

Research In Brief

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Agreement between Parent and Adolescent Reports of Adolescent Substance Use

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This study examined the correspondence between parent and adolescent reports of the adolescent's substance use in a population of parents concerned about, and experiencing problems resulting from, their teen's substance use. Results suggest that most parents are aware of their teenager's cigarette smoking, marijuana use, drinking, and overall substance use.

These findings are novel in that detailed statistics are presented regarding parental knowledge of teen substance use for families in which the teen's substance use is causing the parent stress, but the teen is not necessarily in treatment. Previous studies examining parent-adolescent correspondence regarding adolescent substance use have been restricted to families with a teen in substance abuse treatment, or families with no current substance use issues.

Findings

Incidence:

- Eighty-two percent of the parent and teens accurately reported whether teens smoked cigarettes.
- Eighty-six percent of parents accurately reported whether the teen used alcohol and 86 percent accurately reported whether the teen used marijuana.
- Only 72 percent of parents in the study accurately reported whether the teen used illicit drugs, other than marijuana.

Frequency:

- Nearly equal percentages of parents underestimated and overestimated the frequency of alcohol use (49 percent and 47 percent respectively) and the frequency of any form of substance use (52 percent and 41 percent, respectively).

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Adolescents' Time Use: Effects on Substance Use, Delinquency, and Sexual Activity

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Theory and intuition suggest that young people who engage in constructive extracurricular activities are less likely than others to get into trouble. However, there has been relatively little empirical research examining multiple adolescent time use categories as predictors of adolescent problem behaviors.

This study examined the relationships between adolescents' use of time and the occurrence of five problem behaviors (i.e., heavy alcohol use, cigarette smoking, illicit drug use, delinquency, and sexual activity). Data came from a representative household sample of adolescents ranging in age from 15 to 18 years old. This study is unique in that it takes into account a wide range of time use factors (i.e., homework, extracurricular activities, sports time, alone time, paid work, housework, television watching, time spent with the family and with peers) on adolescent problem behaviors.

Findings

Time Use:

- Adolescents reported that watching television was the single activity that occupied the most time (an average of 20 hours per week).
- Extracurricular activities (e.g., playing a musical instrument or singing; participating in clubs, scouts, or other organized activities), and individual hobbies occupied the second highest amount of time (an average of approximately 12 hours per week).
- Adolescents spent equal amounts of time on paid work and homework from school (approximately eight hours per week for each).

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Agreement between Parent and Adolescent Reports (cont'd)

- Parents were nearly twice as likely to underestimate, rather than overestimate, the frequency of marijuana use (59 percent and 31 percent, respectively).
- Parent-adolescent discrepancy regarding frequency of any form of substance use was greatest when the adolescent was younger, the parent did less monitoring, the parent was psychologically distressed, and the parent drank alcohol more frequently.
- Parent-adolescent agreement was equivalent for families in which the adolescent was in substance abuse treatment, and in which the adolescent was not in substance abuse treatment, dispelling the notion that parents whose adolescent is in treatment know more about the adolescent's substance use.
- Rates of adolescent substance use frequency were similar for adolescents who were and who were not, receiving substance abuse treatment (57 percent vs. 54 percent of the previous 180 days). However, adolescents in treatment reported drinking more alcohol on days they drank compared to adolescents not in treatment (11 vs. 6 standard drinks). A standard drink is equivalent to one 12 oz. beer, one 3 oz. glass of fortified wine, one 4 oz. glass of table wine, or 1.25 oz. of hard liquor.

Study Participants

Participants were recruited through advertisements in the media and flyers placed at social service agencies. Parents telephoned the project and were screened for eligibility (i.e., a child between 11 and 22 years of age either currently abusing alcohol or illicit drugs or currently receiving substance abuse treatment) for a larger study examining coping in parents stressed by, or experiencing problems due to, their teens' substance use. Parents were eligible to participate either alone or with the substance-abusing adolescent.

Biological parents comprised 99 percent of the parent sample. Parents from 200 families participated; 125 of the parents participated alone, whereas the remaining 75 participated with their teen. The information obtained from these latter parents and their teens forms the basis of this report. Parents were assessed for sociodemographic information, family relations, parenting, own substance use, and adolescent substance use. Adolescents were assessed regarding their own alcohol, illicit drug, and cigarette use. By combining the daily reports of alcohol and illicit drug use, the percentage of days the adolescent reported using any substance during a 180-day period also was computed.

Parents were, on average, female (85 percent), 39 years of age, with 13 years of education, with 35 percent being white and the remainder being black. Less than half (41 percent) lived with a spouse or cohabiting partner and approximately 39 percent were

employed. The adolescents averaged 16 years of age, 61 percent were male, and 24 percent were receiving assistance for substance use.

Discussion of Findings

Results of this study suggest that for the most part, parents and adolescents achieved "fair-to-good" agreement regarding the adolescent's substance use. Unlike previous samples studied, these parent-adolescent pairs demonstrate that even if the adolescent is not in treatment, parents are somewhat aware of the level of the teen's substance use. This awareness and the associated stress may motivate parents to participate in training programs for help to modify their own coping, regardless of whether the adolescent enters treatment. It may be that subsequent changes in parental coping skills may influence the adolescent to enter treatment or change substance use behaviors.

When parents' and teens' reports were discrepant, parents overall provided lower estimates of substance use than teens. Although some of these discrepancies were small, (for instance regarding how often teens drank alcohol), others were substantial (parents were nearly twice as likely to underestimate the frequency of marijuana use and the quantity of alcohol use).

Parent-teen reports of the teen's substance use were more discrepant when:

- The teen was younger, perhaps because the teen's substance use is a relatively new phenomenon, and/or because the parent may not have thought the teen was old enough to have an advanced substance use problem.
- The parent did less monitoring of the teens' after school, evening and weekend activities; if the parent is unaware of what the teen is doing when he/she is not under the parent's direct supervision, the parent is less likely to provide an accurate report.
- The parent was caught up in their own issues or problems; when the parent was feeling stressed or depressed, or using alcohol more frequently themselves, they were less likely to accurately report on their teen's substance use.

Future Studies

Results from this study suggest that parents experiencing stress due to an adolescent's substance use are generally aware of many aspects of the teen's substance use, but their degree of correspondence with the teen's report varies with the substance used and its measurement. Though additional studies are necessary, the findings suggest that in research or treatment settings in which an adolescent is uncooperative or unavailable, parental report of at least the frequency of alcohol and other substance use may serve as a proxy.

Adolescents' Time Use (cont'd)

- Adolescents spent an average of nearly six hours a week playing sports.
- After combining six categories of family time (e.g., eating dinner with family, doing things with parents, family celebrations), adolescents spent about ten hours per week in family-related activities.
- After combining six categories of peer time (e.g., going to movies, going on dates, talking on phone), adolescents spent approximately 23 hours per week with peers – more than twice as much time as with family.

The Relationships between Time Use Categories and Problem Behaviors

- Time spent in housework and sibling care, and television watching had no main effect on any of the five problem behaviors.
- Involvement in extracurricular activities and hobbies had a modest protective influence on sexual activity.
- Time spent in paid work was related to heavy drinking for younger, but not for older, adolescents. While time spent on homework averaged only slightly more than an hour per day (or eight hours per week), it is associated with less cigarette smoking, less illicit drug use, and less delinquency. Homework does not protect against heavy drinking but it does have a protective effect on sexual activity for younger adolescents.
- Sports involvement was associated with less cigarette smoking and less illicit drug use.
- Spending greater amounts of time with family protected adolescents from all five problem behaviors.
- Spending greater amounts of time with peers was a risk factor for all five problem behaviors. The effect of time spent with peers had a much stronger influence on the substance use of white adolescents when compared to black adolescents. Also, the impact of time spent with peers had a stronger influence on male sexual activity when compared to female sexual activity.

Study Specifics

This study is based on data from 606 adolescents from western New York state interviewed as part of a six-wave longitudinal study of the development of alcohol misuse and related problem behaviors. The sample included 332 females (55 percent) and 274 males (45 percent). The racial distribution was 425 (70 percent) white and 181 black (30 percent). Parents' education was, on average, 13 years.

- Adolescent heavy drinking was assessed using responses to three separate questions regarding how often respondents had five or more drinks of beer, wine, or liquor at a time during

the past year. (A drink was defined as a 12 oz. can or bottle of beer, a four oz. glass of wine or a 12 oz. wine cooler, and a 1.5 oz. shot of liquor by itself or in a mixed drink.)

- Cigarette smoking was determined by asking adolescents if they had ever smoked cigarettes and if so, how often in the past 30 days.
- Illicit drug use was determined by adding the number of times in the past year that adolescents used marijuana, hallucinogens, cocaine or crack, glue or inhalants, tranquilizers, "ups" such as speed, and "downs" such as sleeping pills.
- Delinquency was based on the frequency of 17 delinquent acts during the past year (e.g., skipped a day of school without a real excuse, took something of value which did not belong to you, beat up someone on purpose, etc.).
- Sexual activity was determined by the frequency of sexual intercourse and the number of different partners.
- Time use predictors assessed were the frequency and usual numbers of hours spent on numerous individual activities during the past year (see above).

Discussion of Findings

This study integrated social control theory (Hirschi, 1969/2002) and routine activity theory (e.g., Hawdon, 1999; Osgood et al., 1996) to examine the effects of adolescent time use on problem behaviors. One of the key elements for social control is developing the individual's bond to conventional society through involvement in conventional activities (i.e. homework and family activities), resulting in little time for problem behaviors. Routine activity theorists argue that trends in increased crime rates are related to a greater dispersion of daily activities with peers, away from parental supervision and providing the opportunity for delinquency.

Study findings were largely consistent with these theoretical perspectives. Family time was found to protect adolescents from problem behaviors whereas peer time places adolescents at risk for these same behaviors. In addition, there was less cigarette smoking, illicit drug use and delinquency when the adolescent spent more time on homework. For younger adolescents, time spent in paid work was related to heavy alcohol use. Television watching, housework, and sibling care had no impact on any of the five problem behaviors.

Implications

These results suggest that increasing positive family time may be a strategy to prevent problem behavior in older adolescents across all sociodemographic groups (including gender, race, or socioeconomic status).

Agreement between Parent and Adolescent Reports (cont'd)

Future research should examine longitudinally whether discrepancy is reduced if parents (1) increase monitoring their teen's behavior (particularly if the teen is younger), or (2) reduce their own psychological distress and drinking, and whether such changes may bring forth reductions in the adolescent's substance use.

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Adolescents' Time Use (cont'd)

No evidence was found, however, for a buffering effect of family time on the causal effect between unsupervised peer time and problem behaviors. Peer influences during adolescence are strong predictors of problem behaviors regardless of family influences.

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References

- Hawdon, J. E. (1999). Daily routines and crime: Using routine activities as measures of Hirschi's involvement. *Youth & Society, 30*, 395-415.
- Hirschi, T. (1969/2002). *Causes of delinquency*. Originally published in 1969 by University of California Press. 2002 edition with a new introduction by the author. New Brunswick, NJ: Transaction Publishers.
- Osgood, D. W., Wilson, J. K., O'Malley, P. M., Bachman, J. G., & Johnston, L. D. (1996). Routine activities and individual deviant behavior. *American Sociological Review, 61*, 635-655.

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