Mental Health Across the Spectrum of Sexual Orientation – a Study Among Young Swiss Men

Matthias Wicki, Simon Marmet, Joseph Studer, Olivier Epaulard and Gerhard Gmel

Introduction

- Compared to heterosexual individuals, non-heterosexual individuals face greater risks for mental health problems such as depression, stress, low life-satisfaction, but also for problematic substance use and behavioural addictions. These differences are often explained by minority-stress theory [1] and biphobia [2] and other factors such as social norms, personality or life-style.
- Although sexologists such as Kinsey [3] initially operationalised sexual orientation as a continuum ranging from being heterosexual to being homosexual, contemporary public health researchers usually aggregate the spectrum (e.g. heterosexual vs non-heterosexual) and thereby potentially blur essential differences between groups. Thus, far less is known about how that risk varies within the non-heterosexual population.
- Additionally, a large part of the existing studies is based on community- or self-selected samples from English-speaking countries and have a risk for sampling bias and/or masking possible cultural differences.

Aim

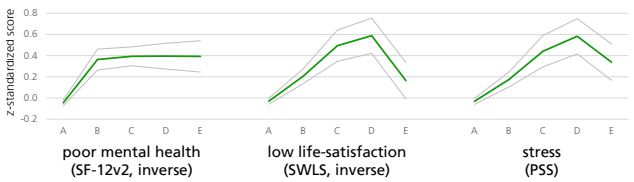
- To estimate the burden (mean-score or prevalence) of poor mental health (low life-satisfaction, stress, depression, problematic substance use and behavioural addictions) across the spectrum of sexual orientation in a large representative sample of young Swiss men.

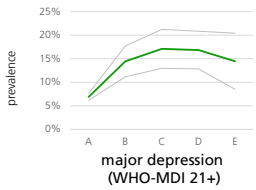
Methods

- Sample: 5,294 young Swiss men (mean age = 25.5, SD = 1.25, representative of 21 of Switzerland's 26 cantons) participating in the third wave of the Cohort Study on Substance Use Risk Factors (C-SURF).
- Measures: Sexual orientation (attraction) was operationalised using the Reduced Kinsey Scale with a focus on the dimension of sexual attraction[4]. Participants were asked, whether they felt sexually attracted to "women only" (heterosexual), "women predominantly" (mostly-heterosexual), "both women and men equally" (bisexual), "men predominantly" (mostly-homosexual) and "men only" (homosexual). Mental health problems have been assessed with standardized self-report instruments using recommended cut-offs [6-18]. All criterion variables were coded so that a higher value corresponded to a less benign state.
- Statistical analyses: Fractional polynomial regression models were used to test the associations between the spectrum of sexual orientation and the criterion variables (adjusted for age and linguistic region). Marginal means and 95%-confidence intervals are presented in the results to allow non-heteronormative comparisons between groups.

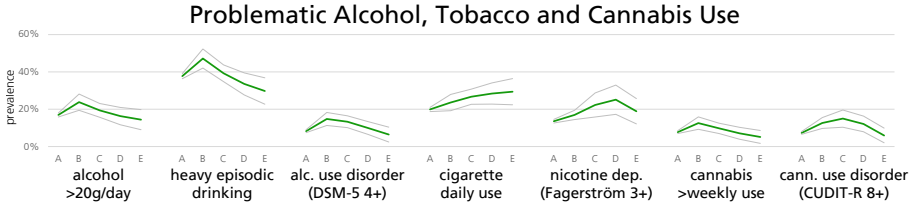
Results

Poor Mental Health

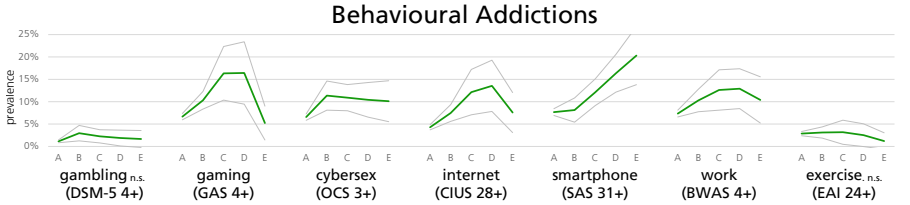




Problematic Alcohol, Tobacco and Cannabis Use



Behavioural Addictions



Remarks: — estimated marginal mean for the spectrum from heterosexual (A) to homosexual (E), — 95% confidence interval

- Sexual orientation (attraction):

89.2%	heterosexual	(A)
6.7%	mostly-heterosexual	(B)
1.1%	bisexual	(C)
0.7%	mostly-homosexual	(D)
2.4%	homosexual	(E)

- All indicators of poor mental health except gambling and exercise addiction were significantly ($p<.05$) associated with sexual orientation.

The highest burden of mental health problems were commonly found among mostly-heterosexual, bisexual or mostly-homosexual men, lowest burden among heterosexual men.

With a few exceptions, the curves identified were inverse-J-shaped and neither monotonically increasing nor decreasing.

The estimated curves varied considerably across indicators of poor mental health.

Conclusions

- Considering sexual orientation is important to provide targeted prevention and healthcare.
- Aggregating the spectrum of sexual orientations into two or three distinct groups blurs important internal group differences.
- Outcome-specific explanations beyond minority stress and biphobia are necessary to understand the pathways between sexual orientation and indicators of poor mental health.

References etc.

[1] Meyer, I.H. (2003). Psychol Bull, 129(5), 674-697.
[2] Ochs, R. (2011). J Bisex, 11(2-3), 171-175.
[3] Kinsey, A.C., W.B. Pomeroy, and C.E. Martin (1948). Sexual behavior in the human male. Philadelphia: Saunders.
[4] Bailey, J.M., et al. (2016). Psychol Sci Public Interest, 17(2), 45-101.
[5] Knight, J.R., et al. (2002). J Stud Alcohol, 2002. 63(3), 263-270.
[6] Fagerström, K.O., et al. (1992). Ear Nose Throat J, 11-16.
[7] Annaheim, B. et al. (2010). Int J Methods Psychiatr Res, 19(3), 142-155.
[8] American Psychiatric Association, Diagnostic and statistical manual of mental disorders (DSM-5®). 2013: American Psychiatric Pub.
[9] Lemmens, J.S. et al., (2009). Media Psychol, 12(1), 77-95.
[10] Carnes, P.J. et al. (2009). In the shadows of the net: Breaking free of compulsive online sexual behavior. New York: Simon and Schuster.
[11] Meerkerk, G.-J., et al., (2009). Cyberpsychol Behav, 12(1), 1-6.
[12] Haug, S., et al. (2015). J Behav Addict, 4(4), 299-307.
[13] Andreassen, C.S., et al. (2012). Scand J Psychol, 53(3), 265-272.
[14] Terry, A. et al. (2004). Addict Res Theory, 12(5), 489–499.
[15] Bech, P., et al. (2015). BMC Psychiatry, 15(1), 190.
[16] Ware, J., et al. (2009). User's Manual for the SF-12v2® Health Survey With a Supplement Documenting SF-12® Health Survey. Lincoln : QualityMetric Incorporated.
[17] Diener, E., et al. (1985). J Pers Assess, 1985. 49(1): p. 71-75.
[18] Cohen, S. (1988). Soc Psy Health, 31-67.

This poster is based on a paper that will be published in Addictive Behaviors (https://doi.org/10.1016/j.addbeh.2020.106609). The study was funded by the Swiss National Science Foundation (FN 33CSC0-122679, FN 33CS30-139467 and FN 33CS30_148493). Acknowledgements: We thank Celine Gachoud, Christiane Gmel and Simon Foster for their valuable work in organizing the study and collecting data and Benjamin Hampel for his useful comments.
Contact info: Matthias Wicki / matthias.wicki@chuv.ch / Addiction Medicine, Department of Psychiatry, Lausanne University Hospital (CHUV), Bugnon 23, 1011 Lausanne.