

Obesity and Nonrelationship Sex: Are Obese Young Adults Hooking Up?

Extended Abstract for PAA 2013 Submission

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Rationale

The prevalence rate of obesity has increased dramatically over the past thirty years among young adults. Current estimates reveal that 30.75 percent of young adults aged 20 to 39 years old are obese (Flegal et al. 2010). Although obesity is increasingly common in young adulthood, obese individuals are still stigmatized and targets of discrimination (Puhl and Brownell 2001; Brownell et al. 2005). The stigma and discrimination that obese individuals experience, in turn, can have negative implications for union formation and sexual activity.

Romantic relationships are often less accessible for obese individuals as attitudes related to attractiveness or desirability suggests significant bias (Regan 1996). Despite the formation of romantic relationships being limited for obese individuals, the opportunity for sexual activity is less clear. Few studies that have addressed whether obesity is associated with sex have found mixed findings. Halpern and colleagues (2005) found obesity is associated with decreased odds of engaging in sexual activity within a romantic relationship only. Other studies suggest body weight does not significantly affect engaging in sexual activity (Cawley, Joyner, and Sobal 2006). In sum, obesity affects union formation, but it does not necessarily affect the likelihood of engaging in sexual activity. Given that obese individuals are less likely to form unions but not necessarily less likely to engage in sexual activity, the possible implications this may have for nonrelationship sex (i.e., “hooking up”) deserves exploration.

The present study contributes to further understanding the association between obesity and sexual activity, particularly by examining nonrelationship sex among obese individuals. I use data from Wave IV (2007-2008) of the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative, school-based sample of individuals aged 24 to 32. Add Health is appropriate for the present investigation for two important reasons. First, Add Health is nationally representative. Previous studies that have explored hooking up relationships have often used college-based (Owen et al. 2010; Grello et al. 2006) or regional samples (Lyons et al. 2010a; Lyons et al. 2010b; Manning et al. 2006). Secondly, Add Health has such a large sample size that different degrees of obesity can be appropriately assessed. It is important to treat obese individuals as a heterogeneous group because the consequences may vary depending on the severity of how much an individual is overweight.

Data

The data that are utilized for this study are drawn from Wave IV of the National Longitudinal Study of Adolescent Health (Add Health). Add Health is a longitudinal nationally representative, school-based sample of adolescents in grades 7-12 in the United States. Respondents are aged 24 to 32 at Wave IV. For this analysis, data from the in-home core sample are used only, which consists of approximately 15,000 respondents. I restrict my analytic sample to respondents who reported valid responses on the dependent variable, not underweight, between the ages of 24 and 32, and valid sampling weights (N=13,912).

Measures

The dependent in the current analysis is frequency of hooking up. To measure the frequency of hooking up, respondents are asked, “Considering all types of sexual activity, with how many partners, male or female, have you ever had sex on one and only one occasion?” Responses ranged from 0 to 650. Given the skewness of this variable, responses are recoded into

four categories using approximate quartile cutpoints. The frequency of hooking up was coded as 0 (Never), 1 (Once), 2 (Two to four times), and 3 (Five or more times). Never hooking up is the reference group. Body mass index (BMI) is the focal variable in my analysis. BMI is calculated as weight (in kilograms) divided by height (in meters). Continuous BMI scores were recoded into five weight categories using cutpoints defined by the guidelines set by the National Heart, Lung, and Blood Institute (1998). The weight categories include normal weight (BMI between 18.5 and 24.9), overweight (BMI between 25 and 29.9), obese I (BMI between 30 and 34.9), obese II (BMI between 35 and 39.9), and obese III (BMI of 40 or higher). Risk and protective factors of hooking up behavior and demographic factors are controlled in the analyses.

Preliminary Results

As shown in Table 1, 36.69% of respondents who are classified as obese II (35.0 – 39.9) and 31.93% of respondent who are classified as obese III (≥ 40) report never hooking up. Further, these two groups report a lower frequency of hooking up relative to respondent who are classified as normal weight (18.5 – 24.9), overweight (25.0 – 29.9), and obese I (30.0 – 34.9). The number of respondents who are classified as obese II and obese III report ever hooking up at least five times is 15.75% and 17.08%, respectively. Respondents who are classified as overweight and obese I, in general, report a higher frequency of hooking up relative to their counterparts. The corresponding numbers for respondents who are classified as overweight and obese I who report hooking up two to four times are 24.54% and 25.78%, respectively. Most (42.73%) of the respondents reported that he or she was married, White, non-Hispanic (69.78%), had a bachelor's degree (19.32%), employed (82.15%), and in relatively good health. Obese individuals, however, tend to report poorer health than their thinner peers. Across BMI, obese individuals also tend to report higher depressive symptoms but lower substance use scores than their thinner peers.

In Table 2, I present ordinal logistic regression odds ratios (and confidence intervals) to evaluate the odds of odds of hooking up five or more times compared to the combined categories of never, once, and two to four times hooking up on BMI (Model 1), demographic variables (Model 2), religiosity (Model 3), depressive symptoms (Model 4), and substance use (Model 5). The odds of hooking up five or more times compared to the combined categories of never, once, and two to four times hooking up for overweight respondents are 22% higher than the odds for normal weight respondents. Conversely, the odds of hooking up five or more times compared to the combined categories of never, once, and two to four times hooking up for obese II respondents are 20% lower than the odds for normal weight respondents. The findings between the association of overweight and the likelihood of hooking up persist even when demographic characteristics, drug and alcohol use, depressive symptoms, and religiosity are controlled. However, the association between obese II and the likelihood of hooking up is no longer significant once substance abuse is controlled.

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Table 1. Means (and Standard Deviations) or Percentages for All Variables in the Analysis, by Body Mass Index (BMI)

	Total	Normal (18.5 - 24.9)	Overweight (25 - 29.9)	Obese I (30 - 34.9)	Obese II (35 - 39.9)	Obese III (≥40)
<i>Dependent variable</i>						
Number of times ever hooked up						
Never	30.33	31.29	27.89	29.22	36.69	31.93
Once	24.31	25.18	23.40	23.60	23.74	26.61
Two to four times	24.27	23.40	24.54	25.78	23.82	24.38
Five or more times	21.09	20.13	24.17	21.41	15.75	17.08
<i>Independent variables</i>						
Demographic characteristics						
Sex (1=Female)	49.29	55.71	39.01	45.97	57.67	62.55
Age (24-32)	28.80 (0.11)	28.64 (0.12)	28.88 (0.12)	28.90 (0.13)	28.85 (0.14)	28.99 (0.15)
Union Status						
Not in a relationship	39.20	40.73	39.43	37.69	35.03	38.84
Dating	6.41	7.60	6.32	5.99	3.41	5.07
Cohabiting	11.66	11.86	11.49	11.94	11.00	11.48
Married	42.73	39.82	42.76	44.38	50.56	44.61
Race or ethnicity						
White, non-Hispanic	69.78	73.83	70.06	64.49	68.09	61.86
Black, non-Hispanic	14.22	11.04	14.15	26.35	17.42	22.85
Hispanic (any race)	11.83	9.71	11.99	15.65	12.05	12.40
Other race	4.17	5.42	3.79	3.51	2.45	2.88
Education						
Less than high school	8.64	8.22	8.23	9.38	10.13	9.12
High school degree	17.44	15.30	17.87	19.56	18.59	20.16
Some college (no degree)	4.31	38.51	42.13	47.20	49.41	54.85
Bachelor's degree	19.32	22.94	20.42	15.22	15.14	9.79
Post-Bachelor's degree	11.50	15.04	11.34	8.64	6.73	6.08

Student (1=Yes)	15.87	16.41	16.46	15.23	14.90	12.79
Income (log)	10.17 (0.02)	10.16 (0.29)	10.26 (0.26)	10.15 (0.30)	10.03 (0.07)	9.97 (0.05)
Employed (1=Yes)	82.15	81.64	83.10	83.05	82.04	77.88
Self-Rated Physical Health (1-5)	3.66 (0.02)	3.93 (0.26)	3.73 (0.23)	3.41 (0.03)	3.20 (0.04)	3.10 (0.04)
Religiosity						
Not very important	16.06	18.17	14.79	15.92	13.91	13.47
Somewhat important	31.63	32.02	32.40	31.01	31.64	27.13
Very important	41.46	39.45	42.37	41.39	43.38	46.21
More important than anything else	10.85	10.35	10.44	11.68	11.08	13.19
Depression (0-30)	6.07 (0.08)	6.14 (0.11)	5.76 (0.11)	6.12 (0.14)	6.04 (0.19)	7.15 (0.23)
Substance Use						
Alcohol use (0-6)	3.06 (0.03)	3.20 (0.04)	3.14 (0.04)	2.93 (0.04)	2.76 (0.05)	2.63 (0.08)
Marijuana use (0-6)	0.80 (0.03)	0.87 (0.04)	0.83 (0.03)	0.75 (0.06)	0.63 (0.07)	0.52 (0.08)
Other drug use (0-6)	0.30 (0.02)	0.31 (0.02)	0.35 (0.03)	0.27 (0.03)	0.19 (0.04)	0.21 (0.04)
Unweighted N	13,912	4,959	4,448	2,452	1,125	928
Weighted %	100	36.27	31.73	17.56	8.21	6.24

Source: The National Longitudinal Study of Adolescent Health (Add Health), Wave IV 2007-2008.

Notes: N = 13,912. Analyses are weighted.

Table 2. Ordinal Logistic Regression Analyses of Hooking Up on BMI, Demographic Characteristics, Religiosity, Depression, and Substance Use

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	<i>OR</i>	95% CI	<i>OR</i>	95% CI	<i>OR</i>	95% CI	<i>OR</i>	95% CI	<i>OR</i>	95% CI	<i>OR</i>	95% CI
Body Mass Index (BMI)^a												
Overweight (25-29.9)	1.22***	1.10-1.36	1.14*	1.03-1.28	1.16**	1.04-1.29	1.16**	1.04-1.29	1.17**	1.05-1.30	1.19**	1.07-1.32
Obese I (30-34.9)	1.12	1.00-1.26	1.07	0.95-1.20	1.08	0.95-1.22	1.08	0.96-1.22	1.13*	1.00-1.28	1.14*	1.01-1.29
Obese II (35-39.9)	0.80*	0.68-0.95	0.79*	0.66-0.95	0.80*	0.66-0.97	0.81*	0.67-0.98	0.86	0.71-1.04	0.88	0.72-1.07
Obese III (≥40)	0.92	0.77-1.10	0.91	0.76-1.09	0.93	0.77-1.11	0.92	0.77-1.10	1.01	0.84-1.20	1.02	0.86-1.22
Demographic characteristics												
Sex (1=Female)			0.67***	0.61-0.74	0.69***	0.62-0.76	0.66***	0.60-0.73	0.73***	0.66-0.81	0.73***	0.66-0.81
Age (24-32)			1.01	0.98-1.03	1.01	0.98-1.03	1.01	0.98-1.03	1.02	0.99-1.04	1.01	0.99-1.04
Union Status^b												
Not in a relationship			1.92***	2.72-2.14	1.83***	1.64-2.03	1.90***	1.70-2.12	1.75***	1.57-1.95	1.67***	1.50-1.87
Dating			1.24*	1.01-1.51	1.17	0.96-1.43	1.23*	1.00-1.51	1.13	0.92-1.38	1.08	0.88-1.32
Cohabiting			1.62***	1.41-1.85	1.48***	1.30-1.70	1.61***	1.40-1.85	1.46***	1.28-1.67	1.36***	1.18-1.56
Race or ethnicity^c												
Black, non-Hispanic			0.76***	0.66-0.86	0.87*	0.76-0.99	0.75	0.66-0.85	0.81***	0.71-0.92	0.90	1.18-1.56
Hispanic (any race)			0.70***	0.61-0.81	0.73***	0.63-0.83	0.70	0.61-0.80	0.73***	0.64-0.84	0.75***	0.66-0.86
Other race			0.57***	0.47-0.70	0.59***	0.49-0.72	0.57	0.47-0.69	0.61***	0.50-0.74	0.62***	0.51-0.75
Education^d												
Less than high school			1.10	0.89-1.36	1.10	0.89-1.36	1.08	0.88-1.34	1.05	0.84-1.30	1.04	0.84-1.28
Some college (no degree)			1.45***	1.28-1.65	1.49***	1.31-1.69	1.46***	1.29-1.66	1.45***	1.28-1.65	1.49***	1.32-1.69
Bachelor's degree			1.24**	1.07-1.44	1.29***	1.12-1.50	1.26**	1.08-1.46	1.30***	1.11-1.51	1.36***	1.17-1.58
Post-Bachelor's degree			1.03	0.84-1.24	1.06	0.88-1.29	1.04	0.86-1.27	1.07	0.88-1.29	1.36	1.17-1.58
Student (1=Yes)			1.11	0.99-1.24	1.10	0.99-1.23	1.11	1.04-1.14	1.12*	1.01-1.25	1.11*	1.00-1.24
Income (log)			1.08***	1.03-1.13	1.07**	1.02-1.12	1.08***	1.04-1.14	1.09***	1.04-1.14	1.09***	1.03-1.14
Employed (1=Yes)			1.03	0.92-1.15	1.01	0.91-1.13	1.05	0.94-1.17	1.03	0.92-1.15	1.03	0.92-1.16
Self-Rated Physical Health (1-5)			0.93**	0.88-0.97	0.93**	0.89-0.98	0.95*	0.90-1.00	0.96	0.92-1.01	0.98	0.93-1.03
Religiosity^e												
Not very important					1.35***	1.18-1.54					1.27***	1.11-1.45

Somewhat important	1.19 ^{***}	1.08-1.33			1.18 ^{**}	1.05-1.31
More important than anything else	0.71 ^{***}	0.61-0.82			0.73 ^{***}	0.63-0.84
Depressive symptoms (0-30)			1.02 ^{***}	1.01-1.03	1.01 [*]	1.00-1.02
Substance Use						
Alcohol use (0-6)					1.04 [*]	1.01-1.07
Marijuana use (0-6)					1.13 ^{***}	1.10-1.16
Other drug use (0-6)					1.17 ^{***}	1.12-1.23
					1.12 ^{***}	1.09-1.16
					1.17 ^{***}	1.11-1.23

* ≤ 0.05 ; ** ≤ 0.01 ; *** ≤ 0.001

^aOmitted reference category is Normal weight (18.5-24.9)

^bOmitted reference category is Married.

^cOmitted reference category is White, non-Hispanic.

^dOmitted reference category is High school diploma.

^eOmitted reference category is Very important.

Source: The National Longitudinal Study of Adolescent Health (Add Health), Wave IV 2007-2008.

Notes: N = 13,912.