An Event-Level Analysis of the Sexual Behavior of College Females: Effects of Motivation, Emotion, & Alcohol Use

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- Dissertation proposal in progress
- Comments/Questions/Suggestions are welcome (& appreciated)

Why Sexual Behavior?

- Family Violence & Sexual Assault
- Sexual Revictimization

Child Sexual Abuse → ? → Adult Sexual Assault

Sexual Behavior

Child Sexual Abuse → ? → Sexual Behavior → ? → Adult Sexual Assault

Sexual Behavior

Sexual Behavior

- Complex, multiply determined construct
- Challenging to operationally define
  – What 'counts' as a sexual experience?
- Important physical & psychological implications
  – Sexually transmitted infections
  – Pregnancy
  – Relationship satisfaction
  – Psychological functioning

Risky Sexual Behavior

- Behaviors related to sexuality that present an immediate physical or psychological health risk and may compromise future health outcomes as well as educational and occupational achievements (Sarigiani et al., 1999)
  – Numerous sexual partners
  – Sex with poorly known partners
  – Sex with partners who are 'high risk'
  – One night stands
  – Sex without condoms or contraception
  – Sex under the influence of alcohol/drugs

Risky Sexual Behavior

- Level of risk dependent on many variables
  – Relationship status, Communication, Personal Goals, etc.
- Possible Negative Outcomes
  – Unwanted pregnancy
  – Sexually transmitted infections/diseases
  – Sexual Assault
  – Depression & Anxiety

Sexual Risk Among College Students

- Up to 80% of college students have had sexual intercourse (Douglas, 1995)
- Casual sex is prevalent on college campuses
  - Rates as high as 78% (Paul et al., 2000)
- ½ of all new STD infections are among adolescents and young adults 15-24 years of age (CDC, 2007)

Sexual Risk Among Women

- Women carry a greater burden for sexual risk
  - Unwanted pregnancy
  - Physical vulnerability to infection
  - Infertility
  - Sexual Assault

Sexual Risk

- Risk reduction programs following a "disease model" are largely ineffective
- Individuals engage in risky behavior despite awareness of the health risks involved (Levinson et al., 1995)
- Need to identify other potential targets for intervention

Predictors of Sexual Risk

- Contextual Factors
  - Dynamic variables that may influence sexual behavior that are in place immediately preceding or during a sexual encounter
- Historical Factors
  - Static variables that may influence sexual behavior that are in place prior to a sexual encounter

Predictors of Sexual Risk

- Functional Approach (Cooper et al., 1998)
  - Different factors promote/maintain sexual behavior when sex serves different psychological needs
- Motives for Sexual Intercourse
  - Intimacy, Enhancement, Self-Affirmation, Peer Approval, Partner Approval, Coping

Predictors of Sexual Risk

- Complex interactions between sexual motives and other variables
- Intimacy motives appear protective in the context of stable relationships
- Coping motives predict pattern of sexual promiscuity, but increased contraceptive use
- Enhancement motives predict sexual risk-taking & greater STD risk
- Affirmation motives predict lower frequency of sex, but higher risk of unplanned pregnancy

Predictors of Sexual Risk

- Alcohol Use
  - Relationship generally empirically supported & often assumed
- Alcohol's effects on sexual behavior dependent on behavior being assessed
  - Sex with poorly known partner vs. condom use
- Cross-sectional studies limit conclusions
  - Possible 3rd variable explanations

Predictors of Sexual Risk

- Emotion / Negative Affect
  - Results are inconsistent across populations
  - Evidence for a prospective link among adolescents
  - Focus largely on depression
- Self-Esteem
  - Levels of self-esteem differentially related to various sexual behaviors

Methodological Considerations

- Available research relies heavily on global, retrospective reports
  - Estimation bias, recency, salience, state of mind effects
- Many event-level studies focus on single occurrence & do not allow examination of within-persons variability
- Few diary studies, none of which examine sexual motivation
- Differing definitions of sexual risk-taking behavior across studies make conclusions difficult.

Historical Predictors of Sexual Risk

- Childhood Sexual Abuse
  - CSA consistently predicts later sexual dysfunction
- Previous Sexual Behavior
  - Age at first intercourse, number of sexual partners, previous sexual risk behaviors
- Affect Regulation Capacity
  - Deficits in affect regulation may lead to avoidant coping and high risk behavior
  - Identified as a risk factor for sexual revictimization

Methodological Considerations

- Historical factors likely interact with contextual factors in influencing sexual risk behavior
- Few studies examine relationships both within and between subjects across time

Purpose of Proposed Study

- To use event-specific methodology (via a weekly electronic diary) to examine historical, contextual, emotional, and motivational factors that may influence the sexual behavior of college females both within and between individuals.
- To strengthen conclusions suggested by previous research by using repeated event-specific methodology in order to identify more definitive predictors of risky sexual behavior.

Operational Definitions

- Risky Sexual Behavior
  - Vaginal or anal intercourse including:
    - Condom nonuse
    - Contraceptive nonuse
    - New partner
    - Poorly known partner

Hypotheses

- Alcohol-Related
1. (W): Sexual encounters precipitated by or involving heavy alcohol use will predict sex with new partners and sex with poorly known partners
2. (B x W): Alcohol use will most strongly predict sex with new partners and sex with poorly known partners among individuals who have affect regulation deficits and report higher levels of negative affect prior to the sexual encounter

Hypotheses

- Sexual Motivation
1. (W): At the event level, coping motives will be positively related to sex with new partners and sex with poorly known partners in combination with higher levels of negative affect prior to the sexual occasion
2. (B x W): Coping motives will most strongly predict sex with new partners and sex with poorly known partners among individuals who have affect regulation deficits and report higher levels of negative affect prior to the sexual occasion
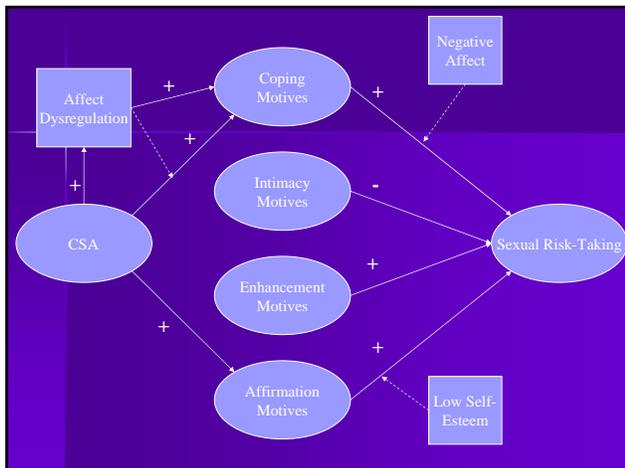
Hypotheses

- Sexual Motivation
3. (W): At the event level, affirmation motives will be positively related to sexual risk-taking in combination with lower levels of self-esteem prior to the sexual occasion
4. (W): At the event level, intimacy motives will be negatively related to sex with poorly known partners and sex with new partners, but will be positively related to condom nonuse.
5. (W): At the event level, enhancement motives will be positively related to sexual risk-taking.

Hypotheses

- Childhood Sexual Abuse
1. (B): A history of CSA will be positively related to sexual risk-taking behavior.
2. (B): CSA will be positively related to affect regulation deficits, reported negative affect, and low levels of self-esteem.
3. (B): CSA will be positively related to coping and affirmation motives for sexual intercourse.

Hypotheses

- Childhood Sexual Abuse
4. (B x W): Coping motives will most strongly predict sex with new partners and sex with poorly known partners among individuals with a history of CSA who have affect regulation deficits and report higher levels of negative affect prior to the sexual occasion
5. (B x W): Affirmation motives will most strongly predict sexual risk-taking among individuals with a history of CSA who report lower levels of self-esteem prior to the sexual occasion

Method - Participants

- Female undergraduates at NIU age 18 and older
  - Majority between 18 and 22 years of age
  - Race & ethnicity typical of NIU undergraduate sample
  - Largely 1st and 2nd year college students
  - Efforts will be made to recruit participants in their junior and senior years

Method - Procedure

- Initial screening
  - Conducted online using SSIWeb
  - Will assess:
    - Sexual history (age at 1st intercourse, number of sexual partners, sexual activity in past 3 months, etc.)
    - History of childhood/adolescent sexual abuse
    - Emotion Regulation Skills
  - Participants who endorse sexual activity in past 3 months will be invited to participate in weekly electronic diary

Method - Procedure

- 8 Weekly Electronic Diaries
  - Emailed once per week, embedded with a unique URL for survey on a secure server
  - Current relationship status
  - Weekly frequency of sexual intercourse & # of partners
    - Report on up to 3 sexual events in past week
  - For each of the 3 reported events
    - Level of consent, Previous sexual contact with partner, Familiarity with partner/length of relationship, Condom/Contraception Use, Alcohol use, Affect, Self-Esteem, Sexual motivation

Method – Screening Measures

- Demographics
- Sexual history
  - Age at 1st consensual intercourse, number of lifetime sexual partners, frequency of one night-stands, frequency of sex with poorly known partners, frequency of condom use, sexual activity in past 3 months
- Difficulties with Emotion Regulation Scale (DERS: Gratz & Roemer, 2004)
  - 36 items assess 6 dimensions of affect dysregulation
  - Ex: "When I'm upset I have difficulty concentrating"
  - Rated on a scale from 1 to 5

Method – Screening Measures

- Traumatic Life Events Questionnaire (TLEQ: Kubany et al., 2000).
  - Assesses frequency of
    - CSA before 13 by someone 5 years older, CSA before 13 by someone close in age, Sexual abuse during adolescence, Sexual assault after age 18
  - Also assesses abuse characteristics
    - relationship to perpetrator, threat or force, level of sexual contact, duration, injury

Method – Event Measures

- Current relationship status
  - Married, engaged, living with someone, dating someone seriously, dating someone casually, no current relationship
- Frequency of sexual intercourse in past week (single item)
- Number of sexual partners

Method – Event Measures

- For up to 3 sexual events:
  - Relationship to partner (stranger – spouse)
  - Partner gender
  - How long had you known this person?
  - How well did you know this person?
  - Have you had sex with this person before?
  - Were you pressured or forced to have sex against your will or without your consent?
  - Presence of oral sex, vaginal, anal intercourse

Method – Event Measures

- Motivations for Sexual Intercourse Scale (Cooper et al., 1998)
  - 29 items assess reasons for engaging in sex among 6 subscales
  - Ex: "To what extent did you have sex to cope with upset feelings?"
  - Rated on a scale from 1 to 5.
- Alcohol use
  - Quantity of alcohol consumed before or during sexual experience (number of drinks)
  - Level of intoxication rated from 1-5

Method – Event Measures

- Condom use
  - Was a condom used on this occasion?
- Contraceptive use
  - Was any type of birth control used?
  - Variable created from selection list
- Self-Esteem
  - Modified version of Rosenberg's Self-Esteem Scale to reflect contextual levels of self-esteem
- Affect
  - Single item?, PANAS?, Other?

Method - Analyses

- Hierarchical Linear Modeling
  – Allows measurement of individual change
  – Each individual's observations are nested within the person
  – Indicated when there are numerous observations per individual & when the # of observations differs between individuals
  – Each diary entry will be considered an observation
  – Fits a regression equation (e.g., calculates slope and intercept) at the individual level, and tests whether the overall relationship between the level 1 variable and the outcome significantly differs from zero

Method - Analyses

- HLM Traditionally involves two-level hierarchical linear models.
  – 1st level is based on the within-person parameters
  – 2nd level is based on the between-person parameters
- Initial models will contain only main effects & then increase in complexity to include higher-order interactions
- Variables will be mean centered
- Level 1 interactions will be calculated in SPSS
- HLM provides interactions between level 1 and level 2 variables

Method - Analyses

- Each sexual behavior outcome will be tested separately
- R^2 will be calculated for effect size for continuous DV's
- Odds Ratios will be calculated for effect size for dichotomous DV's
- Relationship status will be controlled for in all within-persons analyses
- Previous sexual behavior related to the DV will be controlled for in all between-persons analyses

Questions/Comments

- Thank you