

Friendship Networks and Risky Sexual Behavior in Adolescence

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The purpose of this paper is to examine the impact of friend's sexual risky behavior and various friendship dynamics on respondent's number of sexual partners. The saturated sample of Waves 1 and 2 of Add Health will be used for this study. This sample consists of 16 schools in which attempts were made to administer in-home questionnaires to all students on the school roster (N is approximately 4,000). Because of this, the prevalence of nominated friends being in the sample is much higher. The sixteen schools include two large schools (about 1,000 and 2,100 students respectively) and fourteen smaller ones (<300 students each).

Adolescent friendships influence many aspects of life throughout one's existence. Peer relationships are central to development of social understanding and capacity for intimacy (Collins, in press). However, the influence of friendships in adolescence can be negative as well as positive. For example, many studies show that having friends who engage in delinquent activities is linked to self-reported delinquency (Regnerus, 2002; Maxwell, 2002; Warr, 1993; Aseltine, 1995). Additionally, Udry et al., (1987) found that girls who have friends who engage in early sexual activity are more likely to engage in intercourse at an earlier age. Most studies that explore adolescent friendships measure them using only one scale such as intimacy (Giordano et al., 1998) or time spent with friends (Zimmer-Gembeck, 1999). This study will address a various dimensions of friendship that exist in conjunction including friendship closeness, friendship group density and centrality, and friendship reciprocity. An additional strength of this study is that, whereas most papers rely on respondent's report of the friend's behavior, this study uses self-reported data from both the respondent and all of his or her friends.

Friendship networks should influence sexual behavior because they provide the context in which adolescents are exposed to, and choose between, risky versus non-risky sexual behavior. Friendships are formed because an individual is attracted to another, who ideally is attracted in return (Hartup et al., 1997). From this perspective, respondents desire to emulate those who they nominate as friends.

The dependent variable for this study is number of sexual partners. Two main types of independent variables will be addressed: those concerning friendship dynamics and those concerning friend's behavior. The friendship dynamics addressed will be closeness, size of the

network, reciprocity, presence of opposite sex friends, density, and centrality. Friendship closeness is a scale based on five questions asked of each respondent about each friend they nominate addressing whether they went to their house this week, hung out or went somewhere together, talked about a problem, talked on the telephone, or spent time with the friend during the weekend. Friends with high levels of closeness are likely to report more similar sexual behavior than those with low levels of closeness because higher levels of closeness are probably an indication of friends who hold similar life beliefs and behaviors and confide in each other. Size of the network is simply a count of the number of people the person nominates. The larger networks the more likely the respondent is to be exposed to risky sexual behavior, which should in turn lead to a higher incidence of such behavior. Reciprocity is measured as the number of reciprocal nominations each person has, that is, how many people they nominate that also nominate them in return. This measure combines some aspects of both variables mentioned above. Closer friendships should be more likely to be reciprocated, which means reciprocal friends should have more similar behaviors than non-reciprocal ones. Additionally, the higher the number of reciprocal relationships, the larger the likelihood of exposure to risky sexual behavior, which in turn should lead to higher reports of respondent's risky sexual behavior. The number of opposite sex friends present in the network may automatically lead to higher reports of sexual activity, as it would indicate a clear availability of partners with whom to engage in such activities.

Density and centrality are measures based on the school network each respondent belongs to. Density is defined as the number sent and received ties (sum of people the respondent nominates and people that nominate the respondent) divided by the number of possible nominations in the total school network. Thus, if friends all nominate each other and have few external ties, the density of that group will be high. Friendship groups with high density rates probably have a higher incidence of reciprocal ties and also indicate higher similarity in behavior. Thus, groups with higher densities should display more similar sexual behavior than those with low densities. Network centrality, on the other hand, measures the number of ties a person would need in order to be linked to everyone in the school. In this way, this is actually a measure of anti-centrality. It is unclear how this measure will be related to sexual behavior in adolescence. In measuring the number of total ties relative to the school, centrality may act as a measure of popularity within this context. In this environment, the effect popularity has on risky

sexual behavior depends greatly on who each individual's constituents are. If, for example, a person's popularity results from the so called "jock/cheerleader" position (which is often associated with a stereotype of promiscuity), then the constituents may associate this position with risky sexual activity, which would link popularity to a higher incidence of such behavior. If, on the other hand, popularity is associated with a political position (i.e. student body president), the respondent must appeal to a wide range of constituent beliefs and behaviors in order to obtain a high popularity status. This may lead the respondent to avoid extreme or risky behavior in any area of their life and thus, popularity would be associated with average or low levels of sexual behavior.

As far as friend's behavior is concerned, both the amount of risky friends and the average level of risky behavior across friends will be measured. Due to the desire to emulate friends mentioned earlier, friend's risky behavior is expected to be positively associated with respondent's risky behavior. However, this relationship is expected to differ in strength and perhaps even in direction depending on the friendship dynamics present. For example, a person with low closeness to many friends may not emulate his or her friend's behavior as much as a person with high closeness to few friends. In sum, the diverse characteristics of friendship and friend's sexual behavior is expected to be strongly linked to age at first sex and number of sexual partners in adolescence.

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