

“In Real Life”: Social, Communal, and Attitudinal Covariates of Online Sex-Seeking (OSS) among Gay, Bisexual, and other Men Who Have Sex with Men (GBM) in Vancouver, British Columbia

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Background

- Previous work has shown that online sex-seeking men engage in higher rates of condomless anal sex (CAS) and possibly higher rates of seroadaptation [1].
- Little is known about the social and attitudinal factors that distinguish men who use this technology from those who do not.
- **Our Objective** was to identify the social, communal, and attitudinal covariates of online sex-seeking.

Methods

Study Setting. We used cross-sectional baseline data from the Momentum Health Study, a prospective bio-behavioural cohort study which recruited sexually-active GBM aged >16 throughout Metro Vancouver using Respondent Driven Sampling between February 2012 and February 2014. Participants self-completed a computer-administered questionnaire, which was followed by a nursing visit where they were screened for HIV and other sexually transmitted infections.

Explanatory Variables. Age; sexual orientation (gay vs. bisexual/other); race/ethnicity (white, Asian/Latin American/other, Indigenous), annual income (<\$30k, \$30-60k, ≥60k); GBM network size; closeness to GBM; social time spent with GBM (<25%, 26-75%, ≥75%); level of social support (study $\alpha=0.85$); communal sexual altruism ($\alpha=0.88$); loneliness ($\alpha=0.77$); self-esteem ($\alpha=0.88$); importance of gay community ($\alpha=0.81$); HADS anxiety ($\alpha=0.84$) and depression ($\alpha=0.79$); recent community participation via gay sports, gay-specific groups, gay bars/clubs, pride events, and gay media consumption; serostatus sharing; seroadaptive strategies; HIV testing; and serodiscordant/unknown condomless anal sex (sduCAS).

Outcome Variable. Use of apps or websites in the past six months to seek sex (any vs. none).

Statistical Analysis. All analyses were completed in SAS v. 9.4 and adjusted for homophily and network size using RDS-II estimators. A multivariable logistic regression was created using the PROC LOGISTIC command with backwards selection; Type-III p-values and AIC minimization were used to model the covariates of engaging in any online sex seeking using mobile apps or websites in the past six months.

Results

Descriptive Results (Figure 1). At baseline, 774 men were recruited into our study.

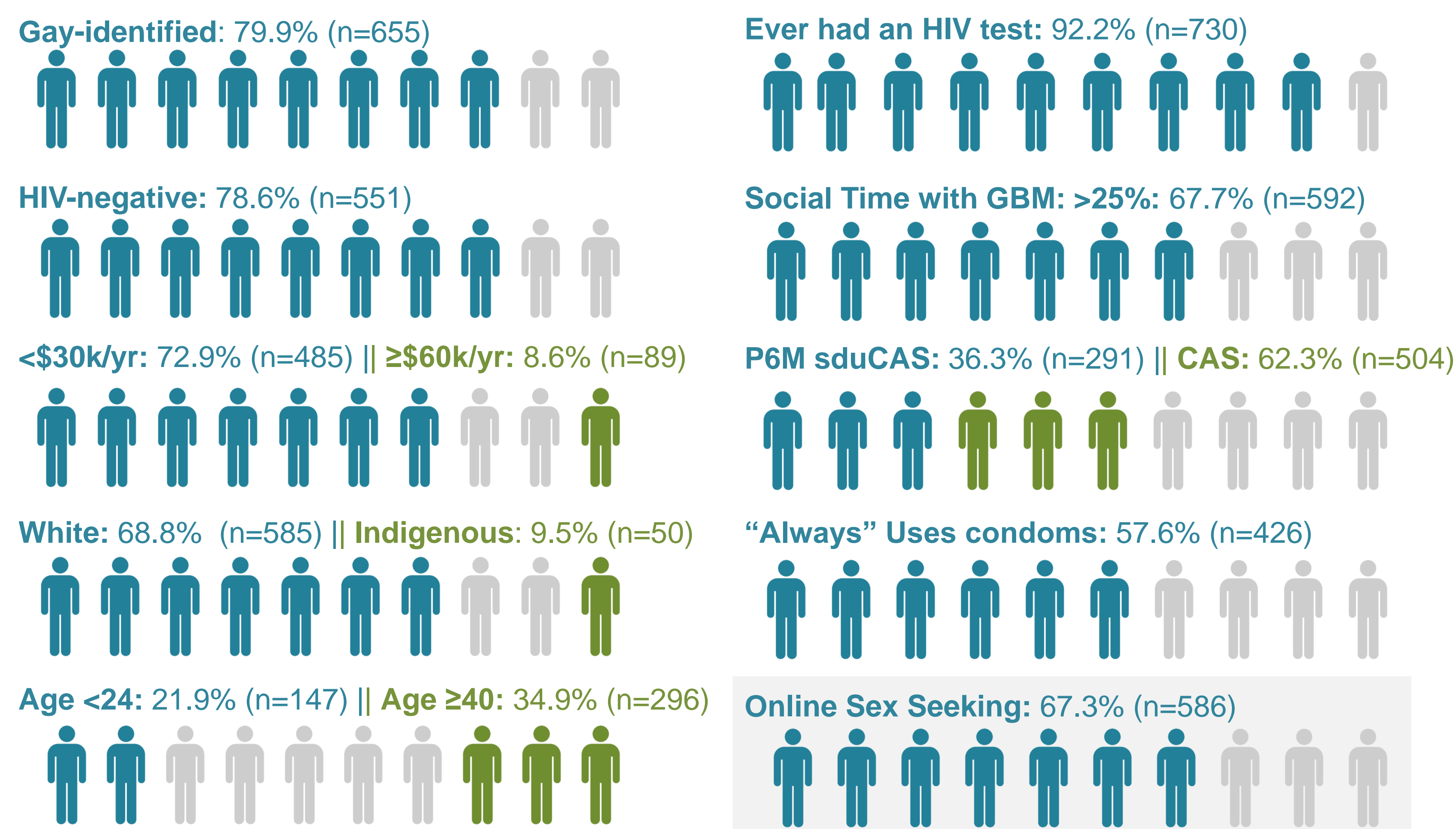


Figure 1. RDS-weighted sample characteristics (n=774)

Univariable Results (Table 1.)

- Men who used the internet to seek sex were just as likely to participate in the gay community by engaging in gay sports, attending gay-specific group meetings, going to gay bars and clubs, celebrating annual pride events, or reading gay media.

Table 1. Community participation of online sex-seeking (OSS) men and non-online sex-seeking men (No OSS) over the past six months (P6M)

	OSS in P6M (n=586)		No OSS in P6M (n=188)		p-value
	n	RDS %	n	RDS %	
Gay Sports	70	10.1	20	8.4	.44
Gay Groups	227	35.8	73	31.9	.29
Gay Bars & Clubs	464	76.5	153	71.0	.10
Pride Parade					.80
Spectator	289	46.2	92	44.9	
Volunteer	78	11.8	27	13.5	
Gay Media	482	77.0	158	80.6	.21

OSS: Online Sex Seeking, P6M: Past Six Months, RDS: Respondent Driven Sampling.

Multivariable Results (Figure 2.)

- Online sex seeking was **negatively associated** with age, Indigenous identity (vs. white), emotive identification with the gay community (as measured by Collective Self-Esteem), low sociality (defined as spending <25% of social time with other gay men vs. 26-75%), and Communal Sexual Altruism; it was **positively associated** with being single, higher HADS anxiety scores, having more Facebook friends, having ever had an HIV test, always asking a partner’s HIV status, higher Sexual Sensation Seeking scores, and greater likelihood of serodiscordant or unknown condomless anal sex.

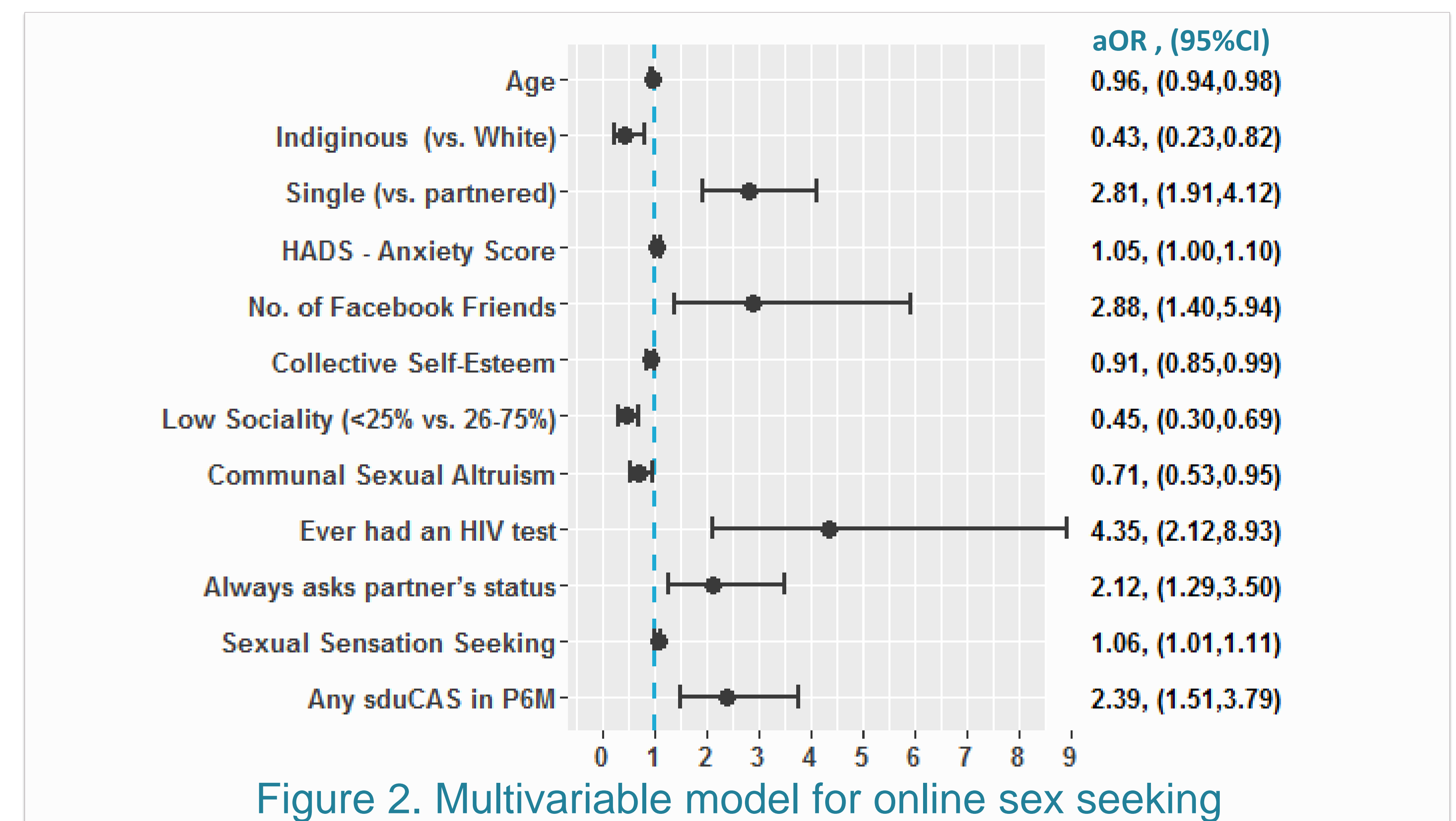


Figure 2. Multivariable model for online sex seeking

Conclusions

- Our findings suggest that online sex-seeking men exhibit distinct social patterns compared to men who do not use the internet to seek sex.
- Further study is needed to explore how social norms interact within digital networks to influence a wide array of psychosocial traits and behaviours that affect the health and wellbeing of GBM.

References

1. JA. Lewnard & L. Barrang-Ford, “Internet-based Partner Selection and risk for unprotected anal intercourse in sexual encounters among men who have sex with men: a meta-analysis of observational studies. *Sex Transm Infect.* 2014.