

Social Determinants of Methamphetamine Use Among Gay, Bisexual, and Queer Men Living with HIV

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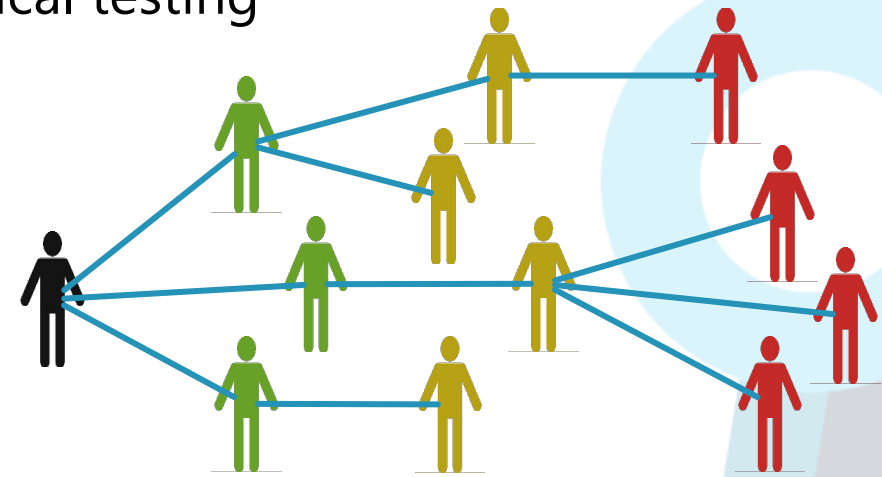
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Introduction

- Approximately 8-20% of gay, bisexual, and other men who have sex with men (GBM) report methamphetamine (meth) use in the past 6-12 months (1,2).
 - GBM living with HIV are significantly more likely to report meth use (3).
- Meth is often used within a sexual context - referred to as party and play (PnP) or chemsex - as it allows for increased sexual stamina, prowess, and confidence (4).
- Although sexual health outcomes are well documented (e.g., greater condomless anal sex, poorer HIV medication adherence; 3), there is a paucity of research quantitatively examining direct and indirect psychosocial pathways of meth use (5,6).
 - This limits the effectiveness of prevention, intervention, and harm reduction services (7).
- We examined social and psychological variables associated with meth use among GBM living with HIV including childhood sexual abuse, heterosexist discrimination, minority stressors (e.g., internalized homonegativity), psychological distress, escape motives (i.e., use of psychoactive drugs to cognitively “escape” from personal HIV-related risks; 8), and sexual compulsivity.

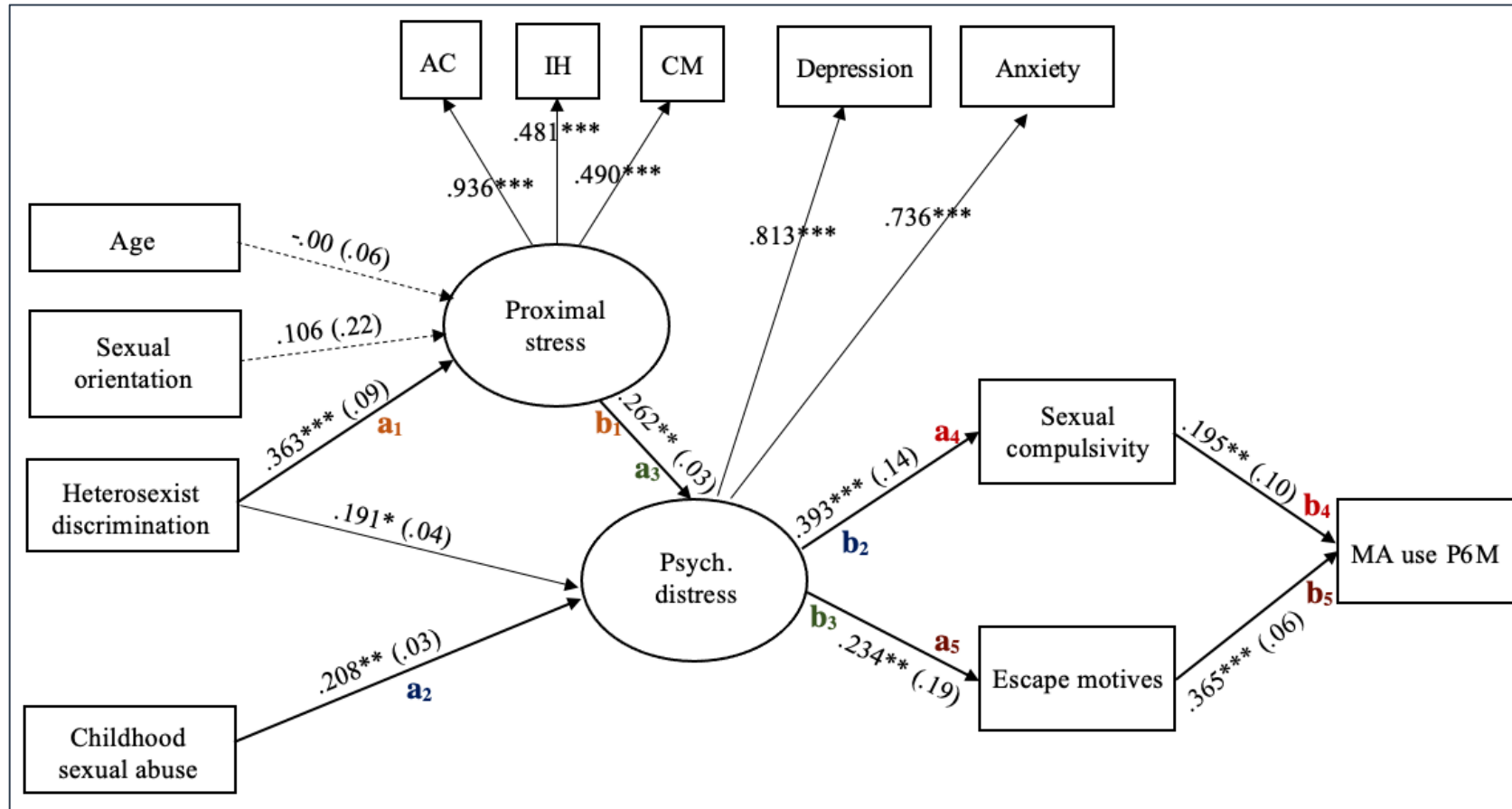
Methods: The Engage Study

- Mixed-Method longitudinal cohort study conducted in Vancouver, Toronto, and Montreal.
- Recruited cis- and transgender men who were 16 years of age or older and reported having sex with another man in the past 6 months.
- Participants completed computer-assisted surveys and biomedical testing (i.e., STI and HIV testing).
- Data collected using Respondent-Driven Sampling (RDS).
- This study presents baseline data among GBM living with HIV:
 - $N = 355$ (pooled across the three cities)
 - Recruitment period: February 2017 – August 2019
- Of this sample, 35% reported meth use in the past 6 months (versus 6% of HIV negative GBM).
- A structural equation model was estimated using unweighted least squares (ULS) with robust (Huber-White) standard errors and a Satorra-Bentler adjusted test statistic (ULSMV).



Results

- Model was a good fit for the data: $\chi^2(df = 45, N = 355) = 50.23, p = .274, CFI = .977, TLI = .986, RMSEA = .018$ (90% CI [.00, .04]), SRMR = .066



Indirect effects

ab_1 : $B = .05, \beta = .10, SE = .02, p = .004$

ab_2 : $B = .05, \beta = .08, SE = .02, p = .012$

ab_3 : $B = .12, \beta = .10, SE = .05, p = .022$

ab_4 : $B = .17, \beta = .08, SE = .07, p = .02$

ab_5 : $B = .19, \beta = .09, SE = .08, p = .013$

Note. Standardized path coefficients (standard errors) and factor loadings. $*p < .05, **p < .01, ***p < .001$. Dashed paths are non-significant. Sexual orientation: 0 = gay, 1 = other sexual orientation. AC = acceptance concerns, IH = internalized homonegativity, CM = concealment motivation, MA = methamphetamine, P6M = past 6 months.

Conclusion

- Among GBM living with HIV, the following factors were associated with recent meth use: childhood sexual abuse, minority stress, psychological distress, sexual compulsivity, and escape motives.
- The model suggests that interventions targeting any of these factors have the potential to directly or indirectly change meth use among GBM living with HIV.
- Primary prevention and intervention efforts should focus on reducing structural forms of sexual orientation based stigma, which are known to increase psychological distress (9) – as well as greater psychosocial support for GBM living with HIV.
- Secondary and tertiary interventions should focus on increasing support at health care sites specific to GBM living with HIV and addressing psychosocial factors associated with meth use among GBM living with HIV using GBM-specific individual/group counselling interventions.
- Given the complex pathways associated with meth use among GBM living with HIV, effective interventions will need to account for the social (e.g., minority stressors, stigma) and psychological (i.e., psychological distress, escape motives) factors that motivate or result from meth use.

Further information: contact gberlin@ryerson.ca or <https://www.engage-men.ca/>

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