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Hook-up Sexual Experiences and Problem Behaviors Among Adolescents

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Abstract

This study focused on the sexual phenomenon of “hooking-up.” A hook-up is defined as a single sexual encounter that may or may not include sexual intercourse with someone who is a stranger, brief acquaintance, or friend. The aim of this study was to document the prevalence of hook-ups in a sample of 1,011 urban, middle and high school students and to examine the relationship between hooking-up and a variety of problem behaviors, including, alcohol, cigarette, illicit drug use, truancy, and school suspensions. The results revealed that 28% of the sample had engaged in at least one hook-up experience, and this percentage increased with age. Hook-ups were correlated moderately with all problem behaviors examined.

Keywords

adolescence; problem behaviors; risk taking; sexual activity; hook-ups; alcohol use; drug use

Introduction

If you were to ask both an adult and adolescent, “What does hooking-up mean?” you likely will get two completely different answers. While an adult might use the term to refer to an informal meeting, most adolescents (and young adults) use the term to refer to an informal sexual encounter. Indeed, in a recent study, 97% of young adults provide the sexual meaning of the term, while in contrast, only 52% of the adults in this study, specifically physicians that treat adolescents, had heard of the term used with a sexual connotation (George, Waxman, Scott, & Kimmel, 2006). Given the limited social science research available on the contemporary adolescents’ notion of hooking-up, particularly in light of the abundance of research on adolescents’ early sexual intercourse, multiple sex partners, and unsafe sex practices, it seems plausible that researchers, even those who study adolescent sexual behavior, may not be aware of the use of this term and the prominence of the practice among contemporary adolescents and young adults.

Correspondence concerning this article should be addressed to Leanna Fortunato, 537 Mark Jefferson, Ypsilanti, MI. 48197. Authors Fortunato and Fons have had their M.S. degrees conferred since this article was submitted. Please include updated degrees in the published article.

The purpose of this study was to document the prevalence of hook-up experiences and begin to examine their relationship with problem behaviors among metropolitan middle and high school students. Despite the fact that adolescent hook-up experiences have received limited attention within health and social sciences, the research on the topic suggests that hook-up encounters are a common practice among secondary students (Manning, Giordano, & Longmore, 2006) and among college students (Paul, McManus, & Hayes, 2000; Paul & Hayes, 2002). As such, it is hypothesized that a significant percentage of both middle and high school students will have engaged in a hook-up, with the prevalence likely increasing with age. It is unclear whether adolescents who engage in hook-up experiences are more likely to engage in other problem behaviors, such as substance use, truancy, and gambling. However, given the relationship between precocious sexual activity and problem behaviors (e.g., Ary, Duncan, Duncan, & Hops, 1999b; Gillmore et al. 1991; Cooper, Wood, Orcutt, & Albino, 2003), it is hypothesized that hook-ups will be positively associated with engaging in the range of problem behaviors under investigation in the present study.

Hooking-Up in Contemporary Adolescent and Young Adult Culture

“Hooking-up” is a term used by contemporary adolescents and young adults to describe a sexual encounter between two or more people who are acquaintances or strangers and who have no expectations about emotional investments or an ensuing relationship (Paul et al., 2000). The act of hooking-up is most similar to what has previously been referred to as ‘casual sex,’ in that both terms describe a sexual encounter among acquaintances or strangers with no expectation of future involvement. Hooking-up is distinct from casual sex in that the former refers to a wide variety of sexual behaviors (e.g., anything from kissing only to sexual intercourse) whereas casual sex typically implies that sexual intercourse has occurred. Indeed, the value and harm of the term ‘hook-up’ lies in its ambiguity, particularly for adolescent girls who are located within a youth culture that may sometimes sanction or sometimes disapprove of their engagement in sexual intercourse outside of a monogamous dating relationship. While sexual liberation of the 1960s (and more recently the 1990s) has resulted in society’s increasing acceptance of women’s expression of sexual behaviors, older, more conservative standards remain. Because ‘hook-up’ can refer to kissing and petting as well as sexual intercourse, adolescent girls can disclose during post-encounter commentary with peers without having to worried about being considered a ‘prude’ or a ‘slut.’ There is a disadvantage of to the term’s ambiguity though, because its vagueness can lead to different expectations among hook-up participants, and thus, the increased likelihood of disappointing or emotionally painful results, including sexual assault.

The only study to investigate adolescent hook-up experiences (Manning et al., 2006) focused exclusively on non-dating sexual liaisons solely involving sexual intercourse (as opposed to any type of sexual behavior). Manning and colleagues found that of the 30% of adolescent students between grades 7th through 11th who reported at least one previous sexual intercourse experience, 61% were not in a dating relationship (or 18% of the total sample). Of those who reported *ever* having a non-dating sexual intercourse experience, 74% and 63% reported that the sexual partner was a friend or ex-girlfriend/boyfriend, respectively. When the findings were restricted to hook-ups that occurred in the last 12 months, the majority of these non-dating encounters occurred between friends (48%), acquaintances (23%), or with a former boy/girlfriend (14%); in contrast, 6% of these encounters occurred between strangers. This is an important finding that indicates for adolescents, hook-up experiences are much more likely to occur with someone who an adolescent knows well, as opposed to a stranger. Furthermore, Sixty-seven percent (67%) of adolescents within non-dating sexual encounters told their friends about the experience, in contrast to 92% of the adolescents within dating relationships. While this study plays an imperative role in beginning to understand the prevalence and context of hook-up

encounters, it represents only the portion of hook-ups that include sexual intercourse, and thus is not representative of all hook-up encounters.

More is known about the hook-up encounters experienced by college students. Studies to date suggest that the phenomenon appears to be common on college campuses today, with approximately 70 – 85% of college students reporting at least one hook-up experience while at college (Kahn et al., 2000; Lambert, Kahn, Apple, 2003; Paul et al., 2000; Paul & Hayes, 2002; Paul, 2006). Paul and colleagues found in a random sample of 555 undergraduate students at a state college that 78% of both males and females reported at least one hook-up experience, defined as a sexual encounter that may or many not include sexual intercourse; the mean number of hook-up experiences in this sample was 10.8 per year while in college ($SD=13.61$; Paul et al., 2000). Three additional studies using smaller, convenience samples produced similar estimates (Kahn et al., 2000; Lambert et al., 2003; Paul & Hayes, 2002). All four aforementioned studies provided a similar definition of hooking-up to participants, which included any form of sexual activity not limited to sexual intercourse, thereby reducing methodological variance across these estimates.

When college students have been asked to describe a typical hook-up experience, there is considerable agreement about its defining features, even between students who have and have not had a hook-up and between males and females (Paul & Hayes, 2002). Students' descriptions of common factors leading to a hook-up include: flirting/attraction (43%), drinking alcohol (32%), hanging out and talking (30%), and attending parties (21%; Paul & Hayes, 2002). While almost half (49%) of the students mentioned that hook-ups are planned, students often clarified that this meant that one intended to have a hook-up with someone, but not a hook-up with a particular person (Paul & Hayes, 2002). The most frequently reported sexual behaviors included in a typical hook-up experience were kissing (over 80%), deep kissing (over 85%), petting above the waist (over 70%), petting below the waist (over 55%), and oral sex (over 35%; Kahn et al., 2000). While there were no significant gender differences in number of students who included the above behaviors in their descriptions, men were more likely to include sexual intercourse in their descriptions than women (32% versus 10%; Kahn et al., 2000). Hook-up were reported to end when one person leaves (56%), when partners fall asleep or pass out (20%), when the couple is interrupted (15%), when one or both partners reach sexual climax (11%), or when one person stops when the hook-up goes too far (8%; Paul & Hayes, 2002). Following the hookup, partners typically give friends a general overview (43%), but males are perceived as bragging to friends more so than females (32% versus 18%). In contrast, females are perceived to provide a detailed story to friends more so than males (29% versus 20%; Paul & Hayes, 2002).

While considerable agreement exists about the defining features of a hook-up, women are more likely to experience negative consequences as a result of hook-up encounters (Paul & Hayes, 2002). Following a hook-up experience, college students indicated that they have felt regretful/disappointed (35%), good/happy (27%), satisfied (20%), confused/unsure (11%), proud (9%), excited/nervous (7%), uncomfortable (5%), and desired/wanted (2%). However, females were significantly more likely to feel regretful or disappointed, while males were more likely to feel satisfied and proud. Additionally, when respondents were asked to describe their worst hook-up experience, a common theme that emerged for women was having felt pressured to engage in unwanted sexual behaviors (Paul & Hayes, 2002). Similarly, in a study of 148 college students, 42% of women and 46% of men reported that they have had a "really terrible hooking up experience" (Kahn et al., 2000). For men, the terrible experience was usually due to the woman wanting a relationship or the over use of substances during the encounter; none of the men indicated that they felt pressured to engage in more intimate sexual behaviors than they desired. However, 48% of the women

indicated that the terrible hook-up experience was due to having been pressured to go further sexually than they had desired to go (Kahn et al., 2000).

While the research on hook-up experiences among college students is useful, there are limitations to applying this body of literature to high school students because of important differences between these two groups. First, since a significant proportion of high school students do not continue with higher education, there generally is greater diversity among high school students than college students, most notably in terms of SES and ethnicity (Justiz, Wilson & Bjork, 1994; Carnevale & Rose, 2004). Second, while these groups may only be a couple of years apart, the developmental stage of adolescents and young adults is significant, particularly in terms of their physical, intellectual, and socio-emotional development (Rice & Dolgin, 2002). For example, adolescents are more likely than young adults to have acquaintance-type exchanges with the opposite sex (Shulman & Kipnis, 2001). Moreover, adolescents are just beginning to learn their sexual scripts, (Krahe, 2000) and often are unclear about the definitions of appropriate or consensual sexual activity (Warshaw, 1988; Vicary, Klingaman & Harkness, 1995). Third, colleges often present an unsupervised and insular social context for its students (Arnold & King, 1997). This context likely presents college students with unique opportunities, which may lead to different rates of hook-up experiences for these two age groups.

Adolescent Problem Behaviors

The association between various adolescent risk behaviors (e.g., alcohol and illicit drug use, early sexual activity, conduct problems, and poor academic performance) has been well documented (e.g., Ary et al., 1999b; Gillmore et al., 1991; Cooper et al., 2003). Problem Behavior Theory provides a useful framework for understanding why these behaviors co-occur. According to the theory, these risk behaviors are associated because they are manifestations of a common underlying ‘problem behavior’ syndrome. Individual, biological, behavioral, and personality factors interact with perceived and actual social environments to shape the underlying syndrome and subsequent problematic behaviors. Common causes to adolescent problem or risk behaviors include poor attachment to parents, school, or wider community; association with peers who exhibit high risk behaviors; lower levels of self esteem, self-efficacy, or psychological well-being; or previous experiences of physical or sexual abuse (Hawkins, Catalano, Morrison, et al., 1992; Kirby, 2001). Research has provided conflicting information regarding whether the problem behavior syndrome is based on a single (Ary et al., 1999a; Zhang, Welte, & Wieczorek, 2002) or a higher order (Willoughby, Chalmers, & Busseri, 2004) model structure. Likewise, it has been noted that while there is shared variance among problem behaviors, there is considerable unique variation for each of these behaviors that is often overlooked (Guilamo-Ramos, Litardo, & Jaccard, 2005). Despite these controversies, there is substantial empirical support for the existence of a problem behavior syndrome.

The present study aims to document the prevalence of hook-ups among adolescents and to explore the relationship between hook-up experiences and adolescent problem behaviors. If engaging in hook-up encounters is associated with problem behaviors, then hook-up behaviors likely have a similar etiology to problem behaviors. Moreover, engaging in one problem behavior increases exposure to peers who are involved in other types of problem behaviors, and thus, engaging in hook-ups may increase the likelihood of engaging in these other problem behaviors. Thus, knowing whether engaging in hook-up encounters is associated with problem behaviors would provide a context to understand factors contributing to, or resulting from, hook-up encounters. In this study, we first document the frequency of hook-up encounters among adolescents and the locations in which such encounters occur. Second, we examined the relationship between hook-up behaviors and

other problem behaviors, including cigarette, alcohol, and illicit drug use, gambling, and truancy/delinquency.

Method

The study used a cross-sectional web-based self administered survey of students from a school district in southeastern Michigan; there was one middle school and one high school in the school district. The university subject review board approved the protocols for this study and a Certificate of Confidentiality from NIH was obtained. All students enrolled in the 5th–12th grades were recruited to participate. The school district is located near a large Midwest metropolitan area and draws from four distinct communities: an upper middle class community (median income \$81,000), two middle-class communities (median incomes \$46,000 and \$49,000), and an economically impoverished community (median income \$22,000). Based on data provided by the school district, approximately 46% receive free/reduced-price lunch. The majority of the students in the school were African American (58%), with a large minority of Caucasian (39%), and a few from other racial/ethnic groups (3%). All of the 2,048 students within the school district were contacted and 1,376 assented, received parental consent, and participated in the study, representing a 67.2% response rate. Minor distinctions between the sample and district population were present and described thoroughly elsewhere (Young, Grey, Abbey, & Boyd, 2008); respondents were more likely than non-respondents to be female and White.

Students and their parents were notified about the upcoming study in a letter sent from their school via U.S. Mail. Because most of the respondents were under 18 years of age, active parental consent was obtained for all minors who participated. Students returned consent forms to their teachers, who in turn, gave the consent forms to the research team. Prior to the administration of the survey, parents were invited to view the survey via the web on their own or school computers.

The survey included 418 questions that asked students about alcohol, tobacco, illicit and prescription drug use; academic performance; instances of interpersonal violence; and attitudes regarding racial tolerance. The survey was conducted over the Internet from computer labs at the respective schools. Students were excused from one class period in order to report to the computer lab for the survey session. The school administrators scheduled survey sessions on a class-by-class basis over the data collection period, although make-up sessions were provided. The web-survey was maintained on a hosted secure Internet site running under the secure sockets layer (SSL) protocol to insure respondent data were safely transmitted between the respondent's browser and the server. Students were given a piece of paper with a unique pre-assigned PIN numbers; these numbers allowed students access to the survey without any identifying information. Following the completion of the survey, students were provided with the contact information for school-based counseling services as well as community based organizations. School officials and parents were unable to access any personally identifiable information connected with the data. Because of the numerous skip patterns, most students received a fraction of these questions and the surveys were completed in approximately 25 minutes. Students were not compensated for participation. The Web-based method was selected because similar computer-based surveys have been shown to increase reporting of highly sensitive and illegal behaviors relative to hardcopy surveys (Lessler, Caspar, Penne, & Barker, 2000; Turner et al., 1998) and because it provides an easy way to test large groups of students in a relatively short period of time.

Participants

The analyses were based on a subset ($n = 1,011$, males = 458, females = 553) of the larger sample ($N = 1,376$) and included students in 7th–12th grade. Students in grades 5 and 6 were excluded from the analyses because they were not asked questions regarding sexual activities and hook-up encounters. The sample was comprised of 47.8% African American and 49.5% Caucasian participants. The remaining 2.7% of the sample was comprised of American Indian/Alaska Native, Hispanic/Latino, and Asian American participants.

Measurement

Demographic characteristics—Respondents were asked about basic demographic information, including gender, race, age, and grade level. The respondents were divided into two groups based on level of schooling, specifically, middle school (i.e., 7th and 8th grade) and high school (i.e., 9th–12th grade) students.

Hook-up experiences—The hook-up questions utilized in the present study are adapted from those previously employed with college-age samples (Paul, et al, 2000; Paul & Hayes, 2002). While an extensive study of the psychometric properties have yet to be conducted, the questions used by Paul and colleagues represent the most extensively validated questions to date. Respondents were first provided with the following definition of a hook-up experience: “A hook-up is a sexual encounter with someone who is a stranger, brief acquaintance, or friend. The encounter is just a one-time event and may include just kissing or it may include other sexual activity.” While the definitions provided to college-aged samples regarding hook-ups typically omitted friends, Manning and colleagues’ (2006) findings strongly suggest that for adolescents, hook-ups most often occur with someone who is well known to the adolescent. As such, friends were included in the definition for the present study. Following the presentation of the definition, respondents were asked if they had ever had a hook-up with someone, and were given the following response options: 1) Never, 2) Yes, I have had a hook-up with one person, 3) Yes, I have had a hook-up with two people, 4) Yes, I have had a hook-up with three or more people, and 5) Rather not say. Respondents were asked about the location(s) where the hook-up(s) took place and were provided a yes/no response option for each location. The locations asked about included: 1) My house or apartment, 2) Someone else’s house or apartment, 3) At a party, 4) At school, 5) Other, and 6) Rather not say.

Substance use—Respondents were asked about their monthly use of cigarettes defined as having smoked “even a puff of a cigarette.” Following this definition, respondents were asked “On average, how many cigarettes did you smoke during the past 30 days?” Response choices included 1) None, 2) Less than 1 cigarette per day, 3) 1–5 cigarettes per day, 4) About a pack per day, 5) About 1 pack per day, 6) About 1 packs per day, 7) 2 packs per day or more, and 8) Rather not say.

Respondents also were asked about their lifetime alcohol use, defined as having more than just a few sips of beer, wine, wine coolers, or liquor. These questions are based on a national survey study of adolescents’ alcohol use (Johnston, O’Malley, & Bachman, 2002). After being given this definition, respondents were asked “The next questions are about drinking alcohol (including beer, wine, wine coolers, or liquor). On how many occasions (if any) have you had alcohol to drink (more than just a few sips) in your lifetime?” Response choices included 1) Never had alcohol, 2) 1–2 occasions, 3) 3–5 occasions, 4) 6–9 occasions, 5) 10–19 occasions, 6) 20–39 occasions, 7) 40+ occasions, and 8) Rather not say.

Information regarding the respondents’ illicit drug use was obtained through an eleven-item scale. Each item asked whether the respondent “On how many occasions in your lifetime

have you used the following types of drugs?” The illicit drugs included marijuana, cocaine, LSD (‘acid’), other psychedelics (i.e., mescaline, peyote, psilocybin, PCP, etc.), crystal meth (‘ice’), heroin, inhalants (i.e., glue, aerosol sprays, nitrites, etc.), ecstasy, GHB (‘georgia home boy’), rohypnol, and anabolic steroids. The response choices the same 8 choices as provided in the lifetime alcohol question. These responses then were recoded into a dichotomous (yes/no) variable regarding whether the respondent had tried each of the 11 drugs. Finally, a summary variable was created by adding the 11 items together; thus, scores range from 0 to 11.

Gambling—Information regarding the respondents’ gambling history was obtained through the use of a five-item scale. The questions included: “On how many occasions have you gambled for money in the past 12 months?”, “Did you ever gamble more than you intended to?”, “Have people told you that you had a gambling problem, whether or not you thought that was true?”, “Have you ever lied to people to hide your gambling?”, and “Do you feel you have ever had a problem with betting money or gambling?” The first question regarding frequency of gambling in the past 12 months was recoded into a dichotomous variable (i.e., those that had gambled at all and those that had not gambled). The remaining questions were all dichotomous (i.e., yes/no). Then a summary variable ranging from 0–5 was created by summing the 5 items together.

Truancy/delinquency—The respondents were asked about their regular school attendance and the types of discipline they have experienced at school. The respondents were asked to indicate the number of days that they skipped/missed school without a legitimate reason, received detention, were suspended, and/or received another form of discipline. The actual questions were as follows: “Without a legitimate reason - In the past 30 days, how many full days have you skipped or missed school?”, “During the current school year, how many times have you received a detention?”, “During the current school year, how many times have you been suspended?”, and “During the current school year, how many times have you received some other form of discipline?” The responses choices for all of the aforementioned questions were 1) None, 2) 1–3 times, 3) 4–6 times, 4) 7–9 times, 5) 10+ times, and 6) Rather not say.

Results

The first aim of this study was to document hook-up experiences in a sample of 7th–12th grade students (Table 1). Twenty eight percent (28%) of respondents ($n = 285$) reported having engaged in a hook-up experience. Of the respondents who reported having engaged in at least one hook-up experience, 48.8% ($n = 139$) reported that the hook-up experience happened at someone else’s house or apartment. Other common locations included one’s own house or apartment (33%, $n = 94$), a party (26%, $n = 75$), or another location (22%, $n = 62$). Thirteen percent (13%, $n = 36$) of respondents reported that the hook-up-experience happened at school.

Bivariate analyses were used to examine whether hook-up experiences varied by sex, race, and grade. Male respondents ($M = 1.69$, $SD = 1.044$) reported engaging in significantly more hook-up experiences than female respondents ($M = 1.34$, $SD = .764$), $t(1009) = 6.112$, $p < .001$. Thirty-seven percent (37%) of male respondents and 21% of female respondents reported having engaged in a hook-up experience, $\chi^2(3, N = 1011) = 37.2$, $p < .001$. There were no ethnic differences in the rate of hooking-up. High school students ($M = 1.59$, $SD = .972$) reported engaging in significantly more hook-up experiences than middle school respondents ($M = 1.31$, $SD = .759$), $t(998) = -4.756$, $p < .0001$. Thirty-four percent (34%) of high school student and 18% of middle school students reported having engaged in a hook-up $\chi^2(3, n = 1000) = 27.95$, $p < .001$.

The data were analyzed using bivariate analyses to determine whether the setting of the hook-up experience (i.e., one's own house/apartment, someone else's house/apartment, a party, school, other) varied for middle and high school students (Table 2). The groups did not differ significantly in the rate at which their hook-up experiences occurred at their house/apartment, at a party, or at school; however, they significantly differed in the rate at which their hook-up experiences occurred at someone else's house or apartment, $\chi^2(1, n = 279) = 15.55, p < .001$. Fifty-six percent (56%) of high school respondents and 28% of middle school respondents reported having experienced a hook-up that occurred at someone else's house or apartment. The groups significantly differed in the rate at which their hook-up experiences occurred at an "other" location, $\chi^2(1, n = 279) = 5.86, p < .05$. Thirty-two percent (32%) of middle school respondents and 18% of high school respondents reported having experienced a hook-up that occurred at an "other" location.

It was hypothesized that hook-up experiences would be related to other risk and problem behaviors. Given that the frequency of hook-up experiences varied by grade levels, separate bivariate correlations were conducted for middle and high school students. Bivariate correlations revealed there was a significant and positive correlation between the frequency of hook-up experiences and other risk behaviors such as alcohol consumption, cigarette smoking, illicit drug use, gambling, and truancy/delinquency for both middle school students (Table 3) and high school students (Table 4). For middle school students, the frequency of engaging in hook-up encounters was most strongly related to gambling ($r = .389$), substance use ($r = .287-.349$), and school suspensions ($r = .301$). There were modest relationships between hook-up encounters and detentions, skipping school, and other school discipline ($r = .173-.214$). For high school students, hook-up encounters were most strongly related to substance abuse ($r = .270-.348$) and skipping school ($r = .224$), while the relationship between gambling ($r = .161$) and other truancy/delinquency variables ($r = .119-.167$) were more modest.

Discussion

Findings from this study indicate that hook-up encounters are all too common among adolescents in 7th–12th grade given the potential negative health ramifications associated with early sexual activity. Twenty-eight percent (28%) of all students reported that they had engaged in a hook-up encounter at least once. Not surprisingly, this percentage varied by the age of the student, ranging from 18% for 7/8th grade students to 34% for high school students. Half of these hook-up encounters occurred at someone else's house or apartment; although high school students were more likely than 7th/8th grade students to report that the hook-up took place at this location. As expected, males (37%) were more likely to report that they had engaged in hook-up encounters than females (21%). Such gender differences are consistent with research on other adolescent sexual behaviors that document a higher level of sexual activity for male youth when compared to female youth (Grunbaum et al., 2002).

While it is difficult to contrast our data to the Manning et al. (2006) findings pertaining to adolescents because their study included only those hook-up experiences involving sexual intercourse, comparisons with college based samples indicate that the percentage of secondary students engaging in hook-up encounters is significantly lower than the 70–85% reported for this older group (Kahn et al., 2000; Lambert et al., 2003; Paul et al., 2000; Paul & Hayes, 2002). The large disparity in the rates between these two groups is not surprising given differences in the psychosocial and sexual development of secondary and college students. What is noteworthy is the step-like changes that occur as students progress from middle school to high school, and then from high school to college. In this study, the rate of hook-up encounters almost doubled from middle to high school. Although clearly

speculative, these findings suggest that distinctions in the social contexts and norms of middle school, high school, and college may play a role in the degree of popularity of the hook-up encounter for each of these environments.

In this study, we found moderate relationships between hooking-up and other adolescent risk and problem behaviors examined, including cigarette, alcohol, drug use, gambling, truancy, and other disciplinary action by the school. Such findings support the notion that engaging in hook-up encounters should be considered an expression of the problem behavior syndrome. Much research has focused on common factors that increase an individual's propensity to engage in risky behaviors; family conflict and poor parental monitoring are predictors of the development of problem behaviors including antisocial behavior, risky sexual behavior, academic failure, and substance abuse (Ary et al., 1999). Similarly, associating with deviant friends has been demonstrated as a risk factor for delinquency (Matsueda & Anderson, 1998), substance use (Hawkins, Catalano, & Miller 1992), and sexual activity (Billy & Udry, 1985). Personality factors such as impulsivity and sensation seeking also have been linked to risky sexual behavior (Rosenthal, Muram, Tolley, Peeler, & Pitts, 1992), alcohol and drug use (Luengo, Carrillo-de-la-Pena, Otero, & Romero, 1994), and delinquency (Hirschi & Gottfredson, 1995). Future research is needed to determine whether these factors contributing to problem behaviors also are predictive of engaging in hook-up encounters.

The notion that hook-up encounters may have both unique (i.e., school norms about hooking-up) and shared variance with other problem behaviors coincides with the Guilamo-Ramos, Litardo, and Jaccard's (2005) assessment of study of adolescent problem behaviors. In their review of problem behavior literature published from 1977 through 1999, Guilamo-Ramos et al. (2005) demonstrated that the average correlation between any two problem behaviors is 0.35, which suggests that approximately two-thirds of the variance is due to unique factors. Furthermore, the correlations remain only moderately correlated even when two behaviors within the same domain are examined (i.e., frequency of sex and use of protection). These data suggest the importance of studying unique determinants of problem behaviors, as well as common factors.

We would anticipate that there are factors contributing to hook-up encounters that are unrelated to other problem behaviors. One such factor may be changes in cultural norms about sexual activity that contribute to the unique variation in hook-up experiences. Research has demonstrated a decline in traditional forms of dating and has suggested that casual relationships have replaced traditional romantic relationships (Denizet-Lewis, 2004). This trend toward more casual relationships appears to be coupled with cultural norms of sexual permissiveness. For example, it has been demonstrated that college students consistently overestimate their peers' level of comfort with engaging in a variety of sexual behaviors within the context of a hook-up encounter when compared to their own comfort level (Lambert et al., 2003). Additionally, the media has a documented influence on viewers' perceptions of what constitutes typical social behavior (Strasburger & Wilson, 2002). This is particularly important given that the average child and teen watches approximately 5.5 hours of television a day (Roberts, Foehr, Rideout, & Brodie, 1999), and more than 80% of teen shows contain sexual content (Kunkel et al., 2003) that is typical displayed as a casual, fun encounter with little or no negative consequences (Strasburger, 2005). Thus, it is possible that these changing societal norms of sexuality contribute to individuals' decisions to engage in hook-up experiences.

Just as important, if not more, future research should examine the negative consequences of hook-up encounters, including sexual assault. Previous research on college students indicates that sexual assault is a common negative hook-up experience for young women

(Kahn et al., 2000). Without a direct comparison of the rates of assault during hook-ups versus other social encounters, it is unclear whether hook-up encounters actually increase the rate of sexual assault or, for example, just mirror the rate of assault within committed relationships. However, it is plausible that the wide spectrum of sexual behaviors that can occur during a hook-up encounter increases the risk for sexual assault because of participants' different expectations of what 'should' occur. Documentation of the prevalence of sexual assault during hook-up encounters is critical given that sexual assault is more common among adolescents than any other age group (Snyder, 2000) and is often associated with profound psychological impairment among victims (Tjaden & Thoennes, 2000).

Several limitations of the present study must be acknowledged. First, the study relied solely on self-report data. As a result, the data are subject to errors in reporting. However, it is unlikely that data on hook-up experiences could be collected using another modality. Second, the psychometric properties of the hook-up questions have yet to be studied extensively and thus make our conclusions more tentative. Likewise, the study was limited in the range of delinquency variables included in the survey; these items only pertained to only to those activities taking place on school grounds and did not ask about the specific activities that led to suspensions and detentions. Third, given the sensitive nature of the topic and the young age group, data regarding the specific type of sexual activity in which participants engaged during the hook-ups were not available. Fourth, information was not gathered regarding the risk and protective factors associated with hooking-up, nor the perceived or actual consequences of having engaged in a hook-up. Lastly, it should be noted that while hook-ups were significantly correlated with all the problem behaviors under investigation in this study, some of the correlations, particularly among hook-ups and the truancy/delinquency behaviors, were relatively modest. Thus, it appears that if an adolescent engages in one problem behavior, the relative risk that he or she will engage in another problem behavior varies somewhat depending upon the specific problem behavior in question.

Despite these limitations, this study is one of the first to describe hook-up experiences among adolescents and to document their relationships with other problem behaviors. Future research is needed to determine risk and protective factors of hook-up encounters, particularly in terms of the unique and shared variance hooking-up may have with other adolescent problem behaviors. Given the negative consequences associated with hook-up encounters among college students, future research needs to determine if such consequences also are present among adolescents.

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Table 1

Frequency of Hook-up Experiences among Adolescents

Frequency	Middle School		High School	
	(n)	(%)	(n)	(%)
Never	297	82.0	424	66.5
Once	34	9.4	108	16.9
Twice	14	3.9	47	7.4
Three or more times	17	4.7	59	9.2
Total	362	100	638	100

Table 2

Frequency of Hook-up Experiences at Various Locations

Location	Middle School		High School		Significance
	(n)	(%)	(n)	(%)	
Home	15	23	77	36	.053
Other's Home	18	28	119	56	.001
Party	16	25	58	27	.691
School	12	18	24	11	.127
Other	21	32	39	18	.016

Table 3
Intercorrelations Between Hook-up Experiences and Problem Behaviors for Middle School Students

Location	1	2	3	4	5	6	7	8	9
Hookups	-								
Smoking	.349**	-							
Alcohol Use	.301**	.532**	-						
Illicit Drug Use	.287**	.652**	.616**	-					
Gambling	.398**	.489**	.371**	.402**	-				
Skipping School	.186**	.361**	.312**	.380**	.314**	-			
Detentions	.214**	.441**	.251**	.220**	.178	.237**	-		
Suspensions	.301**	.419**	.219**	.335**	.358**	.317**	.309**	-	
Other Discipline	.173**	.439**	.250**	.310**	.189*	.179**	.351**	.276**	-

* p<.05,

** p<.01

Table 4

Intercorrelations Between Hook-up Experiences and Problem Behaviors for High School Students

Location	1	2	3	4	5	6	7	8	9
Hookups	-								
Smoking	.321**	-							
Alcohol Use	.348**	.420**	-						
Illicit Drug Use	.270**	.523**	.410**	-					
Gambling	.161*	.487**	.099	.413**	-				
Skipping School	.224**	.202**	.315**	.185**	.096	-			
Detentions	.134**	.319**	.061	.221**	.434**	.136**	-		
Suspensions	.119**	.303**	.075	.379**	.410**	.161**	.472**	-	
Other Discipline	.167**	.208**	.180**	.297**	.213	.159**	.310**	.345**	-

* p<.05,

** p<.01