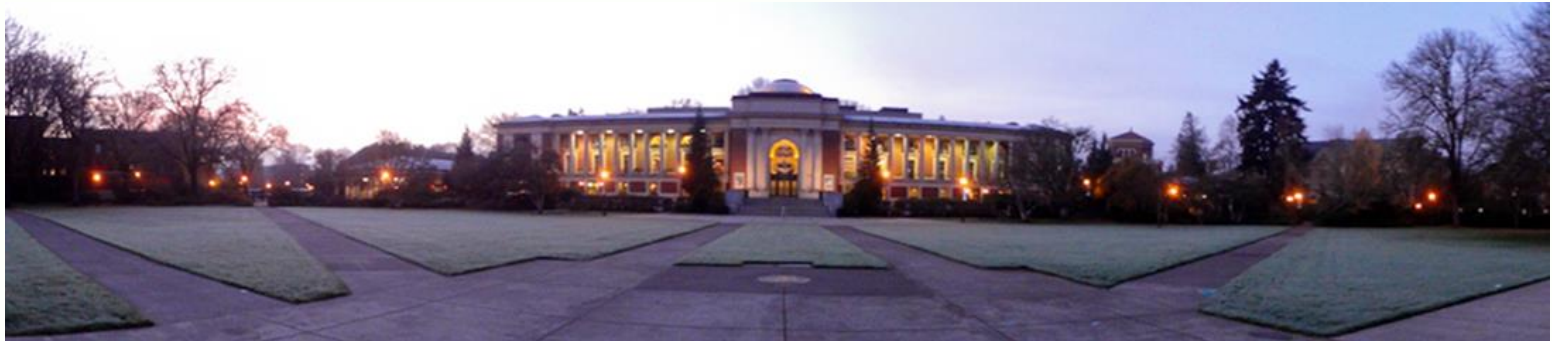


# The Role of Individual and Relationship Factors on Contraceptive Use among At-Risk Young Adults



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# HIV/STIs and unintended pregnancy among young adults

- Adverse consequences of unprotected sex include unintended pregnancy and transmission of HIV and other STIs
- Young adults have the highest rates of new HIV infections and other STIs are epidemic and increasing among this population<sup>1,2</sup>
- Women 18-24 have the highest rates of unintended pregnancy of any age group<sup>3</sup>
- Taken together, the burden of unintended pregnancy and HIV/STIs among young adults is substantial

<sup>1</sup> Centers for Disease Control and Prevention, 2011

<sup>2</sup> Centers for Disease Control and Prevention, 2012

<sup>3</sup> Finer & Kost, 2011

# Contraceptive Use Decision Making

- **Pregnancy Prevention**
  - A number of highly-effective pregnancy prevention options are available including long-acting reversible contraception (LARC) such as IUDs, Depo Provera, and Norplant
  - However, these methods offer no protections against HIV and STIs
- **Condom Use**
  - While some other methods are in development or testing (PrEP and other multipurpose technologies<sup>4,5</sup>), condoms remain the only widely available effective method for preventing HIV and other STIs
  - However, condom use is associated with higher rates of unintended pregnancy than are LARC<sup>6</sup>
- **Dual Protection**
  - Together, a combination of a hormonal or long-acting method with consistent condom use provides the best defense against unwanted pregnancy and the transmission of HIV/STIs

<sup>4</sup> Centers for Disease Control and Prevention, 2014

<sup>5</sup> Thurman, Clark, & Doncel, 2011

<sup>6</sup> Cates & Steiner, 2002

# Contraceptive Use Decision Making

- Previous research on contraceptive choice and use among young adults has focused mainly on individual-level explanatory factors
  - Demographic characteristics (e.g., age, gender, education)
  - Access to services
  - Acceptability of method type and personal preferences
- Contraceptive decisions are often made in the context of a relationship. Researchers posit that partners and relational factors likely influence the type and use of contraceptives
  - A growing body of research has investigated the influence of relationship characteristics (coital frequency, duration, partner type) and qualities (relationship quality, intimacy) on contraceptive choice and use.<sup>7-11</sup>

<sup>7</sup> Katz, Fortenberry, Zimet, Blythe, & Orr, 2000

<sup>8</sup> Manning, Giordano, Longmore, & Flanigan, 2012

<sup>9</sup> Kusunoki & Upchurch, 2011

<sup>10</sup> Manlove, Welte, Barry, Peterson, Schelar, & Wildsmith, 2011

<sup>11</sup> Manlove, Welte, Wildsmith, & Barry, 2014

# Gaps

- Most studies are cross-sectional or retrospective and do not account for the dynamic nature of relationships over time
- Most limit to a single relationship or a comparison between two relationship types
- The majority of studies use individual- rather than partner-specific measures

# Study Purpose

The purpose of this study was to investigate which partner-specific individual and relationship factors predict contraceptive use over time among a sample of at-risk young adults.

# Sample

- Data are from a longitudinal study that examined relationship dynamics among women and men aged 18-30 in the Los Angeles area
- Participants completed 4 in-person interviews over 12 months answering a series of partner-specific individual and relationship questions for each individual partner at each time point.
- Eligibility criteria included:
  - 18-30 years of age
  - Heterosexual sex without a condom at least once in the previous 3 months
  - At least one of the following:
    - More than one sex partner in previous year
    - STI in the previous two years
    - Sex in the previous year with a partner who had an STI or HIV
    - Ever used intravenous drugs

# Measurement

- Dependent Variable: Contraceptive Use
  - Condom (Male condoms only)
  - Hormonal or Long-Lasting (Birth control pills, IUD, Norplant, Depo Provera)
  - Dual Protection
  - No Method (Nothing, Withdrawal, Rhythm)
- Because of small reported numbers, those reporting only sterilization, female condom, diaphragm, spermicides, sponge, other, or abstinence were excluded from this analysis





## Individual Controls

Gender, Age, Race/Ethnicity, Education,  
Number of Lifetime Partners, History of  
STD at baseline

## Partner-Specific Individual Factors

Perceived vulnerability to pregnancy,  
perceived vulnerability to harm (HIV/STIs),  
condom-use self-efficacy

## Relationship Characteristics

Relationship Duration,  
Coital Frequency

## Relationship Qualities

Commitment, Satisfaction,  
Investment, Alternatives,  
Attachment, Perceived  
Partner Exclusivity

## Relationship Dynamics

Relationship Power, Sexual  
Decision Making Power

# Results

- Multinomial logistic regression (4-level dependent variable)
- Partner-specific Individual Factors
  - Those with higher perceived **vulnerability to pregnancy** were significantly *more likely* to choose a hormonal method over condom only, dual protection, or no method (OR = 1.39, 1.32, 1.59 respectively) and were *more likely* to choose dual protection over no method (OR = 1.34).
  - Those with higher perceived **vulnerability to harm** were *more likely* to choose both dual and no method over a hormonal method alone (OR = 1.31, 1.21).
  - Those with higher **condom use self-efficacy** were *less likely* to choose a hormonal method alone than condom only, dual protection, or no method (OR = 0.28, 0.21, 0.29) and *less likely* to choose nothing over condom (OR = 0.33).

# Results

- Relationship Characteristics
  - Although those with higher perceived **coital frequency** were significantly *more likely* to choose a hormonal method over condom only or dual protection and were *more likely* to choose no method over condom only or dual protection, the odds ratios approached 1.0 and are therefore not substantively significant.
- Relationship Dynamics
  - Those with higher **sexual health decision making** were *less likely* to choose no method versus hormone only, condom only, and dual protection (OR = 0.45, 0.29, 0.16) and were also *more likely* to choose condom only versus hormone only (OR = 1.59).

# Results

- Relationship Qualities

- Those with higher perceived **commitment** were *more likely* to choose hormone only versus dual protection or no method (OR = 1.59, 1.41).
- Those with higher **investment** were *more likely* to choose dual protection over hormone only (OR = 1.31).
- Those with higher **attachment** were *more likely* to choose no method over dual protection (OR = 1.45).
- Those with higher **perceived partner exclusivity** were *less likely* to choose only condom compared to hormone only, dual protection, or no method (OR = 0.63, 0.74, 0.71).

# Strengths and Limitations

- Strengths
  - Partner-specific measurement
  - Includes relationship qualities and dynamics in contraceptive context
  - Longitudinal study with multiple measurement time points
- Limitations
  - Included both contraceptive use and types of use
    - To better understand the impact of these factors, our next step is to examine two research questions separately
      - The predictors of use of effective contraceptive vs. non-use
      - The predictors of contraceptive choice among those using effective methods
  - Averaged effects over time
    - Next steps in this study are to use multi-level modeling to determine at which level (individual, partner, time) these variables are affecting contraceptive use and choice

# Conclusions

- Contraceptive choice and use are influenced by both individual and relational factors.
- Relationship characteristics/traditional relationship demographics, while significant, do not substantively predict contraceptive use
- Relationship dynamics and qualities significantly predict contraceptive use

# Implications for Research and Practice

- Implications for Research

- Additional research is needed to understand at what levels these predictors effect choice and use
- Relationship qualities and dynamics should be included in research design in addition to relationship characteristics
- Theoretical models need to be developed incorporating the relational context
- Interventions should include relationship-specific targets and utilize the importance of relationship qualities and dynamics in behavior change.

- Implications for Practice

- Importance of partner-specific discussions and the relational context in regards to contraceptive choices

# Thank You

## Questions?





		Male Condom	Hormonal & Long-Lasting	No Method
Dual	Female	2.48 (1.14, 5.39)	-	-
	White vs. Black	11.13 (4.00, 30.87)	-	-
	Other vs. Black	6.49 (2.15, 19.60)	-	-
	Number of lifetime partners	-	-	0.97 (0.94, 0.99)
	Vulnerability pregnancy	-	0.76 (0.59, 0.97)	1.34 (1.09, 1.57)
	Vulnerability harm	-	1.31 (1.09, 1.57)	-
	Condom use SE	-	4.66 (2.51, 8.64)	-
	Duration	-	-	1.00 (2.51, 8.64)
	Coital Frequency	-	0.99 (0.97, 1.00)	0.99 (0.98, 1.00)
	Commitment	-	0.63 (0.47, 0.82)	-
	Investment	-	1.31 (1.02, 1.69)	-
	Attachment	-	-	0.69 (0.49, 0.98)
	Sexual Health Decision-Making	-	-	6.17 (3.53, 10.73)
	Perceived partner exclusivity	1.35 (1.06, 1.71)	-	-
No Method	White vs. Black	4.14 (1.512, 11.25)	-	-
	Other vs. Black	6.55 (2.28, 18.90)	-	-
	Number of lifetime partners	1.02 (1.00, 1.04)	-	-
	Vulnerability pregnancy	-	0.63 (0.50, 0.80)	-
	Vulnerability harm	-	1.21 (1.02, 1.45)	-
	Condom use SE	0.53 (0.31, 0.90)	3.49 (1.96, 6.23)	-
	Coital Frequency	1.01 (1.01, 1.02)	-	-
	Commitment	-	0.71 (0.55, 0.93)	-
	Sexual Health Decision-Making	0.29 (0.19, 0.42)	0.45 (0.30, 0.69)	-
	Perceive partner exclusivity	1.40 (1.12, 1.76)	-	-
Hormonal & Long-Lasting	White vs. Black	5.64 (2.13, 14.88)	-	-
	Other vs. Black	3.13 (1.08, 9.11)	-	-
	Vulnerability pregnancy	1.39 (1.12, 1.71)	-	-
	Condom use SE	0.28 (0.16, 0.46)	-	-
	Coital Frequency	1.01 (1.00, 1.02)	-	-
	Sexual Health Decision-Making	0.63 (0.42, 0.93)	-	-
	Perceive partner exclusivity	1.60 (1.27, 2.00)	-	-