Adolescent Peer-on-Peer Sexual Aggression: Characteristics of Aggressors of Alcohol and Non-Alcohol-Related Assault*

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ABSTRACT. Objective: The purpose of this study was to examine the characteristics of adolescents involved in alcohol-related and non-alcohol-related sexual assault of peers. **Method:** A Web-based survey was administered to 1,220 7th- to 12th-grade students from a middle school and high school in southeastern Michigan. **Results:** Adolescents who reported alcohol-related and non-alcohol-related sexual aggression had higher levels of impulsivity and more extensive histories of dating, early sexual activity, and alcohol consumption than adolescents who did not

assault. Moreover, aggressors of alcohol-related assault had higher levels of past-30-day alcohol use and reported more alcohol-/drug-related problems than aggressors of non-alcohol-related assault. **Conclusions:** Early identification of the characteristics associated with alcohol-related sexual aggression suggests that targeted interventions may be feasible for this group of adolescents at high risk for both sexual perpetration and alcoholism during adulthood. (*J. Stud. Alcohol Drugs* 70: 700-703, 2009)

PERPETRATORS OF SEXUAL ASSAULT differ from nonperpetrators in terms of antisocial personality and behaviors, early and frequent dating, and endorsement of gender role stereotypes and rape myths (Brown and Forth, 1997; Dean and Malamuth, 1997; Senn et al., 2000). Researchers have been interested in distinguishing perpetrators of alcohol-related sexual assault (ASA) from perpetrators of non-alcohol-related sexual assault (NSA), given that alcohol is involved in approximately half of all sexual assaults (Abbey et al., 1996). Perpetrators of ASA have been found to have higher rates of impulsivity, beliefs about alcohol, and alcohol consumption in sexual situations when compared with perpetrators of NSA (Zawacki et al., 2003). To date, almost all research on the characteristics of perpetrators of ASA have been based on adult samples, and it is unclear whether such distinctions can be identified among a younger population. Adolescents have a far less extensive history of dating, sexual relationships, and alcohol consumption than adults (Durkin, 1995), all of which are factors that might impact the nature of sexual assault and the involvement of alcohol. Almost all studies on adolescent reports of perpetration

are based on crime reports or samples of juvenile delinquent adolescents (for a review, see Van Wijk et al., 2006), with few examining perpetration rates reported within a general population of adolescents (e.g., Maxwell et al., 2003). Thus, the purpose of this study was twofold. The first objective of the study was to document the prevalence of self-reported perpetration of ASA and NSA among a *community* sample of adolescents. The second objective was to test the hypotheses that (1) perpetrators of ASA and NSA have higher rates of early sexual behaviors and frequent dating than nonperpetrators and that (2) perpetrators of ASA have higher rates of impulsivity, alcohol consumption, and alcohol-/drug-related problems than perpetrators of NSA and nonperpetrators.

Method

The study used cross-sectional, self-administered Web-based data of 1,220 7th- to 12th-grade students from a school district in southeastern Michigan collected the spring of 2007. There was one middle school and one high school in this district. All students enrolled in the 7th-12th grades were recruited to participate. The university subject review board approved the protocols for this study, and a Certificate of Confidentiality from the National Institutes of Health was obtained. The survey was administered during class sessions. The majority of the students in the school were black (52.7%), with a large minority of white (44.3%), and a few from other racial/ethnic groups (3%). Respondents were a mean (SD) of 14.4 (1.97) years of age, but age ranged from 12 to 20 years. The 901 students (492 females) who

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answered questions pertaining to sexual-assault aggression were included in the analyses. Analyses of participants who responded to the sexual-aggression questions, in contrast to those who did not answer these questions, indicated that those participants who did not complete the sexual-aggression questions were more likely to be younger, engage in early sexual activity, and be in trouble with the school (i.e., detentions, suspensions, and other forms of discipline). However, there were no differences in terms of ethnicity, dating history, alcohol use past 30 days, alcohol and drug problems (CRAFFT), and impulsivity. These analyses suggest that the cases dropped in the analyses represented participants who were younger and more troubled on some, but not all, indicators. Thus, any impact of the loss of these cases as a result of nonresponse of the sexual-aggression questions would likely result in an underrepresentation of the relationship between sexual aggression and the other variables examined. Additional information regarding the data collection method and sample characteristics are available elsewhere (Boyd et al., in press).

The survey asked about monthly and annual alcohol use, defined as having more than just a few sips of beer, wine, wine coolers, or distilled spirits in the past 30 days or 12 months (Johnston et al., 2006). Response options for both monthly and annual alcohol use were as follows: 1 = none, 2 = 1-2 occasions, 3 = 3-5 occasions, 4 = 6-9 occasions, 5 = 10-19 occasions, 6 = 20-39 occasions, and 7 = ≥ 40 occasions. Problems related to alcohol use were assessed using the six-item CRAFFT screener (Knight et al., 2002), with values ranging from 0 (low) to 1 (high) for each item; a mean score for the six items was used in the analyses. The 19-item Impulsive Sensation Seeking subscale of the Zuckerman-Kuhlman Personality Questionnaire measured impulsivity (Zuckerman and Kuhlman, 2000), with scores ranging from 0 (low) to 19 (high). Dating frequency was measured with the question, "Have you ever been in a romantic relationship?" with the four response options of (1) "never," (2) "once," (3) "twice," and (4) "three or more times." Respondents' frequency of consensual sexual activities was obtained through a nine-item scale, with each item asking about the number of times they had engaged in different activities (i.e., flirting, being home alone with a romantic interest, going out alone with a romantic interest, holding hands, kissing, making out, petting, having sexual intercourse, and doing something else sexual).

Information regarding sexual-assault aggression, including alcohol-related aggression, was measured with a modified Sexual Experiences Survey (Koss and Gidycz, 1985; Koss and Oros, 1982) that had been adapted and validated for use with adolescents (Cecil and Matson, 2006). Sexual-assault aggression was measured with three questions that asked about forcing members of the opposite sex to engage in various sexual activities. Participants were asked: "Since you started high school, how often have you kissed, hugged,

or sexually touched a boy (girl) even though he (she) made it clear that he (she) did not want you to do that?" and provided five response options: (1) "never," (2) "once," (3) "two to three times," (4) "four or more times," and (5) "rather not say." Participants were also asked about the frequency of forced oral sex and sexual intercourse with a similar stem. If respondents replied affirmatively to any of the three items, they were asked whether alcohol was consumed by the victim, aggressor, or both at the time of the incident. Based on the aforementioned questions, a sexual-perpetration variable was created with three categories: (1) no aggression, (2) aggression of an ASA, and (3) aggression of an NSA. Analysis of variance (ANOVA) models, comparing the mean differences in characteristics for the three perpetration groups, were examined along with the moderating effects of gender and ethnicity. Nonparametric tests (i.e., Kruskal-Wallis) were conducted when the sexual-aggression groups had significantly different variances on the characteristics.

Results

Overall, the number of students reporting assault of peers was low ($n = 49$, 5.4%). There were significant gender differences, with males reporting higher rates of sexual aggression than females (males: $n = 29$, 7.9%; females: $n = 20$, 4.4%; $\chi^2 = 4.5$, 2 df, $p < .05$; $n = 896$). Sexual aggression was not significantly related to age or ethnicity. Of the 49 cases of sexual aggression, 20 involved "only" kissing, touching, or fondling, 5 involved forced oral sex, and 4 involved forced sexual intercourse. Respondents who sexually aggressed against peers reported that alcohol was consumed by the victim, aggressor, or both in 18% ($n = 10$) of all assault cases. Whether alcohol was involved in the assault did not vary by gender, age, or ethnicity. Of the 10 cases of assault involving alcohol, alcohol was consumed by the perpetrator only ($n = 4$), alcohol was consumed by the perpetrator and the victim ($n = 4$), or the perpetrator could not recall/did not know. In terms of respondent characteristics and behaviors, 57.7% had consumed alcohol in their lifetime, 41% had consumed alcohol in the past 12 months, and 16% had consumed alcohol in the past 30 days. On average, respondents reported engaging in 2.5 sexual activities in their lifetime, with a standard deviation of 1.0. The most common sexual activities included "flirting" (reported by 85% of the sample), "holding hands" (75%), and "kissing" (70%). Although "making out," "having private parts touched," and "engaging in intercourse" were less common in the sample (54.5%, 56%, and 44.1%, respectively), these activities were more commonly reported among the NSA group (67.8%, 100%, and 75%, respectively), and all three behaviors were reported by the 10 respondents in the ASA group. Age was associated with alcohol use in the past 30 days ($r = .14$, $p < .01$) and sexual activity ($r = .36$, $p < .001$), but age did not differ for the sexual-aggression groups.

TABLE 1. Means, standard deviations, and *F* statistics on adolescent characteristics for those who had never sexually perpetrated, those who had perpetrated non-alcohol-related assault, and those who had perpetrated alcohol-related assault.

Variance	Never perpetrated (<i>n</i> = 836) Mean (SD)	Nonalcohol perpetrated (<i>n</i> = 55) Mean (SD)	Alcohol perpetrated (<i>n</i> = 10) Mean (SD)	Significance
30 days alcohol (range: 0-7)	1.90 (0.06) ^a	2.55 (0.25) ^b	4.25 (0.52) ^c	<i>F</i> = 28.53, ‡ 2/784 df
Alcohol and drug problems (range: 0-1)	0.15 (0.01) ^a	0.25 (0.04) ^a	0.53 (0.08) ^c	<i>F</i> = 12.97, † 2/514 df
Impulsivity (range: 0-19)	10.15 (0.14) ^a	12.09 (0.60) ^b	12.08 (1.25)	<i>F</i> = 6.08, † 2/813 df
Dating frequency (range: 0-3)	0.98 (0.04) ^a	1.48 (0.16) ^b	1.50 (0.34)	<i>F</i> = 5.28, † 2/817 df
Sexual activity (range: 0-9)	2.46 (0.04) ^a	2.88 (0.16) ^b	3.56 (0.34) ^b	<i>F</i> = 8.30, † 2/813 df

Note: Means with different letter superscripts are significantly different from each other at the *p* < .05 level.

†*p* < .01; ‡*p* < .001.

Differences among the perpetrators of ASA, perpetrators of NSA, and nonperpetrators in terms of characteristics and alcohol, dating, and sexual histories were examined with ANOVA and post-hoc Scheffé tests (Table 1). The two perpetrator groups were higher than respondents who had never perpetrated in terms of impulsivity, dating history, and frequency of consensual activity. Distinctions between aggressors of ASA and the two other groups were also present in terms of 30-day alcohol use and alcohol and drug problems. There were no significant differences in the aforementioned relationships based on gender and ethnicity. To determine whether the disproportionate group sizes (i.e., 836, 55, and 10) may have exacerbated problems associated with heterogeneity of variances when conducting ANOVAs, tests for homogeneity of variances were conducted for each ANOVA test. These analyses indicated that the three sexual-aggression groups had significantly different variances for the sexual activity and CRAFFT scores. Thus, for these two variables, Kruskal-Wallis tests also were conducted. Significantly different mean ranks were present for sexual activity (nonperpetrating = 438.43, NSA = 551.02, ASA = 675.90, $\chi^2 = 17.7$, *p* < .001) and for the CRAFFT screener (nonperpetrating = 278.47, NSA = 321.52, ASA = 431.45, $\chi^2 = 13.1$, *p* < .001), indicating that, although the ANOVA test requirements of homogeneity of variances were violated for two of the five variables examined, these violations did not affect the findings.

Discussion

The purpose of this study was to provide preliminary data on peer-on-peer ASA as reported by sexual aggressors within a community sample of adolescents. As anticipated, the consumption of alcohol during assault was lower (18%) among this sample of adolescents than previously reported rates among adults (50%; Abbey et al., 1996). Addressing

the second objective of this study, differences in perpetrators' characteristics and dating and sexual histories were detected in the community sample of adolescents. First, perpetrators of ASA and perpetrators of NSA were distinct from nonperpetrators in terms of consensual sexual activity, dating frequency, and impulsivity. Second, perpetrators of ASA were distinct from the two other groups in terms of frequency of alcohol consumption in the past 30 days and alcohol-/drug-related problems. All of the aforementioned findings were present even when age was controlled in the analyses, indicating that higher levels of sexual activity in the NSA and the ASA groups and higher levels of alcohol use in the ASA group are not simply a result of age. However, it is not clear from our findings the exact nature of the relationship between alcohol, early sexual activity, and ASA. Does engaging in alcohol use and early sexual activity increase the possibility for sexual assault and, in particular, ASA? Or is there a common cause, such as conduct disorder, that underlies excessive alcohol use, early sexual activity, and alcohol-related sexual aggression? Unfortunately, future research is necessary to clarify the complex relationship among these behaviors.

Contrary to previous research based on adult populations, the adolescent perpetrators of ASA in this study were not significantly higher than other perpetrators on impulsivity. Although the lack of differences may be the result of the low number of ASA reported, it should be noted that the mean scores on impulsivity for the two perpetration groups were comparable.

This study was based on a small number of reported cases of aggression from a single district with one middle school and one high school; replications of these findings with future studies are imperative. Furthermore, the significant number of nonresponders to the sexual-aggression questions may have resulted in an underestimation of the relationship between sexual aggression and the other variables. Regard-

less, the noted differences between perpetrators of ASA in a community sample of youth are disconcerting and warrant further research. Youth reporting ASA aggression represent a high-risk group for both sexual perpetration and alcoholism during adulthood. The fact that distinctions can be identified in youth suggests that targeted interventions during middle school and high school may be feasible.

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