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ABSTRACT

It was hypothesized that antisocial behavior and deviant peer involvement assessed prior to puberty, at grade four, would predict initiation of sexual intercourse by grade nine. The hypotheses were tested on a sample of 201 boys who were at risk for delinquency. The subjects participated in an extensive multiple method/agent assessment for both parents and the boy including interviews, home observations, questionnaires, test data, telephone interviews, school questionnaires and records, and court data. The multiple regression analysis showed that deviant peer association and antisocial behavior along with anxiety, assessed at grade four, and pubertal maturation assessed at grade 6, were significant predictors of initiation of sexual intercourse by grade nine. The results revealed that characteristics of the boy at grade four were more powerfully predictive of initiation of sexual intercourse by grade nine than were the family management constructs of supervision and discipline. The process was hypothesized to progress from poor family management to antisocial child behavior, involvement with a deviant peer group, and early sexual intercourse. (NB)

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Fourth Grade predictors of initiation of sexual intercourse  
by 9th Grade, for boys.

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Paper presented at SRCD, April 1991

Abstract

It was hypothesized that antisocial behavior and deviant peer involvement assessed prior to puberty, at Grade 4, would predict initiation of sexual intercourse by 9th Grade. To test alternative hypotheses, 10 additional predictors were tested. The hypotheses were tested on a sample of 201 boys who were at risk for delinquency. Measures were multi-agent, - method.

The multiple regression analysis showed that deviant peer association and antisocial behavior along with anxiety, assessed at Grade 4, and pubertal maturation assessed at Grade 6, were significant predictors of initiation of sexual intercourse by Grade 9. The theorized process proceeds from poor family management to antisocial child behavior, involvement with a deviant peer group, and early sexual intercourse.

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### Introduction

Several researchers have found a syndrome of problem behaviors at adolescence, including early sexual initiation, substance use and delinquency (Donovan & Jessor, 1985; Elliott & Morse, 1989). Antisocial behavior and deviant peer association have been found to be highly related to later involvement in substance use and delinquency (Elliott, Huizinga & Ageton, 1985). The hypothesis tested here was that antisocial behavior and deviant peer involvement assessed prior to puberty, at Grade 4, would account for significant variance in initiation of sexual intercourse by the 9th Grade, the 1st year of High School.

In order to test alternative hypotheses regarding 4th Grade predictor variables, a multiple regression was run which also included: association with older peers, substance use, parental supervision and discipline, academic achievement, socio-economic status (education and occupation), self-esteem, the number of parental transitions experienced (from intact to divorced, divorced to step-parent etc) and anxiety measured at Grade 4, and physical maturation (observer and parent report) measured at Grade 6.

Data presented includes degree of sexual involvement, number of partners, and contraceptive use at Grade 9.

### Subjects and Methods

The Oregon Youth Study sample was recruited from schools in neighborhoods with higher than usual rates of delinquency for the medium sized metropolitan area. Seventy-four percent of the 4th Grade boys and their families agreed to participate, resulting in a sample size of 206. Data used in these analyses are from 4th Grade when the boys were 9-10 years old, and 9th Grade (the freshman year of high school) when the boys were 14-15 years old, when 201 of the 206 boys were re-interviewed (98% retention).

Subjects participated in an extensive multiple method/agent assessment for both parents and the boy including interviews, home observations, questionnaires, test data, telephone interviews, school questionnaires and records and court data.

### Construct Development

Several indicators were developed for each construct. The indicators had to survive a three-stage process:

1. The items comprising the indicator had to show internal consistency (alpha of .6 or higher; item-total correlation of .2 or higher) for Cohort I.
2. The indicators had to converge with other indicators designed to assess the construct (the factor loading for the forced one-factor solution had to be .3 or higher).
3. The indicators had to replicate in a similar fashion on Cohort II.

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Indicators for key constructs were as follows:

Deviant peer association

1. Parent report from the CBC-L and the OCA questionnaire (Achenbach & Edelbrock, 1983).
2. Child self-report.
3. Peer nominations.

Antisocial behavior

1. Parent report from the CBC-L, OCA questionnaire, and telephone interview.
2. Peer nominations.
3. Teacher CBC-L.
4. Child Telephone interviews (6 aggregated).

Anxiety

1. Parent CBC-L.
2. Teacher CBC-L.

Pubertal Maturation

1. Parent ratings.
  2. Observer ratings (3 aggregated).
  3. Interviewer ratings
- (all three ratings based on Tanner scales).

Sexual Behavior

Sexual behavior was measured by boy's self-report in an interview.

### Results

Table 1 shows the degree to which the boys were involved in sexual activity at Grade 9, the number of sex partners in the previous year and condom use.

Table 2 shows the results of the stepwise multiple regression including antisocial behavior and deviant peer association plus nine additional predictors from Grade 4, and pubertal maturation from Grade 6. As hypothesized, deviant peer association and antisocial behavior at Grade 5 significantly predicted initiation of sexual intercourse by 9th Grade.

Physical maturation at grade 6 accounted for additional variance, and an interesting finding was that early anxiety was related to postponement of sexual intercourse. This finding is in keeping with that of Block and colleagues that timid and anxious adolescents are less likely to be involved in problem behaviors at adolescence such as substance use. The 4 predictors were still significant even if socio-economic status was entered in to the equation first.

### Conclusions

- Characteristics of the boy at Grade 4 were more powerfully predictive of initiation of sexual intercourse by Grade 9 than the family management constructs of supervision and discipline.
- The process is hypothesized to progress from poor family management to antisocial child behavior, involvement with a deviant peer group, and early sexual intercourse.

References

Achenbach, T. M., & Edelbrock, C. S. (1983). Manual for the child behavior checklist and the revised child behavior profile. Burlington, VT: Thomas M. Achenbach

Donovan, J. E., & Jessor, R. (1985). Structure of problem behavior in adolescence and young adulthood. *Journal of Consulting and Clinical Psychology*, 53(6), 890-904.

Elliott, D. S., Huizinga, D., & Ageton, S. S. (1985). Explaining delinquency and drug use. Beverly Hills, CA: Sage Publications.

Elliott, D. S., & Morse, B. J. (1989). Delinquency and drug use as risk factors in teenage sexual activity. *Youth and Society*, 21(1), 32-60.

Table 1

Degree of sexual involvement

	<u>Yes</u>	<u>No</u>
Have you kissed a girl?	88%	12%
Have you felt a girl's body?	51%	49%
Have you had sexual intercourse?	29%	71%

Number of sexual partners in the past year for those who have had sex.

1	45%
2	25%
3	23%
4	5%
5	2%

Frequency of condom use.

Every time	72%
Most times	14%
About half	2%
Sometimes	2%
Never	10%

Table 2

Grade 4 constructs regressed on whether boy had engaged in sexual intercourse by 9th grade.

Grade 4 construct*	Beta	R square
Deviant peer association	.18	11.5
Pubertal maturation	.18	14.6
Antisocial behavior	.30	17
Anxiety	-.19	19.6

\*In order of stepwise entry into equation