Sexual Activity of Affluent Adolescents: The Differential Importance of Family Socialization and Social Bonds

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Extended Abstract

INTRODUCTION

For most adolescents, families play an important role in healthy development. As the most proximate social context in which an adolescent is embedded, the family can provide both material and emotional support, setting the initial course for the adolescent's life trajectory. Extant research has largely assumed that "more is more," possibly reflecting a Western/capitalist cultural bent. Some research findings suggest, however, that the relationship between social class and problem behavior among adolescents is more complex than this simple linear expectation would suggest.

Adolescents who have strong social bonds to parents and whose parents are supportive and loving are expected to have better outcomes. Typically, access to material resources and cultural capital is thought to strengthen this effect. Thus, an affluent adolescent with strong bonds to supportive, loving parents should be least likely to engage in problem behavior, given the advantages of both strong material and emotional support.

With regard to the relationship between socioeconomic status and delinquent problem behavior, researchers have reached opposing conclusions. Strain theorists have long argued that there is a negative relationship between social class and delinquency, and that delinquency is precipitated by the frustration that lower class adolescents feel when they cannot obtain their material goals through legitimate, socially accepted means (Cohen 1955). The theory's requirement of a disjuncture between goals and legitimate means, however, indicates that there should be little to no delinquency among those in the middle and upper classes, a fact that is not borne out by research (Hirschi 1969). In one meta-analysis conducted in the 1970s, Tittle and colleagues (1978) examined the empirical evidence and concluded that the conjectured negative relationship between social class and delinquency is a "myth."

In contrast, Hagan and colleagues (1985, 1987) argued that the relationship between social class (as measured by parents' occupational positions) and delinquency is positive, not negative. Their power-control theory specifies that children with parents

whose occupations involve the command or control of others are more likely to commit delinquent acts, because they will likely be less supervised, have a lower perceived risk of punishment, and have a higher taste for risk than adolescents whose parents have other jobs. Jensen and Thompson (1990) tested the premises of power-control theory, with inconclusive results; however, they found that the relationship between parent employment class and delinquency was curvilinear. Participation in delinquency was highest among adolescents whose parents were "surplus" workers at the lowest end of the employment continuum and those whose parents were in high-level positions of command and control, while children of mid-level workers and managers were less likely to engage in delinquent behavior. This finding has been largely overlooked in more recent criminological research, and deserves further consideration. If the relationship between social class and behavior is not linear, but instead inversely curvilinear, existing theories on problem behavior that require a linear relationship (or specify no relationship) are of limited predictive value.

Organizational researchers Phillips and Zuckerman (2001) argue that research findings such as those of Jensen and Thompson (1990) support a second look at a neglected sociological premise: the middle-status conformity hypothesis, which provides that the effects of social control vary by social status, with social control most effective among those in the middle. Citing research from the 1950s through the 1960s, they argue that "middle-status conservatism…reflects the anxiety experienced by one who aspires to a social station but fears disenfranchisement" (p. 380). Lower- and upper-status individuals are more secure in their statuses: lower-status individuals may feel blocked from higher status and cannot slip to a lower status, while high-status individuals may possess enough wherewithal to maintain their existing status without fear of slippage. Both lower- and upper-status individuals are thus free to deviate, while those in the middle may see the risks of deviant behavior as slippage to an undesirable lower status and/or blockage to a desired higher status.

If the relationship between social class and problem behavior is inverse curvilinear, it may mean that there are family-level social forces common to both lower- and upper-status families that manifest themselves in adolescent problem behavior. Alternately, it may be that positive social forces that prevent problem behavior are absent or of little effect for those at the very bottom and top of the social class continuum. A third possibility is some combination: perhaps prosocial processes are absent or uncommon at the lowest levels, and are present but of no effect at upper levels of social status, or vice versa.

In this research, we consider the relationship of two indicators of social class status—family income and socioeconomic status (as measured by parents' educational attainment and occupation)—to a single adolescent problem behavior: multiple sexual partnering. We employ data from the National Longitudinal Study of Adolescent Health (Add Health) and examine the respective roles of social class and social control variables on our outcome to test the middle-status conformity hypothesis that the effects of social control variables on deviance vary by social status, such that the association between social class and deviance is an inverse, U-shaped curvilinear relationship.

DATA AND METHODS

Data

Data are from The National Longitudinal Study of Adolescent Health (Add Health). Add Health is a survey-based data set culled from a sample of adolescents in grades 7 through 12, attending 134 U.S. schools in 1994-1996 (Bearman, Jones, and Udry, 1997). Schools were selected with unequal probability of selection, but systematic sampling and implicit stratification techniques were employed to ensure that the selected schools were representative of U.S. schools. An in-home survey was conducted in the summer of 1995 through 1996 with a subsample of students selected from school rosters at the 134 schools, consisting of a total of 20,745 observations. In addition, a questionnaire was completed with a parent of most of the adolescents who participated in the in-home surveys (over 17,000). A second in-home survey was conducted in 1996 with adolescents who participated in the first in-home subsample. The size of the sample of adolescents who participated in both waves is 14,738. With its school-based design and emphasis on health (including sexual health), the Add Health data set is particularly well-suited to an analysis of adolescent sexual behaviors.

Data are from Waves I and II of Add Health, as well as the parent questionnaire. For the purposes of this analysis, the sample does not include adolescents who reported that they had sexual intercourse prior to Wave I (or who reported at Wave II a date of first sex that preceded Wave I), adolescents who reported that they were married at Wave II, adolescents who were under 15 and were not asked questions related to sexual attitudes at Wave I, adolescents who were over the age of 18, those adolescents for whom sex was misrecorded or for whom age was miscalculated at Wave I, adolescents who were not residing with a mother or an individual who served as a mother at Wave I, adolescents whose parents did not answer the battery of questions related to socialization in the parent questionnaire, those whose age and sex were misrecorded, and those for whom sample weights were not available. Additional cases were excluded during this analysis through listwise deletion. The sample size for the final model in this analysis (after weighting) is 3,543 adolescents.

The elimination of adolescents who had already had sex at Wave I is generally consistent with sample selection methods employed by other researchers who have used the Add Health data to consider issues of adolescent sexuality (Meier, 2003; Bearman and Brückner, 2001). In this research, although the sexual outcome is one of magnitude (total number of partners), we opted to restrict analyses to Wave I virgins to better assess causality. Individuals who had sexual intercourse prior to Wave I, at a potentially young age, have been eliminated from the sample.

Dependent Variable

The dependent variable, total number of sex partners, is derived from Wave II of the Add Health data. Each respondent was asked specific questions regarding up to three romantic partners. For each partner, respondents were asked if they had engaged in sexual intercourse with that partner. In addition, respondents were later asked the number of additional sexual (romantic or nonromantic) partners they had beyond the three nominated romantic partners. The total number of sexual partners variable is derived from the total number of romantic and additional sexual partners reported. Due to the very short timeframe between waves of data, the distribution was highly skewed; therefore, responses were coded so that "0" represented no sexual partners (which, in this sample of time 1 virgins, means that the respondent had never had sexual intercourse), "1" represented a single sexual partner, and "2" represented 2 or more partners between Wave I and Wave II.

Independent Variables

Social Status

Two concepts of social status are employed: one for family income, and the other for family socioeconomic status (educational attainment and occupation). The family income measures are derived a logged measure of the respondent's parent's report of the family's annual income. From this logged measure, three dichotomous variables were created by dividing the sample into thirds: one-third each representing high income, middle income, and lower income. For the analyses that follow, medium income was treated as the comparison category. Due to the endemic problem of missing income data, income was imputed for just under 14% of the sample. To ensure that this imputation did not affect the reported results, the analyses also include as a control a binary variable coded so that "1" indicates those cases for which income was imputed.

The second social status concept is family socioeconomic status. For this, I employed a measure developed by Moody and Bearman (Bearman et al., 2004) specifically for the Add Health data, in which five parent education categories (1=less than high school, 2=high school degree, 3=some college, 4=college degree, 5=graduate/professional degree) are matched with six occupational categories (0=not in the labor force, 1=unskilled laborer, 2=skilled laborer, 3=white collar lower-level, 4=white collar upper-level, and 5=professional) to yield a socioeconomic score for each parent from 0 to 10. In cases where data were available for both parents, the authors selected the higher combined score. We again developed three categories from their measure—high, medium, and low social status—and created dichotomous variables for each. Medium socioeconomic status was used as the reference category.

Social Control Variables

We employ several social control variables. First, we developed a measure of general socialization: the extent to which parents enforce right and wrong with

adolescents. The general socialization scale is a standardized scale that includes responses from both the parent and the child questionnaires. Parents were asked whether they agreed that they make decisions with their children; whether they were satisfied with their relationships with their children; and whether they got along with their children. Children were asked whether they were satisfied with their communication with their mothers; whether their mothers discussed wrongdoing with them after the fact; whether their families paid attention to them; and whether their parents cared about them. A single indicator ($\alpha = .69$) served as a reliable measure of the concept.

As an additional measure of socialization, and to control for those situations in which a family does not believe that adolescent sexual activity is deviant, we use a measure of whether the adolescent believes that his or her mother would be upset if s/he had sexual intercourse. However, regardless of a family's best intentions, if an adolescent is insensitive to the feelings of others, or does not reciprocate parents' warm feelings, social control efforts may fail. Therefore, we also use a measure of internal social control that is a standardized scale ($\alpha = .69$) comprised of the adolescent's responses to questions regarding the embarrassment associated with unwanted pregnancy, and guilt feelings related to having sexual intercourse.

For supervision measures, we use two separate indicators. First, we use a measure of whether the adolescent's parents impose a curfew on weekend nights (1 = curfew imposed). The second measure is a count of the number of nights in a week (0-7) that an adolescent eats dinner with at least one parent.

Social Learning Variables

An enduring associate of adolescent problem behavior is the presence of delinquent peers. While social control theorists argue that delinquent adolescents self-select into delinquent peer groups, social learning theorists argue that adolescents learn delinquent behavior through the influence of delinquent peers. For this reason, we include a measure of peer delinquency in our analysis to assess whether differential effects of social control by social class are the result of delinquent peer relationships: the number of peers that the adolescent reports smoke, drink, or use other substances.

Self-Control Variables

We also employ a measure to control for the adolescent's level of impulsivity. Impulsive adolescents, regardless of attachment to parents or knowledge of right or wrong, may be susceptible to multiple partnering to an extent greater than less impulsive adolescents. This measure is a simple indicator of the adolescent's response to whether or not s/he relies on "gut feelings" in making a decision. In addition to this gut feelings measure, we use a measure of the adolescent's tendency to analyze situations prior to making a decision. This measure is a standardized scale ($\alpha = .75$) comprised of responses to questions about the adolescent's tendency to get as many facts as possible when solving a problem, think of as many solutions as possible to a problem, use a systematic

method in making decisions, and analyze a decision after the fact to determine what went right or wrong.

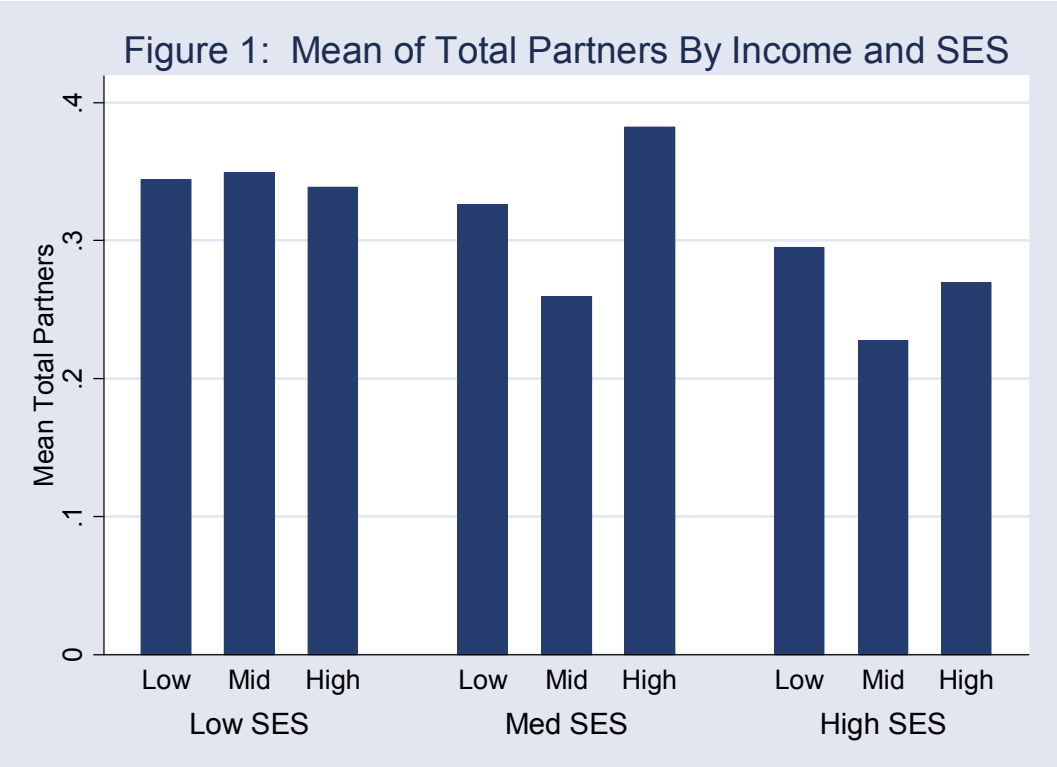
Controls

We control for sex, race, age, and religiosity. Sex is a dichotomous variable in which 1 = "female." Race is a set of dichotomous variables, one representing Black race, one representing Hispanic race, and one representing "other race," with White as the reference category. Age is a continuous variable of the respondent's age (from 15 through 18). Religiosity is a measure of how religious the adolescent claims to be, with 1 = "religious."

ANALYSES AND RESULTS

We use survey-corrected ordered logistic regression to conduct our analyses. Stata survey software was used to correct for correlated error structures and the unequal probability of selection (Chantala and Tabor, 1999).

As an initial exploration of the premises of the middle-status conformity hypothesis, we considered the bivariate associations between the number of total partners variable and our two measures of social class, absent all other variables. As shown in Figure 1, there is a complex interplay between social class as measured by family income, social class as measured by socioeconomic status, and the mean number of total reported partners.



Across socioeconomic classes, as socioeconomic status increases, the mean level of reported total sex partners decreases. However, within the medium and high socioeconomic classes, the observed pattern is the inverse, or "U-shaped," relationship predicted across income levels: the means are higher for those at the lowest and highest income levels than those at the middle income levels.

Results from the survey-corrected ordered logistic regression analyses are reported in Table 1. In Model 1, we provide a baseline model, controlling only for sex, race, and age. Unsurprisingly, age is strongly positively associated with the outcome. In Model 2, we introduce our binary indicators for high and low income (with middle income as the comparison category). As anticipated by the middle-status conformity hypothesis, both the high and low income indicators are positively associated with the total partners outcome in comparison to middle income adolescents. High income adolescents are 36% more likely to have had one or two or more sexual partners in the year between Waves I and II than middle income adolescents, while low income adolescents are 37% more likely to do so than middle income adolescents.

In Model 3, we add high and low family socioeconomic status to the model, with unexpected results. The addition of these variables is associated with an increase in the magnitude of the high income effect and a decrease in the magnitude of the low income effect (which is no longer statistically significant at the conventional level). Controlling for SES, high income adolescents are 51% more likely to have had one or two or more sexual partners in the year between survey waves than middle income adolescents. The high SES effect is negative, indicating that adolescents whose parents have higher status occupations and more education are 36% less likely than middle status adolescents to transition from virginity to one, two or more sexual partners. Low SES adolescents are not significantly distinguishable from middle SES adolescents; however, the relationship is positive in comparison to middle SES adolescents. The results with regard to SES, then, support a negative linear relationship between SES and problem behavior.

In Model 4, we include the battery of social control variables: the socialization scale, whether the adolescent's mother would be upset if the adolescent had intercourse, and the internal social control scale. All three of these measures are in the expected, negative direction, and their inclusion reduces the magnitude of the positive high income effect by nearly 9% and the negative high SES effect by over 6%. However, the effect of the addition of these variables on the coefficients for low income and low SES are more marked (though the measures are not statistically significant): the inclusion of social control variables is associated with a reduction in the magnitude of the low income coefficient of nearly 45%, and in the magnitude of the low SES coefficient of 37%. Thus, the differential patterns observed across measures of SES are, for those of lower class status, greatly attributable to differences in social control between lower and middle status families. Further, while social control variables still matter for adolescents with higher class status, their effects are considerably less marked, suggesting that social

control processes are less critical to the prevention of problem behavior among advantaged adolescents.

In Model 5, we include supervision in the model. Adolescents with weekend curfews are substantially less likely to transition from virginity to one or two or more sexual partners than adolescents whose parents do not impose such curfews. Relatedly, adolescents who have dinner with their parents more often are also substantially less likely to make this transition. While these findings are expected, the lack of effect of their inclusion on the other variables in the model (other than a slight decrease in the magnitude of the high SES coefficient so that the coefficient is no longer statistically significant at conventional levels) is somewhat surprising. In particular, the high income effect is not explained even in part by lower parental supervision or engagement among the wealthy.

As a final step, in Model 6, we include variables representing competing perspectives on deviance: two self-control variables (impulsivity and reasoning) and a social learning variable (peer deviance). We also include a measure of religiosity to assess whether the observed differences in the model are attributable to differential adherence to religious tenets across class levels. As shown in Table 1, though the coefficients for each of these variables are in the expected directions, only peer opportunity is statistically significant, and is associated with a 77% increase in the likelihood of transitioning from virginity to one or two or more partners. Indeed, as with other analyses of delinquency and problem behavior, peer opportunity represents the strongest predictor of this transition. Strikingly, though the addition of these variables is associated with a decrease in the magnitude of the high income effect, the high income effect remains significant at the .05 level.

DISCUSSION

The findings add to existing research in the area of problem behavior in two ways. First, the results indicate the importance of considering family income apart from family cultural capital. The expected negative association between socioeconomic status and problem behavior may only hold true when families possess high cultural capital: more parental education and higher status employment. Luthar (2003) argues that there is a "culture of affluence" in which adolescents are simultaneously subject to high pressures to achieve and outdo their successful parents, but are emotionally isolated from their parents, and may be more likely to experience problems with substance use, anxiety, and depression. However, the high pressures they are under may differentiate them from adolescents whose families possess substantial material resources, but not cultural resources. In these families, perhaps adolescents are most free to deviate, assured that they have the material resources to emerge from a "jam," but not held back by the pressure to succeed and outdo highly educated, professional parents.

Second, and relatedly, the results are partially supportive of the middle-status conformity hypothesis—at least for family income. The problem behavior of

adolescents in high income families is less responsive, seemingly, to prosocial forces such as attachment, socialization, and supervision. Further, while high family socioeconomic status has the expected negative effect on problem behavior, prosocial variables do not provide a clear explanation for this negative effect. For low income and low SES adolescents, however, family social processes appear to make a difference in individual problem behavior outcomes. In short, a loving, caring family can protect adolescents even in the absence of material and cultural resources.

Table 1: Survey-Corrected Ordered Logistic Regession Models of Number of Total Partners *(N=3543)*

	Model					
Independent Variables	1	2	3	4	5	6
Individual demographic						
Female	-.196	-.203	-.213	-.105	-.150	-.100
	(.111)	(.111)	(.112)	(.121)	(.119)	(.114)
African American	.289	.291	.264	.240	.137	.375
	(.191)	(.190)	(.184)	(.197)	(.196)	(.222)
Latino	-.259	-.260	-.326	-.347	-.399	-.322
	(.258)	(.245)	(.255)	(.258)	(.259)	(.258)
Other race	-.263	-.246	-.205	-.127	-.137	-.011
	(.257)	(.253)	(.251)	(.259)	(.262)	(.282)
Age	.324 ***	.322 ***	.327 ***	.301 ***	.308 ***	.317 ***
	(.047)	(.046)	(.047)	(.045)	(.050)	(.049)
Family demographic						
High income	-	.310 *	.411 **	.377 **	.377 **	.335 *
		(.120)	(.133)	(.137)	(.134)	(.141)
Low income	-	.311 *	.242	.134	.120	.066
		(.151)	(.142)	(.143)	(.141)	(.146)
Income imputed	-	-.101	-.074	-.074	-.071	-.069
		(.198)	(.196)	(.205)	(.206)	(.195)
High SES	-	-	-.306 *	-.256 *	-.236	-.233
			(.124)	(.125)	(.128)	(.124)
Low SES	-	-	.148	.094	.105	.046
			(.132)	(.143)	(.140)	(.141)
Social control						
Socialization	-	-	-	-.298 **	-.250 **	-.073
				(.085)	(.089)	(.086)
Sex would upset mother	-	-	-	-.177 **	-.180 **	-.129 *
				(.059)	(.060)	(.060)
Internal social control	-	-	-	-.237 **	-.248 ***	-.209 **
				(.068)	(.068)	(.069)
Curfew	-	-	-	-	-.388 **	-.355 **
					(.121)	(.117)
Dinners with parent/week	-	-	-	-	-.062 **	-.043 *
					(.021)	(.021)
Self-control						
Gut feelings	-	-	-	-	-	.078
						(.052)
Reasoning scale	-	-	-	-	-	-.065
						(.069)
Peer Deviance	-	-	-	-	-	.573 ***
						(.072)
Religiosity	-	-	-	-	-	-.188
						(.123)
Cutpoint 1	6.364 ***	6.546 ***	6.574 ***	5.418 ***	5.053 ***	5.695 ***
	(.780)	(.794)	(.800)	(.768)	(.844)	(.843)
Cutpoint 2	7.71 ***	7.895 ***	7.929 ***	6.796 ***	6.44 ***	7.142 ***
	(.784)	(.780)	(.808)	(.781)	(.856)	(.859)

*$p < .05$. **$p < .01$. ***$p < .001$. (two-tailed tests). Standard errors in parentheses.

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