Unpacking Chemsex : What Distinguishes Non-Users, Non-Problematic, and Problematic Users?

A cross-sectional survey into sexualized drug-use among gay, bisexual and other men who have sex with men in Amsterdam, 2024

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Background

Chemsex—the use of specific substances to enhance sex—is linked to increased STIs and other health concerns. Problematic chemsex involves negative impacts on relationships, work, and mental health.

Objective

To identify psychological and demographic factors linked to problematic chemsex and compare them across non-users, non-problematic, and problematic chemsex users.

Methods

- Cross-sectional survey among MSM in Amsterdam (Apr–Jul 2024).
- Chemsex was defined as the use of methamphetamine, mephedrone, GHB/GBL, ketamine, cocaine, speed, 3-MMC, or designer drugs in sexual settings.
- Participants were classified as Non-Chemsex, Non-Problematic Chemsex, or Problematic Chemsex (based on self-reports).

Figure 1. Psychological stressors among non-chemsex, non-problematic chemsex, and problematic chemsex users

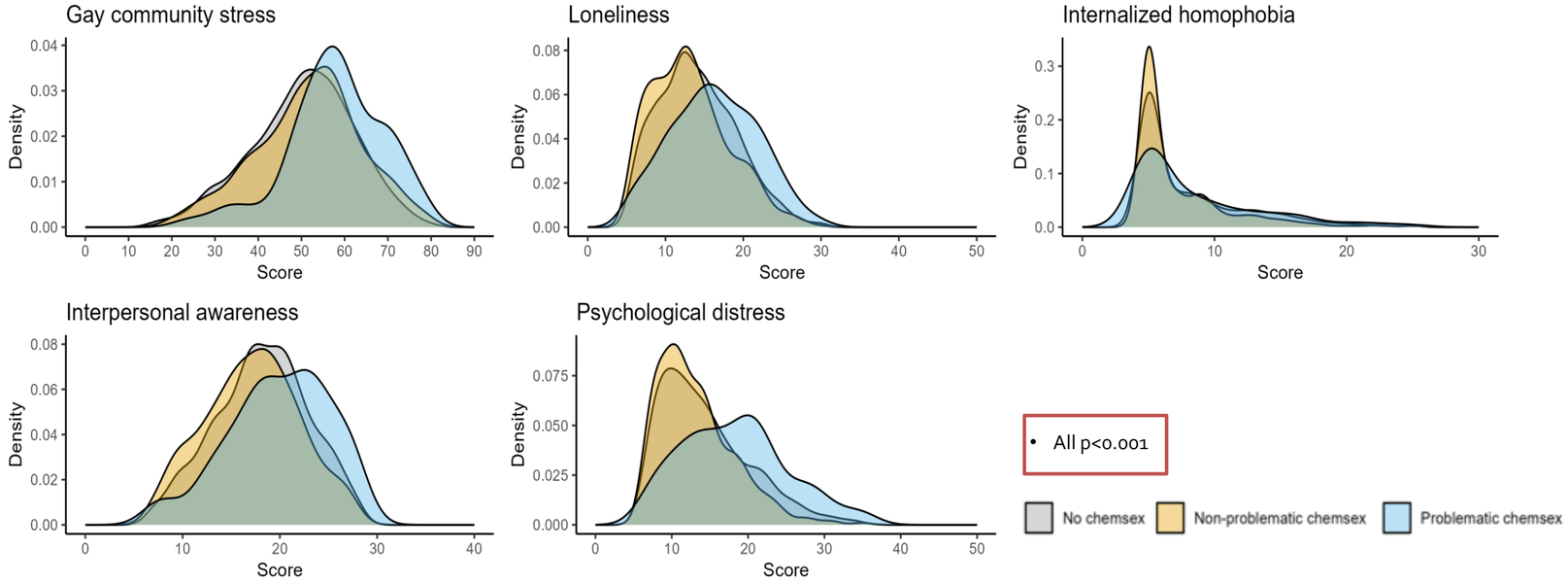

Table 1. Baseline socio-demographic and sexual behavior characteristics of participants

	Non-Chemsex (n=1,074)	Non-Problematic Chemsex (n=645)	Problematic Chemsex (n=161)	*p-value*
Demographics				
Living in Amsterdam	478 (44.51%)	298 (46.20%)	101 (62.73%)	<0.001
Non-Dutch	395 (36.78%)	229 (35.50%)	74 (45.96%)	0.046
Steady relationship	569 (52.98%)	375 (58.14%)	74 (45.96%)	0.011
Engaged in sex work	32 (3.03%)	36 (5.65%)	13 (8.18%)	0.002
HIV / PrEP				
Lives with HIV	83 (7.73%)	94 (14.57%)	25 (15.53%)	<0.001
HIV- PrEP+	515 (51.97%)	437 (79.31%)	118 (86.76%)	<0.001
HIV- PrEP-	476 (44.32%)	114 (17.67%)	18 (11.18%)	<0.001

Results

- N=1,880 (63%) of the 2,984 participants completed the survey
- Most (95%) identified as cis man
- Median age was 39 years (IQR =31–52)

Conclusions

- Self-reported problematic chemsex is linked to measurable psychosocial outcomes and to distinct demographic and HIV-related profiles.
- These insights support early identification and integrated care addressing substance use and psychological needs.