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Forced Intercourse, Individual and Family Context, and Risky Sexual Behavior Among Adolescent Girls

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A B S T R A C T

Purpose: This study tested the hypothesis that individual and family factors associated with adolescent risky sexual behavior (RSB) operate differently in their relationship to RSB among girls who have experienced forced sexual intercourse (FSI), as compared to those girls who have not.
Methods: Data were collected from 3,863 eighth-grade girls from a larger statewide sample. Different subgroups of participants received different sets of questions, so 655–2,548 students were included in each analysis. Multilevel modeling was used to examine relationships of individual (social negotiation skills, personal safety, depression, and sensation-seeking personality) and family factors (sibling deviance, parental monitoring, and quality of family relationships) to RSB. FSI was examined as a predictor of RSB and as a moderator of the relationship between individual and family variables and sexual risk.
Results: In the case of individual predictors, social negotiation skills were associated with lower RSB for all girls, but these skills had a stronger relationship to RSB among girls who had experienced FSI. Depression and sensation-seeking tendencies had small positive relationships to RSB for all girls. In the case of family predictors, for girls without a history of FSI, parental monitoring was associated with lower RSB. However, among girls who had experienced FSI, parental monitoring was not significantly related to RSB, but sibling deviance was associated with lower RSB.
Conclusions: Results suggest that social negotiation skills and parental monitoring may warrant further attention in research and intervention.

IMPLICATIONS AND CONTRIBUTION

This study tested whether individual and family factors had different relationships to RSB among girls who experienced FSI, compared with those who had not. Social negotiation skills were associated with less RSB for all girls. Experience of FSI moderated the relationships of several family factors to RSB.

Unwanted sexual activity is a contributor to risky sexual behavior (RSB) and its outcomes, including sexually transmitted infection and unplanned pregnancy [1–7]. Forced sexual intercourse (FSI) is prevalent among U.S. samples of adolescents, with 10%–20% of girls reporting FSI in their lifetimes [1,4,7]. Girls who have experienced FSI are at risk for revictimization [8], and report negative outcomes including alcohol and drug use [4,7], dating violence [4,9], depression and post-traumatic stress disorder [8,10], suicidal ideation [4,6,9], and RSB [3–7], defined here as intercourse before the age of 16 years, use of alcohol with sexual activity, inconsistent or absent condom use, and intercourse with ≥2 partners in the past month. These factors have demonstrated relationships to poorer sexual health outcomes in previous research studies [2].

Research is needed to better understand risk and protective factors for FSI and its outcomes. The current study explores how the experience of FSI, or ever having been forced to have sexual intercourse against one's will, is related to RSB in the context of individual and family factors. We posit that risk factors for RSB operate differently for girls who have experienced FSI than for those who have not.

Theoretic Framework

Bronfenbrenner's ecological model [11] provides a framework for conceptualizing the influences of individual and family

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factors and FSI on adolescent sexual behavior. The ecological model describes adolescent development in the context of multiple systems: individual biology and personality; the microsystem (family, school, and peers); mesosystem (structure and quality of interactions among microsystem factors); exosystem (community-level resources and influences); and macrosystem (sociocultural and political environments). The current study focuses on the individual, micro-, and mesosystems.

Family Factors

In adolescent micro- and mesosystems, family relationship quality and parental monitoring are predictors of sexual behavior among population-based samples [12–15]. For adolescent girls with a history of FSI, family factors may contribute both to experiencing FSI and to its outcomes. Family may influence FSI directly, as when forced intercourse is perpetrated by an abusive family member [16], or indirectly, through processes that expose adolescents to risky situations, as with inadequate monitoring [17,18]. Monitoring influences adolescents' friends and dates, indirectly shaping the risk for sexual assault [18]. At the same time, monitoring is partially dependent on adolescents' disclosure of their activities, and adolescents who spend time with deviant peers may be less likely to disclose activities [19]. Deviant siblings may also increase the likelihood of victimization or traumatic experiences among other siblings, particularly younger ones [20,21].

Family processes may also affect outcomes from FSI. One study of a family-based intervention for adolescent FSI effected improvements in family functioning, adolescent drug use, depression, and post-traumatic stress disorder, suggesting that family support (from nonabusing family members) may improve outcomes [16]. However, few studies of adolescent FSI include detailed measures of family relationships and functioning, so research is needed to better understand the contributions of family to these adolescents' sexual behaviors.

Individual Factors

At the level of individual biology and personality, psychological research has examined a wide range of factors and their relationships to sexual behavior. Three of these factors examined in the present study are depressed mood [22], sensation-seeking tendencies [23], and social negotiation skills [24]. These three factors were chosen because they have shown a relationship to RSB in previous research [22–24], may be amenable to intervention, and were available in our survey.

Sensation seeking is defined as obtaining a psychological reward from engaging in exciting or "intense" experiences [25]. As sexual activity represents an opportunity for intense sensation and experience, several studies have found a link between sensation seeking and adolescent RSB [26,27]. Previous studies have not examined sensation seeking among adolescent survivors of FSI. Experience of FSI may increase or decrease a teen's desire to act on sensation-seeking tendencies with RSB.

Social negotiation skill, as defined in the current study, is the ability to enact a preferred course of action while maintaining relationships with others. Social negotiation skills may be particularly applicable to sexual relationships, allowing a teen to navigate sexual preferences or negotiate condom use [24,28]. Research data are lacking regarding the relationship of social negotiation skills to RSB in the context of FSI, although it is conceivable that these skills would be helpful in negotiating sexual situations for all teens.

Depression has also been linked to adolescent sexual behavior. Studies involving female adolescents have shown that self-reported depressed mood often co-occurs with RSB [29,30]. Longitudinal analyses suggest that sexual behavior predates depression for adolescent girls and that depression does not predate sexual behavior [31]. Many studies on the link between depressed mood and RSB do not assess whether sexual activity was consensual. Depressed mood associated with sexual activity may be because of unwanted sexual experiences for some adolescents, and the link between depressed mood and RSB may differ by experience of FSI. Adolescents who have experienced FSI are at increased risk for depression compared with those who have not [10].

The Current Study

The current study examines relationships among FSI, individual and family variables, and RSB for an adolescent female sample. The following hypotheses are addressed: First, we expect that FSI will be associated with RSB as a moderator of the effects of individual and family factors, but that it will not be independently associated. Second, we hypothesize that lower quality of family relationships, less parental monitoring, and more deviant sibling behavior will be associated with RSB for both groups of girls, but the strength of relationships will differ for girls with and without a history of FSI. Third, for girls with no history of FSI, we expect that sensation seeking tendencies and depression will be associated with higher RSB, whereas social negotiation skills will be associated with lower RSB. For girls who have experienced FSI, the existing literature does not provide guidance on sensation seeking and social negotiation skills, but we expect that depression will have a stronger relationship to RSB than for those without the experience of FSI.

Methods

Participants and procedure

This study used data from the Oregon Healthy Teens (OHT) project, a statewide survey of 8th-and 11th graders. The current study focuses on eighth graders. OHT surveyed eighth grades in 102 schools in 2000–2001, 123 in 2001–2002, 116 in 2002–2003, and 131 in 2003–2004, for 176 unique schools. Staff excluded surveys if students did not report their sex (~2%) or provided extreme (e.g., marked the highest or lowest values on all items) or inconsistent (e.g., reported alcohol use on one item but no alcohol use on another) responses (~2%), leaving 83,897 surveys across 4 years.

For the first 3 years, OHT staff administered anonymous voluntary student surveys in classrooms. Students were not included if they refused, were absent from class, withdrew from school, or had parents return a decline card. Of the enrolled eighth graders, 79% completed surveys. During 2003–2004, teachers administered the surveys as well. Teachers signed an agreement to protect students' confidentiality, and students sealed surveys in envelopes before returning them. We have no return-rate information from the 4th year, but comparisons with previous work in the same schools indicate that a similar proportion of students completed surveys. All study procedures were approved by Oregon Research Institute's Institutional Review Board and relevant school-system personnel.