GLOBAL SOCIOSEXUALITY MEDIATES THE RELATIONSHIP BETWEEN PREP KNOWLEDGE AND RISKY SEXUAL BEHAVIOR

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I N T R O D U C T I O N

- Pre-exposure prophylaxis (PrEP) is a preventative drug that offers 95% risk reduction of acquiring HIV (2)
- PrEP’s release has corresponded with a rise in STI rates (3)
- Some research characterizes PrEP as a conduit for people engaging in risky sexual behavior; citing the theory of risk compensation (3, 4)
- Others cite PrEP as an effective protective mechanism and a boon to the communities at risk for HIV (5)
- Given this paucity of evidence for either side of the argument, further research is needed to determine how PrEP has impacted the relationship between PrEP and risky sex

A I M

- To assess the effects of PrEP knowledge on intentions to engage in risky sexual behavior and how sociosexual orientation, sexual compulsivity, and contraceptive attitudes could mediate this relationship
- We predicted that higher PrEP scores would lead to a higher likelihood of risky sex, which could be mediated by global sociosexual orientation, sexual compulsivity, and contraceptive attitudes

M E T H O D S

P A R T I C I P A N T S

- 246 men, aged 18-72 (see Table 1)
- Ethnic breakdown: 88.5% Caucasian, 3.7% African-American, 16.7% Hispanic/Latino, 9.3% Asian American, and 4.1% marked other or missing
- Sexual identity breakdown: 65% different-sex attraction only, 20% same sex attraction only, and 15% both sex attraction

M E A S U R E S

- PrEP knowledge was calculated by participant’s responses to factual questions about PrEP (e.g., What year did the FDA approve this drug?) resulting in a continuous score from 0 to 10
- Sociocultural Orientation was assessed with the Revised Sociosexual Orientation Scale (SOQ-R), which assesses one’s openness to uncommitted sex (6)
- Sexual Compulsivity was assessed with the Sexual Compulsivity Scale (SCS), which measures a tendency toward sexual behaviors that interfere with everyday life (7)
- Contraceptive Attitudes was assessed with the Contraceptive Attitudes Scale (CAS), which measures one’s favorability toward the use of contraceptives (e.g., condoms, birth control) (8)
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V I G N E T T E

- "You are attending a party with some coworkers who you have not spent much time with before. You decide to go to the bathroom, where you meet someone you find attractive. You two begin talking, and find that you get along very well. After talking for a few minutes, she asks if you’d like to come home with her. She lives near your place, and as you walk, she reveals that she is taking a drug that is 95% effective in preventing HIV infection. Once you get to her apartment, she begins to kiss you, and you must decide what to do next, as you know that sex will be the likely outcome. Do you choose to have sex with her, or do you choose to leave the apartment?"
- If participant answers yes, do you use a condom? If participant answers no, please explain your reasoning for deciding not to have sex with this person.
- Answering yes qualified as “risky sex” for the purposes of this study.

R E S U L T S

- To interpret the data obtained, a logistic regression analysis was conducted, where we utilized a mediation model (See Figure 1)
- PrEP Knowledge on Risky Sex
  - A logistic regression analysis revealed that PrEP knowledge significantly mediated the relationship when accounting for the mediators
- Global sociosexual orientation on risky sex
  - The same mediation analysis using logit regression revealed global sociosexual orientation (SOQ-R) to be the only statistically significant mediator of the relationship between PrEP and risky sex
- Answering yes to the vignette and also indicating no condom use predicts higher sociosexual orientation
- i.e., answering “yes” to the vignette and going through with the encounter without a condom is associated with higher global sociosexual orientation


<table>
<thead>
<tr>
<th>Predictor</th>
<th>Estimate</th>
<th>SE</th>
<th>Est. SE</th>
<th>P-Value</th>
</tr>
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<tbody>
<tr>
<td>CAS</td>
<td>0.003</td>
<td>0.006</td>
<td>0.064</td>
<td></td>
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<tr>
<td>SCS</td>
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<td>0.005</td>
<td>0.002</td>
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<td>SOQ-R</td>
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<td>0.044</td>
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<td>DV on IV</td>
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<td>0.075</td>
<td>0.3154</td>
<td>0.022</td>
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</table>

Note the importance of pairing PrEP with safe sex practices

C O N C L U S I O N S

- Based on the results of this study, the relationship between PrEP knowledge and risky sex appears to be mediated by sociosexual orientation.
- This offers a potential entry point for treatment and understanding the behaviors of groups at risk for HIV infection
- However, it is important to recognize the problematic nature of characterizing PrEP as a conduit for risky sex behavior – the majority of respondents who were somewhat PrEP knowledgeable indicated they would use protection in the risky sexual encounter with a stranger
- Note the importance of pairing PrEP with safe sex practices
- More studies need to be conducted concerning real life scenarios, as the vignette in this study may not be reflective of a real world sexual encounter

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Estimate</th>
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<th>P-Value</th>
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</thead>
<tbody>
<tr>
<td>Pre-Exposure Prophylaxis (PrEP) Prescribers</td>
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<td>3.7</td>
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<td>Global Sociosexual Orientation</td>
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<table>
<thead>
<tr>
<th>Race</th>
<th>163 (%)</th>
<th>86.3 %</th>
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<tbody>
<tr>
<td>African American</td>
<td>9</td>
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<tr>
<td>Hispanic/Latino</td>
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<td>18.6</td>
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<tr>
<td>Asian American</td>
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<td>9.5</td>
</tr>
<tr>
<td>Other/missing</td>
<td>10</td>
<td>4.1</td>
</tr>
</tbody>
</table>

S E X U A L I D E N T I T Y

| Attracted to women only | 100 (80) |
| Attracted to men only   | 49 (20) |
| Attracted to both men and women | 37 (15) |

R E F E R E N C E S