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# Truancy is associated with sexual risk among early adolescents

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### **Abstract**

While previous studies have identified relationships between school truancy and adolescent substance use risk, sexual risk remains unaddressed. Urban early adolescents (mean age 13.14 years) with mental health symptoms completed audio computer-assisted self-interviews regarding risk behaviors. Teens who reported a history of skipping school (n=25), compared to those who did not (n=113), indicated greater frequency of having ever engaged in oral, vaginal, and anal sex, as well as non-intercourse sexual behaviors. They also reported less value in remaining abstinent but did not demonstrate differences in HIV knowledge or school connectedness. Truancy may serve as an important marker for the early identification of youth at risk for unintended pregnancy or sexually transmitted diseases.

# Keywords

truancy; sexual risk; adolescents

In a national study, 10% of 8<sup>th</sup> graders and 16% of 10<sup>th</sup> graders reported not attending school in the last four weeks (1). Skipping school often represents unsupervised time during which health risk behaviors, such as substance use or sexual activity, can occur. Such unexcused absences, or truancy, can serve as a marker for identifying high-risk students, yet little information exists regarding the risk behaviors, particularly the sexual risk behaviors, of this population.

Research has shown that truancy is associated with mental health problems (2, 3) and substance use (4, 5), both of which are also associated with human immunodeficiency virus (HIV) risk (6). Inconsistent school attendance can also lead to deficits in knowledge about HIV (7). Furthermore, truancy is associated with a lack of parental supervision and greater unsupervised time (1, 2). Less parental monitoring has been directly tied to early adolescent sexual activity/HIV risk (8, 9) and substance use (4, 5). Youth who miss school do so with peers about two-thirds of the time (5), leading to risky situations involving others. In short, skipping school provides youth with more opportunities for unsupervised time, which may increase opportunities for sexual risk behavior, however no published studies have examined this relationship.

Early adolescence is a critical time for identification of risk, as these behaviors, including sexual behaviors and skipping school, often begin in early adolescence (1, 10). Youth Risk Behavior Surveillance data indicate that before age 13, 6.2% of adolescents have had sexual intercourse (10). In another study of middle school students, 9% reported having had sexual

intercourse, and 8% reported oral sex. Only 69% reported using a condom the last time they had intercourse, and 44% had had multiple partners (11). By tenth grade, 41% of adolescents have had sex, highlighting the importance of the early adolescent years in sexual risk decision making (10). Youth who engage in early sexual activity continue to be at greater risk than peers as they grow older; they have more sexual partners, more frequent intercourse, and less condom use (12). Implementing interventions early in development is an opportunity to encourage abstinence and safer sex before sexual attitudes are well established, yet identifying those at risk can present a challenge. The current study attempted to begin to address a gap in the adolescent literature by examining whether relationships observed between problems with school attendance and substance use extend to sexual risk behavior among early adolescents.

### **METHODS**

Between 2007 and 2009, 138 7<sup>th</sup> graders from three New England public middle schools participated in an HIV prevention intervention study for at risk youth. Teens were eligible if they were in 7<sup>th</sup> grade, aged 12–14 years, spoke English, and were identified by school personnel (e.g., school counselors, nurses, principals) as exhibiting mental health symptoms from a school department list used to refer students for counseling.

Procedures were institutional review board (IRB) approved. Parental consent and adolescent assent were obtained for all participants. The current study used data from baseline adolescent assessments completed on audio-assisted computer self interview (ACASI). Participants were compensated via \$30 gift cards. They provided information on age, gender, ethnicity, and race. Parents reported family income.

Consistent with the literature, truancy was conceptualized as missing school without a valid excuse (5, 13). Students completed the item "I skip school" ("never," "sometimes," "often," or "very often") from the Youth Inventory-4 (14), a screening tool for common emotional and behavioral disorders. Responses other than "never" were considered to indicate a history of truancy.

Regarding sexual activity, participants were asked whether they had ever kissed; rubbed another person's genitals over or under their clothes or had their genitals rubbed; given or received oral sex; had vaginal sex; or had anal sex. Each item was asked separately using behavioral descriptions (e.g., "Have you ever put your mouth on someone's private parts?"). Questions allowed for reporting of behaviors with both opposite- and same-sex partners. Participants were reminded that sexual intercourse items referred to instances that were not abuse. Regarding substance use, participants were asked whether they had ever used alcohol, marijuana, or inhalants.

HIV knowledge was assessed using a 20-item questionnaire of HIV and condom use knowledge (e.g., "A birth control pill will protect you against AIDS") (15). Participants responded to items with "true," "false," or "don't know" (the latter was coded as incorrect;  $\alpha = .70$ ); the score equals the number correct.

Attitudes toward sexual abstinence were assessed using ten items assessing level of agreement ("strongly disagree" to "strongly agree";  $\alpha = .83$ ) with statements such as "I think it's ok for kids my age to have sex" (16).

Connection to school through social belonging was assessed using three items ("strongly disagree" to "strongly agree";  $\alpha$  = .76) from the National Longitudinal Study of Adolescent Health (17), such as "You are happy to be at your school."

Global functioning was measured by the self-report Columbia Impairment Scale (18). Teens reported how much of a problem they had in thirteen areas (e.g., "getting along with other kids your age") on a 5-point scale ("none" to "very big";  $\alpha = .86$ ).

Data were analyzed using SPSS 15.0 using independent *t*-tests and Pearson chi-square analyses to compare demographic characteristics between truant students and those who did not skip school. These analyses were followed by comparing the sexual behaviors, substance use behaviors, HIV knowledge, abstinence attitudes, and school connectedness of truant youth to those of youth who were not truant. Finally, a logistic regression was conducted to examine whether truancy provided a significant contribution in predicting sexual risk in the context of other selected variables.

### **RESULTS**

The total sample was 51% male; participants' average age was 13.14 years (SD = .62). The racial composition of the sample was 38% Caucasian, 25% African-American, and 12% other categories (25% provided no response); 38% identified as Latino. Forty-seven percent of parents reported a family income less than \$30,000. No significant group differences existed on baseline demographic variables between adolescents who endorsed truancy and those who did not (p>.10).

Twenty-five students (18%) reported that they had skipped school at least "sometimes." Pearson Chi-square analyses indicated that  $7^{\text{th}}$  graders who had ever been truant were more likely to have engaged in oral, vaginal, and anal sex. They were also more likely to have engaged in non-intercourse sexual behaviors, though rubbing genitalia was a nonsignificant trend (p=.089). Truant teens were more likely than their at-risk peers to have tried alcohol and marijuana, but endorsed similar rates of inhalants. They endorsed significantly less value toward sexual abstinence than peers, however, there were no significant differences in their knowledge of HIV, their connection to school, or global functioning (see Table 1).

To examine whether truancy remained a significant predictor of sexual risk when controlling for other factors, a logistic regression was conducted using a subset of variables, due to the sample size and possibilities of multicollinearity. Gender and age were included as basic demographic factors. Marijuana and alcohol use were significantly related in the sample ( $\chi^2(1)=15.5$ , p<.001), therefore only marijuana was included in the model. Similarly, race and ethnicity were related to marijuana use ( $\chi^2(1)=3.1$ , p=.08 and  $\chi^2(1)=7.9$ , p=.005, respectively). Finally, a preliminary model including truancy, abstinence attitudes, HIV knowledge, school connectedness, and global functioning indicated that only truancy was significantly related to having ever been sexually active; therefore none of these scales were included in the final model. Results of the logistic regression model ( $\chi^2(4)=13.9$ , p=.008, Nagelkerke R<sup>2</sup>=.182) revealed that participants were 3.8 times more likely to be in the group reporting a history of vaginal, anal, or oral sex if they had skipped school (OR=3.8; 95% CI: 1.2–11.8), even controlling for gender and age (not significantly related) and marijuana (OR=4.1; 95% CI: 1.3–13.1).

#### DISCUSSION

This study begins to fill a gap in the literature by describing the sexual behaviors of truant early adolescents. Even compared to other at risk youth with mental health symptoms, early adolescents who skipped school were more likely to be sexually experienced than their atrisk peers. This was true across a wide-range of sexual behaviors, including those that may be developmentally typical (e.g., kissing or genital rubbing) and those that may be less common and more risky (e.g., sexual intercourse) in this age group. Truancy remained a

significant predictor of sexual activity even when controlling for age, gender, and marijuana use. This truant subgroup appears to be at especially high risk, given that youth with mental health problems themselves are more likely to be sexually active (19, 20). Truant youth may be on an accelerated trajectory of sexual behavior that requires more intensive and earlier interventions than other at-risk adolescents, perhaps related to more unsupervised time, greater substance use, or differences in sexual attitudes. For example, teens with a history of truancy also endorsed more substance use and less positive attitudes toward abstinence than their peers.

Contrary to previous literature, teens who skipped school did not exhibit poorer knowledge of HIV, though scores on this measure were low for all participants. Also contrary to expectations, truant youth did not endorse less school connection than their peers with mental health symptoms. Multiple motivators besides school connection may contribute to truancy at this age, which suggests that these teens, not yet disconnected, may still be reached by school-based interventions. Finally, among this sample of adolescents with mental health symptoms, truant teens did not report significantly more problems in functioning, though a trend indicated greater difficulties. Longitudinal data will be useful to determine whether early truancy is a marker for these other problems in functioning besides sexual and substance use risk.

Limitations to the current study exist. First, the frequency of skipping school was not assessed; frequency may contribute to the amount of risk behavior in which they engage. Also, the current study was cross-sectional and assessed students with mental health symptoms; the relationship of skipping school and sexual risk among students without such symptoms may differ. Finally, this study represents early adolescents from one urban geographical area and may not generalize to non-urban settings or other areas.

This study suggests that truancy is associated with sexual risk among early adolescents. Unlike some other markers for risk, unexcused absences are an observable measure routinely collected by schools and reportable by parents, thus representing a convenient tool for identifying adolescents at risk for unwanted sexual outcomes at an early age. Targeting this population for HIV and pregnancy prevention represents an important strategy for adolescent risk reduction and can highlight adolescents requiring further sexual health intervention in the pediatrician's office. Further research should determine underlying factors that might contribute to both skipping school and sexual risk, such as poor problem solving, peer influence, or affect dysregulation.

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Risk variables by response to "I skip school"

	Truant (n=25)	Never Truant (n=113)	Na	$\chi^{2/t}$	d
Vaginal, anal, or oral sex	36% (n=9)	13% (n=14)	136	7.94	.005
Vaginal sex	25% (n=6)	9% (n=10)	133	4.66	.031
Anal sex	21% (n=5)	3% (n=3)	133	11.38	.001
Oral sex	(6=u) %9£	5% (n=5)	134	21.45	000
Kissing	80% (n=20)	50% (n=57)	138	7.25	200
Rubbing	56% (n=14)	38% (n=42)	137	2.89	680°
Alcohol	83% (n=20)	42% (n=46)	133	13.31	000
Marijuana	33% (n=8)	14% (n=15)	133	5.27	.022
Inhalants	13% (n=3)	9% (n=10)	132	.32	.571
Abstinence attitudes	23.1 (6.2) (n=25)	27.7 (6.1) (n=100)	125	-3.33	.001
School connectedness	11.1 (3.6) (n=25)	10.8 (3.3) (n=109)	134	.47	689.
Columbia Impairment Scale	30.2 (9.4) (n=24)	26.8 (9.1) (n=111)	135	1.64	.104
HIV knowledge	9.7 (4.0) (n=24)	8.6 (3.8) (n=108)	132	1.23	.222

Note:

<sup>a</sup>Incomplete responding to questionnaire items (i.e., selecting "Don't want to answer") contributed to missing data. On scales, participants occasionally provided an insufficient number of responses on the scales to allow for the generation of a reliable scale score.

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