweight does not fit in the category of "low normal" and the number of respondents was too small to create its own category. Respondents who described themselves as "homosexual" or "mostly homosexual" were also excluded as all of our hypotheses are based on theories and literature that assume heterosexual attraction. Finally, we included only respondents who were enrolled in high school or college. We identified high school and college respondents with two questions. All respondents were asked "Are

you currently in school or will you be attending school during the next school year.” Those who answered “yes” were asked “What grade are you currently enrolled in?” Response options varied from 0 to 16 with grade 12 corresponding to senior in high school and grade 16 corresponding to senior in college. Those in grades 10–12 were coded as “high school” and those in grades 13–16 were coded as “college”. Twenty-five percent of respondents were in high school ($N=155$) and 75 % in college ($N=231$). This brought the final sample size to 386; 223 women and 163 men (58 % female). Consistent with previous research (Chapman 2007; McDaniel et al. 2011), women were significantly more likely to be enrolled in college (65.92 %; $N=147$) than were men (51.53 %; $N=84$); (Chi Sq=8.11, $df=1$, $p<.01$).

Table 1 shows descriptive statistics for the demographic characteristics of this sample: age, perceived body size, height, weight, and BMI. We calculated BMI by dividing weight in pounds (lbs) by height in inches (in) squared and multiplying the result by 703 (Centers for Disease Control 2004). We used a two-way MANOVA to test for gender and education (high school versus college) differences as well as an interaction between gender and education. We excluded age from the MANOVA, however, since age differences are accounted for by including education as an independent variable. Perceived body size did not differ significantly across the comparison groups nor did BMI. There were significant differences between men and women in both between height and weight with men being significantly taller and heavier than women.

Measures

Dating Status—To assess their dating status, respondents were asked, “What best describes your current relationship status?” The original variable offered eight response options: “I am not dating” (1); “I date, but do not have a steady, romantic relationship with one person” (2); “I date one person on a regular basis but can still see other people” (3); “I am in a steady, committed romantic relationship but not engaged” (4); “I am engaged to be married (and don’t live with my fiancé)” (5); “I live with my romantic partner but we do not currently have plans to marry” (6); “I live with my romantic partner and we are engaged to marry” (7); “I am married” (8). We recoded this measure into three categories of romantic involvement: “not dating” (response option 1 above); “casually dating” (response options 2 and 3); “serious relationship” (response options 4–7). As noted earlier, we excluded individuals who described their relationship status as married. The final recoded romantic status variable had three categories: 1= not dating, 2 = casually dating, and 3 = in a serious relationship. In the analytic sample, 34 % of respondents said they were not dating ($N=130$), 26 % said they were casually dating ($N=101$), and 40 % said they were in a serious relationship ($N=155$). Men were more likely to report they were not dating or casually dating while women were more likely to report being in a serious relationship (Chi-Sq=8.66, $df=2$, $p<.05$).

Self-Assessed Body Size—Our measure of body size is based on a self-assessment using the 9-point Figural Rating Scale (FRS; Stunkard et al. 1983). Respondents viewed the figures and chose the one that most accurately portrayed their own body. Women viewed female figures and men viewed male figures. Although these figures are not explicitly African American in appearance, they have been widely used in studies with large

proportions of African American respondents and have demonstrated validity as a measure for self-assessments of weight (Bulik et al. 2001; Riley et al. 1998; Thompson and Altabe 1991). Specific assessments of the FRS' validity as a tool for African Americans shows that they may slightly underreport their body size; Caucasians, in contrast, tend to slightly over report their body size (Bhuiyan et al. 2003).

We use self-assessments of body size rather than a measure such as BMI for several reasons. First, indicators of weight status such as BMI or body weight do not necessarily capture a person's overall physique, body shape, or appearance (Deurenberg and Deurenberg-Yap 2003) and thus may be of less use when weight is being assessed as an element of physical attractiveness. Second, the principle of reflected appraisals suggests self-ratings of overall body size should incorporate social feedback regarding the way individuals are perceived by others, a crucial component of attractiveness (Stone 1962). Third, research on the validity of body size assessments suggests that they correlate with weight status and there is no evidence that the evaluations of African American differ in their accuracy relative to other groups (Bhuiyan et al. 2003). Finally, as would be expected, the perceived body measure is strongly correlated with BMI for both men ($r=.635$, $p<.01$) and women ($r=.78$, $p<.01$) suggesting respondents' perceived body size assessments are capturing a valid element of body size. For all these reasons, we believe self-assessed body size is a valid method for making weight assessments and may even be preferable when examining associations between weight and romantic involvement.

To create our measure of perceived weight, we drew from the literature on Sexual Strategies Theory and on African American male and female body ideals to categorize respondents' FRS ratings. For both men and women, we created four categories: low normal, high normal, overweight, and obese. There is no standard association between the FRS body size rating scale and categorical body sizes. However, several studies have assessed the FRS against other standards, including body mass index (Bhuiyan et al. 2003; Bulik et al. 2001). We relied on this literature, as well as visual inspection of the figures to create the body size categories for this measure.

As noted earlier, we excluded respondents who chose Figure 1 (the thinnest figure) because this figure corresponds to an underweight body size (Bhuiyan et al. 2003; Bulik et al. 2001). For female respondents, the body size categories were: low normal (figures 2 and 3); high normal (figure 4); overweight (figures 5 and 6); and obese (figures 7, 8, and 9). For men the categories were low normal (figures 2 and 3); high normal (figures 4 and 5); overweight (figure 6); and obese (figures 7, 8, and 9). For both men and women, all body size variables (i.e., low normal, high normal, etc.) were coded as dichotomous indicators with the low normal category as the reference. In the full analytic sample, 19 % of respondents were classified as low normal ($N=74$), 41 % as high normal ($N=159$), 28 % as overweight ($N=106$), and 12 % as obese ($N=47$). Men were more likely to classify themselves as low or high normal weight whereas women were more likely to classify themselves as overweight ($\text{Chi-Sq}=23.57$, $\text{df}=3$, $p<.001$).

High School—In order to examine differences between high school and college respondents, we created a dichotomous variable in which respondents attending high school

were coded at 1 and those attending college were coded as 0. (See the data section for a discussion of how high school and college students were identified within the sample.)

Results

Our analysis focuses on the within gender association between body size and dating status across two dating contexts: high school and college. The distribution of dating status and body size across the four combinations of gender and education are shown in Table 2. The top half of the table compares high school women to men and college women to men. We used Chi Square tests of association to evaluate the bivariate relationships. The association between gender and dating activity was significant among college students only. College men were more likely to report not dating at all or casual dating and women more likely to report a serious relationship. The association between gender and self-assessed body size category was significant among both high school and college students and the patterns were the same; men were more likely to place themselves in the low and high normal body size categories, women were more likely to place themselves in the overweight category.

The bottom half of Table 2 compares women in high school to women in college and men in high school to men in college. The association between school enrollment and dating activity was marginally significant at $p < .10$ for both women and men. Both female and male college students were more likely to say they were not dating while high school students were more likely to report being in a serious relationship. There was no evidence of significant differences in body size between high school and college women or high school and college men.

Table 3 shows bivariate correlations among dating status, body size, and high school status. Coefficients for men are above the diagonal and those for women are below. Among both women and men, dating status is positively associated with enrollment in high school. Neither the body size nor the high school measures were significantly associated with dating status for women or for men.

Multivariate Analyses

Our multivariate analysis examined the association between perceived body size and three types of dating statuses: not dating (the reference), casually dating, and in a serious relationship. We ran multinomial logit models that regressed dating status on body size category and education (high school versus college). Multinomial logit models are appropriate when the dependent variable is nominal (Long and Freese 2003). In the case of dating categories, respondents can move in and between these different dating statuses without regard to any particular order (for example, it is possible to move from not dating to serious relationship or vice versa without necessarily going through casually dating). Given this, the dependent variable qualified as nominal and thus multinomial regression was the most suitable method. We ran models for men and women separately because both Sexual Strategies Theory and the cultural variability perspective suggest that the association between body size and dating status differ for men and women (Buss 1998; Jackson and

McGill 1996). We used interaction terms to distinguish between high school and college respondents within genders.

All coefficients are expressed as odds ratios and can be interpreted as the factor change in odds for a one unit increase in the independent variable. A coefficient of 1 indicates zero change in the odds that the dependent variable will occur (e.g., the odds of casually dating). Coefficients above 1.00 indicate increased odds whereas coefficients below 1.00 indicate decreased odds. Multinomial logit expresses odds relative to a reference category in the dependent variable; for example, the odds of casually dating versus not dating at all. For the weight categories, the low normal weight category is always used as the reference. Thus, all weight coefficients represent the change in odds of membership in the dating category versus an alternative, relative to the odds of a low normal respondent being in that same dating category, holding all other variables constant.

Results for the association between body size category and dating when weight is measured by respondents' self-assessment of their body size are shown in Table 4. The models on the top half of the table are for women and those on the bottom half are for men. Within each model we report the probability of three possible dating outcomes: casually dating versus not dating at all, being in a serious relationship versus not dating at all, and being in a serious relationship versus casually dating. We will briefly describe the pattern of results and then review the specific hypotheses. Turning first to the results for women, Model 1 shows the coefficients for the association between body size categories and dating status and controlling for high school versus college enrollment. There was one significant association; being overweight increased the odds of casually dating versus not dating at all for women. Specifically, an overweight woman was 3.7 times more likely to be casually dating (versus not dating at all) than low normal weight women, holding all other variables constant. The coefficient for high normal women was similar in magnitude but was significant only at $p < .10$. Also, relative to women in college, women in high school were over twice as likely to be in a serious relationship versus not dating at all.

Model 2 steps in interaction terms that assess whether body size is related to dating status differently for women in high school than in college. These interactions were created by multiplying each body size category by the high school term. With the interaction terms in the model, the main effect coefficients can be interpreted as the association between self-assessed body size and dating for college women. After the interaction terms were added, the coefficient for overweight women and the probability of casually dating versus not dating at all lost significance. However, obese college women were less likely than low normal weight women to be in a serious relationship (versus not dating at all). The significant coefficient for obese women in college showed that being obese lowered the odds of being in a serious relationship (versus not dating at all). Specifically, the odds of a low normal weight woman being in a serious relationship were 4.76 times that of an obese college woman (1.00/.21). The interaction terms shows that being obese and female in high school increases the odds of being in a serious relationship versus not dating at all. This coefficient, however, should be interpreted with caution due to the small number of high school women who classified themselves as obese.

The results for men (Model 3) showed no associations between self-assessed body size and the odds of dating. However, the significant coefficient for high school in Model 3 indicates that being in high school significantly increased the odds that a man would be in a serious relationship versus not dating at all. Model 4 stepped in the interactions between high school and self-assessed body size. None of these coefficients were significant.

Turning now to our specific hypotheses, we first assess those drawn from Sexual Strategies Theory, Hypotheses 1, 2, and 3. Hypothesis 1 stated that women in the low normal body size category will be more likely to casually date or be in a serious relationship relative to women in the high normal body size category. This hypothesis would be supported if the coefficients for body size shown in Model 1 were negative and significant as this would mean that the odds of dating were higher for women in the low normal body size category. The hypothesis was not supported; though there are some negative coefficients none of them approached significance suggesting that women in the low normal body size category were not at an advantage with respect to casual dating or serious relationships.

The second hypothesis predicted that men in the high normal body size category would be more likely to casually date or be in a serious relationship relative to men in the low normal body size category. This hypothesis would be supported if the coefficients for high normal body size in Model 3 were significant and positive. This hypothesis was not supported. Men in the high normal body size category were more likely to casually date relative to not dating at all, however the association was significant only at the $p < .10$ level. No other body size coefficients were significant.

Hypothesis 3 applied to both men and women and predicted the association between body size and dating status would be stronger for casual dating than for serious romantic relationships. This hypothesis was tested in Models 1 (for women) and 3 (for men). Support for this hypothesis would be indicated if the coefficients for the odds of casually dating versus not dating at all were significant but those for serious relationships versus not dating at all were not. There was no support for this prediction. Among women, significant body size coefficients were found for both casual dating (Model 1) and serious relationships (Model 2). Among men, no body size coefficients attained significance.

We derived Hypothesis 4 from the cultural variability perspective. This hypothesis stated that women in the high normal or overweight categories would be more likely to casually date or be in a serious relationship than women in the low normal body size category. Support for this hypothesis would be indicated if the coefficients for high normal and overweight categories in Model 1 were significant and positive. This hypothesis received support. Model 1 shows that overweight women were significantly more likely to casually date (versus not dating at all) when compared with women in the low normal body size category. High normal women showed the same pattern, though the coefficient was significant only at $p < .10$. There was no specific cultural variability hypothesis for men because the limited literature on attractive preferences of African American women suggested predictions that were the same as those generated by Sexual Strategies Theory.

Discussion

This study sought to examine how the body size of African American high school and college women and men was associated with their involvement in casual dating and serious relationships. Taking these results as a whole, we found limited support for Sexual Strategies Theory among men. The results for women, in contrast, support the cultural variability perspective. Overweight women were more likely to casually date than were their low normal weight peers. Further, there was no instance in which high normal or overweight women were disadvantaged on the dating market relative to low normal weight women. This pattern is consistent with prior research showing African-American high school and college men report finding heavier female bodies attractive (Harris et al. 1991; Thompson et al. 1996) and suggests very thin African American women may be at a disadvantage with respect to dating. Given that overweight is associated with poorer health (Boggs et al. 2011; Huxley et al. 2010; Lumeng and Saltiel 2011), these results run counter to what would be predicted by Sexual Strategies Theory. Thus, while past research indicates that Caucasians' beauty standards for women conform, in large measure, to the predictions of Sexual Strategies Theory (Buss 1998), these results suggest that this may not be the case among African Americans. This highlights the importance of contextual factors for understanding both preferences and behavior. What then might explain the lack of support for Sexual Strategies Theory when assessing the dating and relationship status of women?

There are a number of explanations that could explain this pattern. Anthropologists have documented cross-cultural differences in perceptions of health and attractiveness; one review, for example, documented examples of variation across Europe, Asia, the Middle East, African and Australia (Miller and Pumariega 2001). These variations are usually seen as rooted in the socioeconomic conditions of a society (Anderson et al. 1992). In nations including Egypt, Malaysia, and Samoa, for example, body fat is often perceived as an indicator of economic success, health, and sexual capacity (Ghannam 1997; McGarvey 1991; Swami et al. 2006). In these cultures, where most people are poor, there is often a positive relationship between increased socioeconomic status and body weight as only high status individuals are able to put on weight. Supporting this idea, a cross-cultural investigation of 62 groups from the Human Relations Area File found that "plump" women were considered attractive in societies in which food supplies are unreliable (Anderson et al. 1992). Further, findings from laboratory studies conducted in the U.S. and the U.K. indicate that undergraduate men who feel either hungry or poor are more likely to prefer heavier women than do satiated or rich-feeling men (Nelson and Morrison 2005; Swami and Tovée 2006).

While this explanation for cultural differences in mate preferences is intriguing, it does not explain why heavier African American women are advantaged on the dating market, as overweight women are not rare within the African American community (Ogden et al. 2010). Further, there is no evidence that African Americans consider overweight to be an indicator of either high status or health. Thus the traditional anthropological explanation for a cultural group's preference for overweight women does not seem to apply to contemporary African Americans.

A second argument that might explain these results is drawn from evolutionary theory. Natural selection, in response to regional differences in environmental pressures (e.g., availability of food, climate), may cause the indicators of health and reproductive success to differ across cultural groups (Ferguson et al. 2011). Thus because of long-term regional differences in living conditions, men in one cultural group may have evolved to prefer elements of the female physique that differ from what is preferred in another group. Using this explanation, African Americans continue to be attracted to women who are heavier than the Caucasian ideal because of innate preferences that evolved over thousands of years. The trouble with this argument is that history indicates beauty standards have considerable diversity across time with thinner bodies moving in and out of fashion within a single society, a trend documented in both the United States and France (Stearns 1999). It is unlikely that such a change in beauty standards could be the result of evolutionary changes as natural selection would require thousands of years to accomplish such a shift.

In our view the most promising explanations for the particular findings we report here are those that integrate evolutionary arguments with theories grounded in socialization, social construction, and social structure (Eagly and Wood 2011, 2013; Liesen 2013). Such approaches acknowledge evolutionary processes but also emphasize the evolved capacity of human beings to craft creative and innovative responses to changing structural, biological or cultural circumstances. Thus, men and women form attractions in ways that reflect their current culture and socialization as well as their evolutionary past. How would such a model approach the questions in this paper? Biosocial constructionist approaches to dating and mate selection would point to social structural conditions that may mediate the pathways documented by evolutionary psychology; chief among these are gender roles and the gendered division of labor, the very factors that have characterized the lives of African American men and women (Staples 2007; Staples and Johnson 1993). Thus, one possibility for this pattern is that the greater economic and social parity between African American men and women is influencing attractiveness preferences. This is especially intriguing as there is evidence that the gender parity long seen among African Americans is becoming more common; for example, U.S. women as a group, regardless of race, now complete college at higher rates than do men (Schwartz and Han 2014). If this explanation is correct, then one could expect attractiveness preferences to evolve among other groups as their economic relations become more equal. These patterns present an opportunity to explore how culture, structure, and economic arrangements may influence physical attractiveness more generally. Our data are too limited to fully test the arguments of a biosocial constructionist model. However, we believe the pattern of evidence presented here suggests such a model would be relevant.

In assessing our results, we also note several limitations. First, our analysis was focused on a particular sub-set of African Americans: young people enrolled in high school or college and who grew up outside of urban inner cities. Thus, we cannot assume the results will be generalizable to all African Americans. Second, our analysis could not determine causality. We focused on an association that moved from weight to dating activity, but the opposite may also be true as some have suggested that dating behavior among U.S. high school and college students may influence dieting and, ultimately, body size (Cash et al. 2004; Gralen et al. 1990). Such dual causality may well be at work here. It is also possible that dating status

may influence weight trajectories such as has been found among U.S. married couples (Kahn and Williamson 1990; Sobal et al. 1992). Research that assesses individuals and couples over time will be needed to answer these causal questions. Our measure of body size used self-report data. Although we believe there are substantial advantages to our measure, it is possible respondents made incorrect assessments. Future work could combine self-assessments with other measures such as one by trained observers. Finally, relationships are complex and relationship status can be quite nuanced and it was not possible to capture this fully in the measures we had available. For example, men and women may perceive relationship status differently which could have influenced the results. Commitment escalation, where casual dating leads to the formation of stable serious relationships is also not captured (Surra et al. 2007). Future work that employs a continuum rather than a categorical approach to romantic status and that more fully captures perceptions of relationship status may allow better specification of the role of body size at different points in relationship development.

Although our study suffered from these limitations, it was also able to overcome weaknesses inherent in previous work. We used an African American sample, assessed reports of dating status rather than preferences, and evaluated both casual dating and serious relationships. We also assessed the dating status of both men and women attending both high school and college.

These results also point to a number of future research studies. First, as noted earlier, we believe our findings highlight the importance of developing integrated biosocial models that explicitly account for the influence of changing gender roles and the gendered division of labor. In addition, although our analysis focused on weight status as an independent variable, there is ample reason to believe that weight status and relationship status influence one another and that the specific pathways through which this occurs will vary based on the age of the individuals involved, their relationship and weight trajectories, and the cultural and social structural conditions in which they are living. Thus, longitudinal research that examines how these factors evolve differently for men and women will be very useful for understanding determinants of physical attractiveness and links between attractiveness and relationship trajectories. There are other elements of body size that may also be important to romantic attractiveness such as waist to hip ratio, height, and (for men) muscularity. Future research would benefit from examining additional factors that may moderate how weight is related to dating or relationship status. With respect to types of dating relationships, future research should look at these associations among lesbian, gay, bisexual, and transgendered individuals as well as interracial dating contexts. Finally, and perhaps most obviously, there is a dearth of work on the attractiveness preferences of women in general and especially African American women. Expanding research into this area has the potential to contribute to a more integrated understanding of the formation of romantic attraction. In addition, it can contribute importantly to the development of a truly robust and integrated framework for understanding how gender, culture, and structure may interact with physical appearance to create relationship patterns.

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Table 1

Respondent demographic characteristics - means grouped by gender and education

	Women (N=76)	High School	Women (N=147)	College	Men (N=79)	High School	Men (N=84)	College	Range	Significance
Age	18.07 (.91)		18.89 (.73)		18.22 (.90)		18.85 (.76)		16-21	N/A
Perceived Body Size	4.99 (1.55)		4.59 (1.37)		4.87 (1.63)		4.60 (1.54)		2-9	F=1.63(df1=4, df2=379), <i>p</i> <.NS
Height (inches)	63.92 (2.88)		64.22 (2.84)		71.05 (3.18)		71.36 (3.14)		55-79	F=177.05(df1=4, df2=379), <i>p</i> <.001 ^a
Weight (lbs)	160.68 (39.67)		156.32 (37.80)		188.09 (53.21)		193.71 (48.03)		88-380	F=18.259(df1=4, df2=379), <i>p</i> <.001 ^b
BMI	27.60 (6.49)		26.64 (6.10)		26.17 (7.28)		26.64 (5.96)		18.59-54.52	F=0.68(df1=4, df2=379), <i>p</i> =NS

^a Standard deviations are shown in parentheses^a Men were significantly taller than were women^b Men weighed significantly more than did women

Table 2Respondent reports of romantic status and weight by gender and education ($N=386$)

	High School				College			
	Women		Men		Women		Men	
	N	%	N	%	N	%	N	%
Dating Activity								
Not Dating	17	22.37	23	29.11	54	36.73	36	42.86
Casually Dating	18	23.68	25	31.65	31	21.09	27	32.14
Serious Relationship	41	53.95	31	39.24	62	42.18	21	25.00
Total	76	100.00	79	100.00	147	100.00	84	100.00
	Chi Sq (3)= 3.37, $p=NS$				Chi Sq (3)=7.51, $p<.05$			
Body Size								
Low Normal	10	13.16	19	24.05	27	18.37	18	21.43
High Normal	23	30.26	36	45.57	55	37.41	45	53.57
Overweight	32	42.11	11	13.92	50	34.01	13	15.48
Obese	11	14.47	13	16.46	15	10.20	8	9.52
Total	76	100.00	79	100.00	147	100.00	84	100.00
	Chi Sq(3) = 16.03, $p<.01$				Chi Sq (3)=10.24, $p<.05$			
Dating Activity								
Not Dating	17	22.37	54	36.73	23	29.11	36	42.86
Casually Dating	18	23.68	31	21.09	25	31.65	27	32.14
Serious Relationship	41	53.95	62	42.18	31	39.24	21	25.00
Total	76	100.00	147	100.00	79	100.00	84	100.00
	Chi Sq (2)= 4.90, $p<.10$				Chi Sq(2)=4.72, $p<.10$			
Body Size								
Low Normal	10	13.16	27	18.37	19	24.05	18	21.43
High Normal	23	30.26	55	37.41	36	45.57	45	53.57
Overweight	32	42.11	50	34.01	11	13.92	13	15.48
Obese	11	14.47	15	10.20	13	16.46	8	9.52

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	High School				College				
	Women		Men		Women		Men		
	N	%	N	%	N	%	N	%	
Total	76	100	147	100	79	100	84	100	
Chi Sq(3)=3.22, p=NS									
Chi Sq (3)=2.23, p=NS									

Table 3

Correlation coefficients ($N=386$)^a

	1.	2.	3.	4.	5.
1. Dating Status	1	.08	-.06	.02	.17 ^a
2. High Normal	-.00	1	-.41 ^b	-.38 ^b	-.08
3. Overweight	.07	-.56 ^b	1	-.16 ^a	-.02
4. Obese	-.06	-.27 ^b	-.28	1	.10
5. High School	.14 ^a	-.07	.08	.06	1

^a Coefficients for men are shown above the diagonal and those for women below the diagonal

^a $p<.05$

^b $p<.01$

Table 4

Multinomial logistic coefficients for dating status regressed on perceived body size category and education

Women						
	Model 1		Model 2			
	Casual vs. Not [#]	Serious vs. Not	Serious vs. Casual	Casual vs. Not	Serious vs. Not	Serious vs. Casual
Low Normal	—	—	—	—	—	—
High Normal	2.94 ^a	1.20	0.41	2.55	1.05	0.41
Overweight	3.70 ^b	1.44	0.39	2.55	0.84	0.33
Obese	1.24	0.74	0.60	0.67	0.21 ^b	3.11
High School	1.82	2.11 ^b	1.16	0.67	0.57	0.86
High Normal* High School				1.68	1.70	1.01
Overweight* High School				4.41	7.07 ^a	1.60
Obese* High School				15.00	46.67 ^c	3.11
Log Likelihood	-229.04			-223.38		
Pseudo R ²	2.57			4.97		
Chi-Sq	12.07			23.39		
N	223			223		
Men						
	Model 3		Model 4			
	Casual vs. Not [#]	Serious vs. Not	Serious vs. Casual	Casual vs. Not	Serious vs. Not	Serious vs. Casual
Low Normal	—	—	—	—	—	—
High Normal	2.56 ^a	1.65	0.65	1.24	1.16	0.93
Overweight	1.73	0.89	0.51	0.91	0.46	0.50
Obese	2.04	1.31	0.64	2.13	0.53	0.25
High School	1.51	2.38 ^b	1.57	0.53	1.24	2.33
High Normal* High School				5.17	2.23	0.43
Overweight* High School				4.38	3.75	0.86
Obese* High School				1.05	3.62	3.43
Log Likelihood	-174.28			-171.68		
Pseudo R ²	2.51			3.97		
Chi-Sq	8.99			14.20		

Women	
Model 1	Model 2
Casual vs. Not [#]	Casual vs. Not
Serious vs. Not	Serious vs. Casual
Serious vs. Not	Serious vs. Not
Serious vs. Casual	Serious vs. Casual
163	163
N	

^a $p<.10$

^b $p<.05$

^c $p<.01$

^d All coefficients are expressed as odds ratios

[#] The three outcomes categories are: “Casual vs. Not” – The odds of casually dating versus not dating at all; “Serious vs. Not” – The odds of being in a serious relationships versus not dating at all; “Serious vs. Casual” – The odds of being in a serious relationship versus casually dating