



HAL
open science

Predictors of drug type and sexualized use in men who have sex with men (MSM) and transgender people in France

Alain Léobon, Eugénie Samson-Daoust

► **To cite this version:**

Alain Léobon, Eugénie Samson-Daoust. Predictors of drug type and sexualized use in men who have sex with men (MSM) and transgender people in France. AIDS 2022, the 24th International AIDS Conference, Jul 2022, Montreal, Canada. , 2022. halshs-03749453

HAL Id: halshs-03749453

<https://shs.hal.science/halshs-03749453>

Submitted on 10 Aug 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Predictors of drug type and sexualized use in men who have sex with men (MSM) and transgender people in France

Alain Léobon, PhD, & Eugénie Samson-Daoust, MSc

Background

Chemsex: Use of psychoactive drugs in a sexual context.

- Recent mediatic attention



- Healthcare professionals are helpless: "There is an explosion of chemsex in France" (Charente Libre)

- Drugs involved: wide range of substances ≠ poppers or cannabis (Léobon, Dussault, & Otis, 2018; Maxwell, Shahmanesh, & Gafos, 2019; Scholz-Hehn et al., 2022)
- Quantitative data is lacking in France

Objective

Investigate predictors of sexualized use of uncommon drugs by comparing 3 groups, in a sample of MSM and trans people.

Methods

Net Gay Barometer, 2018: 10,853 online French participants → 3,563 drug users (32.8%)

Common drugs: cannabis, poppers, Viagra

- Group 1:** Exclusive users of common drugs → n=1,796 (50.4%) [reference group]

Uncommon drugs: cocaine, amphetamines, MDMA, methamphetamine, cathinones, GHB/GBL, opioids, etc.

- Group 2:** At least one uncommon drug in the past year, no sexual context → n=887 (24.3%)
- Group 3:** At least one uncommon drug in the past year, in a sexual context at least once → n=880 (24.1%)

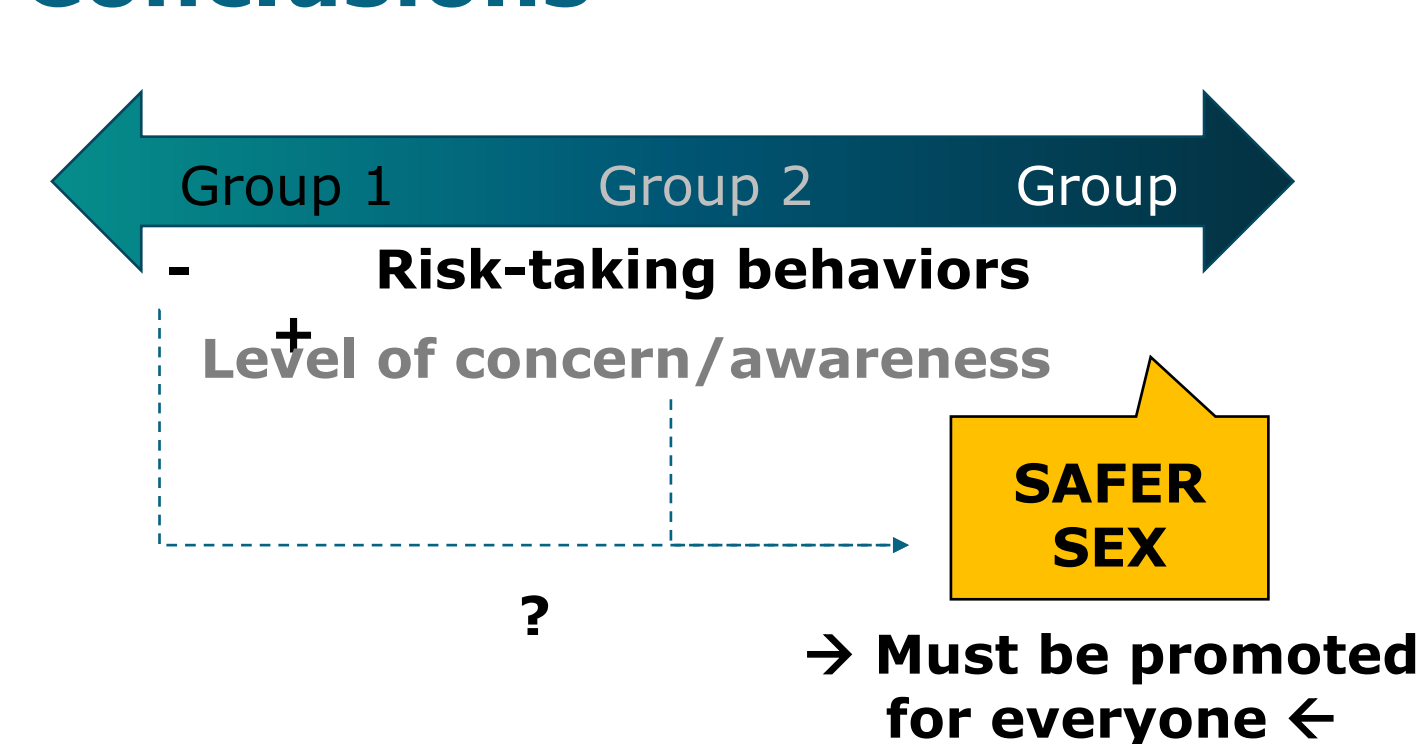
Results

Multivariate regression model (Table 1) explained 50,9% (Cox and Snell's R²) of variance between groups.

Controlling for sociodemographic variables:

- Professional status:**
 - Group 2 → + self-employed (aOR=1.69);
 - Group 3 → - retired (aOR=0.18) or - full-time student (aOR=0.59)
- Residence in Paris region:**
 - Group 2 & 3 → + Paris region (aOR=1.59-2.02)
- Residence area:**
 - Group 3 → - suburban (aOR=0.68) or - rural (aOR=0.46)
- Birth country:**
 - Group 3 → + born outside of France (aOR=1.84)
- Website of origin:**
 - Group 2 → - general MSM dating websites (aOR=0.71)
- Gender identity:**
 - Group 2 → + non-binary people (aOR=2.21);
 - Group 3 → + trans women (aOR=4.54)
- Sexual orientation:**
 - Group 2 → + other than gay or bisexual orientation (aOR=1.62)
 - Group 3 → - bisexual orientation (aOR=0.48)

Conclusions



References

Léobon, A., Dussault, É., & Otis, J. (2018). « Chemsex » chez des hommes français ayant des relations sexuelles avec des hommes. *Drogues, Santé et Société*, 17(2), 53–75. <https://doi.org/10.7202/1062116ar>

Maxwell, S., Shahmanesh, M., & Gafos, M. (2019). Chemsex behaviours among men who have sex with men: A systematic review of the literature. *International Journal of Drug Policy*, 63, 74–89. <https://doi.org/10.1016/j.drugpo.2018.11.014>

Scholz-Hehn, A. D., Millin, S., Schulte, B., Reimer, J., Buth, S., & Schäfer, I. (2022). Substance Use and Chemsex in MSM - A Latent Class Analysis. *Journal of Drug Issues*, 52(1), 83–96. <https://doi.org/10.1177/00220426211040564>

Table 1. Multinomial logistic regression model of sexualized and non-sexualized context of uncommon drug use compared with exclusive use of common drugs (Net Gay Barometer 2018)

	Total (N=3563)	χ ²	Group 1: Users of common drugs exclusively (N=1796)	Group 2: Users of uncommon drugs outside of a sexual context (N=887)	Group 3: Users of uncommon drugs in a sexual context (N=880)
	Freq. or M (SD)	p	Freq. or M (SD) aOR	Freq. or M (SD) aOR (95%CI)	Freq. or M (SD) aOR (95%CI)
Poly-drug use (2+ on the same occasion)	N=3563	<0.001	N=1796	N=887	N=880
Yes	37.0%		18.5%	45.7%	66.0%
No	63.0%		81.5%	54.3%	34.0%
				2.544 (2.016-3.211)***	4.144 (3.158-5.437)***
				1.000	1.000
Addiction concerns: Drug use	N=3552	<0.001	N=1794	N=886	N=872
Very concerned	3.1%		1.1%	4.0%	6.5%
Quite concerned	8.4%		4.0%	12.1%	13.5%
Not very concerned	13.5%		8.6%	18.7%	18.3%
Not concerned at all	23.3%		19.9%	24.5%	28.9%
Did not experience this issue	51.7%		66.4%	40.7%	32.7%
				4.857 (2.177-10.836)***	6.778 (2.855-16.095)***
				3.753 (2.418-5.826)***	2.693 (1.607-4.511)***
				2.498 (1.796-3.475)***	2.557 (1.704-3.838)***
				1.550 (1.197-2.007)**	2.169 (1.580-2.977)***
				1.000	1.000
5+ alcoholic drinks on the same occasion	N=3561	<0.001	N=1794	N=887	N=880
Everyday or almost everyday	2.1%		1.3%	2.6%	3.1%
Several times a week	15.5%		11.5%	23.0%	16.1%
Once a week	24.2%		21.0%	32.0%	23.1%
Once a month	23.6%		26.0%	20.9%	21.4%
Less than once a month	21.8%		25.5%	14.3%	21.8%
Never	12.7%		14.6%	7.2%	14.5%
				3.372 (1.440-7.897)**	2.113 (0.778-5.745)
				3.336 (2.129-5.227)***	2.257 (1.347-3.781)**
				2.533 (1.657-3.872)***	2.288 (1.425-3.672)**
				1.531 (0.998-2.346)	1.914 (1.204-3.043)**
				1.240 (0.808-1.903)	1.343 (0.855-2.108)
				1.000	1.000
Mean frequency of mixed marginal sex practices (breeding, group sex, gangbang as a bottom) with casual male partners	N=3265	<0.001	N=1581	N=815	N=869
	4.02 (3.67)		3.21 (3.28)	2.69 (2.78)	6.75 (3.67)
				0.940 (0.896-0.986)*	1.164 (1.106-1.225)***
Barebacking in a drug use context at least 1x	N=3563	<0.001	N=1796	N=887	N=880
Yes	22.9%		11.4%	13.1%	56.4%
No	77.1%		88.6%	86.9%	43.6%
				0.997 (0.683-1.453)	3.642 (2.406-5.513)***
				1.000	1.000
Injected drugs	N=3563	<0.001	N=1796	N=887	N=880
Yes	4.7%		0.6%	1.8%	16.1%
No	95.3%		99.4%	98.2%	83.9%
				2.483 (0.993-6.212)	10.214 (4.265-24.459)***
				1.000	1.000
Sexual health concerns: Risky sexual behaviors	N=3550	<0.001	N=1793	N=885	N=872
Very concerned	5.8%		4.6%	6.8%	7.3%
Quite concerned	18.2%		17.2%	18.3%	20.0%
Not very concerned	13.2%		10.1%	17.6%	14.9%
Not concerned at all	21.4%		17.2%	16.2%	35.6%
Did not experience this issue	41.4%		50.9%	41.1%	22.2%
				1.583 (1.006-2.489)*	0.888 (0.500-1.575)
				1.203 (0.893-1.621)	1.017 (0.694-1.492)
				2.411 (1.741-3.338)***	1.550 (1.015-2.366)*
				1.243 (0.914-1.692)	1.372 (0.960-1.959)
				1.000	1.000
Mean frequency of hard marginal sex practices (fisting, BDSM, urophilia, scatophilia) with casual male partners	N=3265	<0.001	N=1581	N=815	N=869
	2.05 (2.61)		1.54 (2.25)	1.28 (1.96)	3.70 (3.00)
				0.940 (0.883-1.001)	1.132 (1.068-1.199)***
Sex in exchange for money, drugs, goods or services	N=3561	<0.001	N=1795	N=886	N=880
Often	2.6%		1.6%	1.1%	6.1%
Sometimes	5.3%		3.8%	3.7%	9.9%
Rarely	6.7%		5.3%	6.3%	10.0%
No	85.4%		89.3%	88.8%	74.0%
				1.130 (0.435-2.937)	4.021 (1.653-9.780)**
				1.853 (0.992-3.461)	4.706 (2.445-9.059)***
				1.693 (1.056-2.716)*	1.994 (1.167-3.409)*
				1.000	1.000
Frequency of exchanges on mobile dating applications	N=3563	<0.001	N=1796	N=887	N=880
Many times a day	26.6%		23.1%	25.3%	35.1%
Many times a week	27.8%		25.7%	27.6%	32.2%
Many times a month	9.9%		10.5%	9.0%	9.5%
Less than 1x/month or irregularly	10.4%		9.6%	15.1%	7.5%
Does not use apps	25.3%		31.1%	23.0%	15.7%
				1.210 (0.874-1.674)	1.507 (1.002-2.266)*
				1.268 (0.933-1.723)	2.220 (1.500-3.285)***
				0.836 (0.557-1.256)	1.491 (0.882-2.521)
				1.505 (1.029-2.200)**	2.159 (1.268-3.677)**
				1.000	1.000
Psychosocial concerns: Accepting sexual orientation	N=3552	<0.001	N=1794	N=886	N=872
Very concerned	3.2%		4.2%	2.9%	1.4%
Quite concerned	7.2%		8.7%	6.2%	5.3%
Not very concerned	6.8%		7.6%	7.4%	4.4%
Not concerned at all	10.2%		11.5%	9.7%	7.9%
Did not experience this issue	72.7%		68.1%	73.7%	81.1%
				0.570 (0.317-1.025)	0.369 (0.140-0.975)*
				0.533 (0.352-0.806)**	0.543 (0.315-0.936)*
				0.695 (0.461-1.049)	0.551 (0.309-0.982)*
				0.592 (0.416-0.843)**	0.656 (0.417-1.031)
				1.000	1.000
Condomless anal penetration with casual male partners	N=3563	<0.001	N=1796	N=887	N=880
Always	9.1%		7.0%	4.6%	18.1%
Often	15.3%		10.2%	9.2%	31.8%
Sometimes	15.2%		13.5%	14.0%	19.8%
Rarely	14.7%		14.8%	16.6%	12.5%
Never or not applicable	45.7%		54.5%	55.6%	17.8%
				0.607 (0.350-1.053)	0.495 (0.262-0.938)*
				0.814 (0.518-1.280)	1.080 (0.630-1.852)
				0.765 (0.520-1.126)	1.011 (0.617-1.655)
				0.784 (0.554-1.108)	1.472 (0.932-2.323)
				1.000	1.000
Total number of STDs (excluding HIV et HCV)	N=3557	<0.001	N=1794	N=886	N=877
	0.79 (1.95)		0.43 (1.28)	0.70 (2.05)	1.62 (2.63)
				1.146 (1.054-1.245)**	1.156 (1.063-1.256)**
Developing feelings, friendships or emotional relationships with 1+ partners in the context of paid sex	N=3563	<0.001	N=1796	N=887	N=880
Very often or often	0.9%		0.7%	0.3%	1.8%
Sometimes	1.9%		1.2%	1.1%	3.9%
Rarely	2.7%		2.2%	1.5%	5.1%
Never or not applicable	94.5%		95.9%	97.1%	89.2%
				0.476 (0.105-2.171)	1.533 (0.461-5.098)
				0.680 (0.249-1.855)	1.568 (0.641-3.834)
				0.524 (0.234-1.175)	0.342 (0.156-0.750)**
				1.000	1.000
Negative impact of drug use	N=3563	<0.001	N=1796	N=887	N=880
Yes	31.9%		20.8%	33.3%	53.2%
No	68.1%		79.2%	66.7%	46.8%
				0.981 (0.759-1.267)	1.661 (1.247-2.212)**
				1.000	1.000
Barebacking practice	N=3563	<0.001	N=1796	N=887	N=880
Exclusively as a couple	21.4%		22.6%	24.0%	16.3%
Non-exclusively	18.1%		14.0%	12.6%	32.0%
Only with casual male partners	21.1%		17.3%	17.6%	32.6%
No barebacking	39.3%		46.1%	45.8%	19.1%
				1.261 (0.925-1.719)	0.973 (0.630-1.503)
				1.105 (0.724-1.687)	0.522 (0.302-0.902)*
				1.364 (0.914-2.036)	0.576 (0.337-0.985)*
				1.000	1.000
Mean number of known HIV risk reduction strategies	N=3550	<0.001	N=1789	N=887	N=874
	7.02 (2.67)		6.56 (2.64)	6.76 (2.67)	8.23 (2.33)
				0.986 (0.943-1.031)	1.095 (1.033-1.162)**
Hepatitis C	N=3563	<0.001	N=1796	N=887	N=880
Yes	2.8%		0.9%	1.5%	8.2%
No	97.2%		99.1%	98.5%	91.8%
				3.402 (1.357-8.528)**	3.209 (1.403-7.339)**
				1.000	1.000
Number of casual male partners	N=3563	<0.001	N=1796	N=887	N=880
	21.37 (41.77)		13.22 (28.14)	15.34 (32.03)	44.11 (61.10)
				1.003 (0.998-1.007)	1.005 (1.002-1.009)**
Regularly attending sexually charged meeting spaces (outdoor places, saunas, sex clubs, peep shows, swingers clubs)	N=3563	<0.001	N=1796	N=887	N=880
Yes	22.4%		19.9%	12.9%	37.3%
No	77.6%		80.1%	87.1%	62.7%
				0.760 (0.563-1.025)	1.276 (0.941-1.730)
				1.000	1.000
Global satisfaction with physical appearance	N=3554	<0.001	N=1794	N=886	N=874
Yes	68.7%		63.6%	73.7%	73.9%
No	31.3%		36.4%	26.3%	26.1%
				1.427 (1.121-1.816)**	1.256 (0.928-1.698)
				1.000	1.000
Positive impact of drug use	N=3563	<0.001	N=1796		