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# Prevalence of Exposure to Sexual Orientation Change Efforts and Associated Sociodemographic Characteristics and Psychosocial Health Outcomes among Canadian Sexual Minority Men

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Prévalence de l'exposition aux tentatives de changement d'orientation sexuelle et aux caractéristiques sociodémographiques associées, et résultats de santé psychosociale chez des hommes canadiens de minorités sexuelles

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## Abstract

**Objective:** Sexual orientation change efforts (SOCE), or “conversion therapy,” are pseudoscientific practices intended to suppress or deny sexual attraction to members of the same gender/sex. There are currently no data available to inform estimates of the prevalence of SOCE exposure in Canada. The objective of this study is therefore to describe the prevalence, social–demographic correlates, and health consequences of SOCE among Canadian sexual minority men.

**Methods:** *Sex Now* 2011 to 2012 was a cross-sectional nonprobability survey of Canadian sexual minority men. Respondents were asked about lifetime SOCE exposure. We estimated prevalence of SOCE exposure by sociodemographic characteristics and examined psychosocial health outcomes among those exposed to SOCE.

**Results:** Of  $N = 8,388$  respondents, 3.5% (95% confidence interval, 3.2% to 4.1%) reported having ever been exposed to SOCE. Exposure to SOCE was higher among gay men (as compared with bisexual men), transgender respondents (as compared with cisgender respondents), those who were “out” about their sexuality (as compared with those who were not “out”), Indigenous men (as compared with White men), other racial minorities (as compared with White men), and those earning a personal income  $< \$30,000$  (as compared with those earning  $\geq \$60,000$  CAD). Exposure to SOCE was positively associated with loneliness, regular illicit drug use, suicidal ideation, and suicide attempt.

**Conclusions:** SOCE exposure remains prevalent and associated with substantial psychosocial morbidity among sexual minority men in Canada. All levels of government in Canada should consider action to ban SOCE. SOCE survivors likely require intervention and support from the Canadian health-care system.

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## Abrégé

**Objectif :** Les tentatives de changement d'orientation sexuelle (TCOS), ou thérapie de réorientation, sont des pratiques pseudo-scientifiques destinées à supprimer ou à nier l'attraction sexuelle pour des membres du même genre/sexe. Il n'y a présentement aucunes données disponibles pour éclairer les estimations de la prévalence de l'exposition aux TCOS au Canada. L'objectif de la présente étude est donc de décrire la prévalence, les corrélats sociodémographiques, et les conséquences des TCOS sur la santé chez les hommes canadiens de minorités sexuelles.

**Méthodes :** Sex Now 2011-12 était une enquête transversale non probabiliste menée auprès des hommes canadiens de minorités sexuelles. Les répondants étaient interrogés sur l'exposition de durée de vie aux TCOS. Nous avons estimé la prévalence de l'exposition aux TCOS par des caractéristiques sociodémographiques et examiné les résultats de santé psychosociale chez ceux qui étaient exposés aux TCOS.

**Résultats :** Sur  $N = 8\,388$  répondants, 3.5% (intervalle de confiance à 95% 3.2% à 4.1%) ont déclaré avoir été exposés aux TCOS. L'exposition aux TCOS était plus élevée chez les hommes gais (comparativement aux hommes bisexuels), les répondants transgenres (comparés aux répondants cisgenres), ceux qui avaient « divulgué » leur sexualité comparativement à ceux qui ne l'avaient pas divulguée), les hommes autochtones (comparés aux hommes blancs), d'autres minorités raciales (comparativement aux hommes blancs), et ceux dont le revenu était  $< 30\,000$  \$ (comparativement à ceux qui gagnaient  $\geq 60\,000$  \$). L'exposition aux TCOS était associée positivement avec la solitude, l'usage régulier de drogues illicites, l'idéation suicidaire et les tentatives de suicide.

**Conclusions :** L'exposition aux TCOS demeure prévalente et associée à une morbidité psychosociale substantielle chez les hommes de minorités sexuelles au Canada. Tous les paliers de gouvernement du Canada devraient songer à des mesures en vue de bannir les TCOS. Les survivants des TCOS nécessitent vraisemblablement l'intervention et le soutien du système de santé canadien.

## Keywords

sexual and gender minorities, conversion therapy, social stigma

Sexual orientation change efforts (SOCE), also known as “conversion therapy,” are pseudoscientific practices intended to suppress or deny unwanted feelings of sexual attraction to members of the same gender/sex.<sup>1,2</sup> SOCE were developed and expanded in the wake of the American Psychiatric Association's (APA) decision to remove homosexuality as a mental illness from the *Diagnostic and Statistical Manual* in 1973.<sup>1,3</sup> SOCE draw on a range of discredited methods including aversion therapy (e.g., electric shock), attempted desensitization to same-gender/sex erotic materials, psychodynamic therapy with a focus on etiology of the individual's sexuality, and religious approaches (e.g., prayer, Bible reading).<sup>1</sup> “Therapeutic” attempts to “repair,” “convert,” or otherwise suppress sexual orientation have been unequivocally denounced by the Canadian Psychological Association, Canadian Psychiatric Association, APA, and numerous other professional bodies.<sup>4-7</sup> The failure rate of SOCE has been estimated at  $\geq 97\%$ .<sup>1,4</sup> More significantly, SOCE have been found to be associated with numerous negative health outcomes including self-hatred, depression, and suicidal ideation and suicide attempts.<sup>1,2,8,9</sup>

Despite health professional denunciation and scientific evidence of harm,<sup>1,2,10</sup> SOCE are still conducted in a variety of settings, notably including religious and nonprofessional settings that do not fall under the purview of health professional regulatory bodies.<sup>11,12</sup> This renders health professional regulatory measures insufficient for stopping SOCE and presents unique challenges to legislative and municipal bans.<sup>13</sup> Youth are particularly susceptible to the harmful

effects of SOCE, although adults are not immune, and harmful effects have been observed regardless of whether participants are coerced to participate or participate willingly.<sup>1,2</sup>

SOCE are related to similar practices targeting gender identity or expression (also called “reparative practices”).<sup>14</sup> Gender identity change efforts borrow many of the same methods of SOCE as well as “treatments, practices, and sustained efforts that delay or impede a person's desired social or medical transition.”<sup>14,15</sup> Whether targeting gender identity or sexual orientation, the intention of sexual orientation and gender identity change efforts (SOGICE) is consistent: to suppress the expression of a socially disfavored status and impose a socially sanctioned cisgender and heterosexual standard.

There are currently no data available to inform estimates of the prevalence of SOGICE exposure in Canada. In the United States, researchers have estimated that 700,000 people have been exposed, representing 5 to 14% of the sexual and gender minority population; approximately 50% of these individuals were exposed during adolescence.<sup>11,16,17</sup> While SOGICE have received substantial media attention in the United States, SOGICE have largely been ignored in Canada until recently despite the persistence of these practices across the country.<sup>18,19</sup>

Recently, several countries—including Canada—and multiple provinces and states have debated SOGICE bans; however, in most parts of Canada, SOGICE is still not illegal.<sup>4,18-20</sup> In some Canadian settings, SOGICE have been disincentivized through restriction of billing codes or

intraprovincial regulation of health professionals in Ontario (2015), Manitoba (2015), and Nova Scotia (2018); however, there is no legal repercussion for enacting SOGICE outside of these settings. Given that many people are exposed to SOGICE in unregulated settings outside of health-care providers' offices, these policies are inadequate.<sup>13,19</sup> In this context, data to inform public policy regarding SOGICE are urgently needed. The objective of this study is to describe the prevalence, social-demographic correlates, and health consequences of SOCE among Canadian sexual minority men, based on a large community-based survey.

## Methods

*Sex Now* is a periodic, cross-sectional, online survey of sexual minority men in Canada. Content is developed in consultation with community members and health professionals to ensure relevance and appropriate language of included topics. A question to assess lifetime exposure to SOCE was asked in the 2011 to 2012 iteration of *Sex Now*. Given the focus on lifetime exposure and the paucity of Canadian data on estimates of SOCE exposure, these data provide a unique opportunity to address this gap in the literature. Participants were recruited from an array of online community venues including dating and sex-seeking websites, social media, community organization newsletters, a database of previous study participants, and word of mouth.<sup>21</sup> Respondents represented 72% of all forward sortation areas (first three characters of postal code) in Canada.<sup>22</sup> The questionnaire was offered in English and French. The *Sex Now* protocol was reviewed and approved by the independent research ethics board of the Community-Based Research Centre in Vancouver, British Columbia.

SOCE exposure was measured by asking, "Have you ever attended sexual repair/reorientation counseling?" with the following response options: "no," "some time ago," "last 12 months," "both prior to and last 12 months." For the present analysis, we selected sociodemographic, psychosocial health, and social and professional support variables hypothesized to be associated with SOCE exposure based on available literature.<sup>1,2,8,17</sup>

Psychosocial outcomes were elicited as follows. Loneliness was measured by asking, "How often do you feel so lonely that you're starved for company? [never, rarely (less than 25% of the time), sometimes (25% to 49% of the time), most of the time (50% to 74% of the time), almost all of the time (75% to 99% of the time), all the time (100% of the time)]; the last 3 categories were collapsed to create a binary variable. Binge alcohol use was measured by asking, "How often do you consume more than 5 drinks in one sitting (beer, wine, or spirits)? [never, occasionally, some weekends, most weekends, some days and most weekends, most days]; the last 3 categories were collapsed to create a binary variable representing "regular" binge alcohol use. Illicit drug use was measured by asking, "How often have you used the following in the last 12 months? [never, occasionally, regularly,

daily]"; regular or daily use of cocaine, crystal methamphetamine, ecstasy,  $\gamma$ -hydroxybutyrate (GHB), ketamine, or heroin was categorized as "regular" illicit drug use. Suicidal ideation and suicide attempts were measured by asking, "Have you ever felt troubled by suicide: thought about suicide; attempted suicide? [no, some time ago, last 12 months, both prior to and last 12 months]; any "yes" response to these questions was coded as having ever thought about or attempted suicide.

Social and professional supports were assessed by asking, "What cultural or civic activities are you currently involved in? [check all that apply, including religious group, church]?" and "Are you currently involved in a gay community organization, recreational group, or sport activity?" Professional support was measured by asking, "Have you ever had sessions to discuss emotional issues with a care provider: psychiatrist, psychologist, therapist, other health provider (doctor, nurse, etc.)? [no, some time ago, last 12 months, both prior to and last 12 months]; any "yes" response was coded as ever having consulted with a mental health provider. Finally, medication use for depression or anxiety was assessed by asking, "Have you ever been prescribed medications for: anxiety, depression [no, some time ago, last 12 months, both prior to and last 12 months]."

Descriptive analyses were conducted in two steps. First, we calculated the proportion of *Sex Now* respondents who reported any lifetime exposure to SOCE, overall and by sociodemographic subgroups, with 95% confidence intervals (CIs). We compared lifetime prevalence of SOCE exposure across sociodemographic subgroups using relative risks (RRs) with 95% CI ( $P < 0.05$ , or CI excluding 1 were considered statistically significant). Second, we calculated the proportion of respondents exposed and unexposed to SOCE who reported psychosocial health outcomes and social and professional supports and calculated RR with 95% CI, comparing prevalence of the variable in those exposed to those unexposed. We did not conduct multivariable analyses because our objective was to describe the demographic and psychosocial profile of those exposed to SOCE rather than identify causal effects. Analyses were conducted in R Version 3.5.1, and RR and CI were estimated using the *Epi* package.

## Results

Of the 8,388 respondents, 3.5% [95% CI, 3.2 to 4.1] reported having ever been exposed to SOCE. Of those exposed, 7.9% were exposed in the last 12 months only, 78.3% were exposed more than 12 months ago, and 13.8% were exposed both prior to the last 12 months and during the last 12 months. Exposure to SOCE was higher ( $P < 0.05$ ) among gay men (as compared with bisexual men), transgender respondents (as compared with cisgender respondents), those who were "out" about their sexuality (as compared with those who were not "out"), Indigenous men (as compared with white men), other racial minorities (as compared with white men), and those earning a personal income  $< \$30,000$  (as compared

**Table 1.** Lifetime Prevalence of Exposure to Sexual Orientation Change Efforts (SOCE) among Sexual Minority Canadian Men, by Sociodemographic Subgroups.

Variable	n (%) in SN2011, N = 8,388	n (%) among Those Exposed to SOCE <sup>a</sup> , N = 304	n (%) among Those not Exposed to SOCE <sup>a</sup> , N = 8,084	% Exposed to SOCE <sup>b</sup> (95% CI)	RR (95% CI)
Overall	—	—	—	3.5 (3.2 to 4.1)	—
Sexual identity <sup>c</sup>					
Gay	5,410 (64.5)	237 (78.0)	5,173 (64.0)	4.4 (3.9 to 5.0)	Referent
Bisexual	2,719 (32.4)	54 (17.8)	2,665 (33.0)	2.0 (1.5 to 2.6)	0.45 (0.34 to 0.61)
Other	259 (3.1)	13 (4.3)	246 (3.0)	5.0 (2.8 to 8.6)	1.15 (0.66 to 1.97)
Gender identity					
Cisgender	8,289 (98.8)	292 (96.1)	7,997 (98.9)	3.5 (3.1 to 4.0)	Referent
Transgender	99 (1.2)	12 (4.0)	87 (1.1)	12.1 (6.7 to 20.6)	3.44 (2.00 to 5.92)
Age (at time of survey)					
<20	252 (3.0)	8 (2.6)	244 (3.0)	3.2 (1.5 to 6.4)	Referent
20 to 29	1,616 (19.3)	58 (19.1)	1,558 (19.3)	3.6 (2.8 to 4.6)	1.13 (0.55 to 2.34)
30 to 39	1,406 (16.7)	53 (17.4)	1,353 (16.7)	3.8 (2.9 to 4.9)	1.19 (0.57 to 2.47)
40 to 49	2,135 (25.5)	75 (24.7)	2,060 (25.5)	3.5 (2.8 to 4.4)	1.11 (0.54 to 2.27)
50 to 59	1,929 (23.0)	80 (26.3)	1,849 (22.9)	4.1 (3.3 to 5.2)	1.31 (0.64 to 2.67)
60+	1,050 (12.5)	30 (9.9)	1,020 (12.6)	2.9 (2.0 to 4.1)	0.90 (0.42 to 1.94)
“Out” about sexuality					
Not out	3,061 (36.5)	52 (17.1)	3,009 (37.2)	1.7 (1.3 to 2.2)	Referent
Out	5,327 (63.5)	252 (82.9)	5,075 (62.8)	4.7 (4.2 to 5.3)	2.78 (2.07 to 3.74)
Race/ethnicity					
White	7,313 (87.2)	238 (78.3)	7,075 (87.5)	3.3 (2.9 to 3.7)	Referent
Indigenous <sup>d</sup>	169 (2.0)	11 (3.6)	158 (2.0)	6.5 (3.5 to 11.6)	2.00 (1.11 to 3.59)
Other racial minorities	906 (10.8)	55 (18.1)	851 (10.5)	6.1 (4.6 to 7.9)	1.87 (1.40 to 2.48)
Educational attainment					
College/university degree	4,792 (57.1)	179 (58.9)	4,613 (57.1)	3.7 (3.2 to 4.3)	Referent
<College/university degree	3,596 (42.9)	125 (41.1)	3,471 (42.9)	3.5 (2.9 to 4.1)	0.93 (0.74 to 1.16)
Personal income					
≥\$60,000	3,178 (37.9)	93 (30.6)	3,085 (38.2)	2.9 (2.4 to 3.6)	Referent
\$30,000 to \$59,999	2,816 (33.6)	106 (34.9)	2,710 (33.5)	3.8 (3.1 to 4.6)	1.29 (0.98 to 1.69)
<\$30,000	2,394 (28.5)	105 (34.5)	2,289 (28.3)	4.4 (3.6 to 5.3)	1.50 (1.14 to 1.97)
Area of residence					
Urban	4,897 (58.4)	185 (60.9)	4,712 (58.3)	3.8 (3.3 to 4.4)	Referent
Suburban	2,214 (26.4)	80 (26.3)	2,134 (26.4)	3.6 (2.9 to 4.5)	0.96 (0.74 to 1.24)
Rural	1,277 (15.2)	39 (12.8)	1,238 (15.3)	3.1 (2.2 to 4.2)	0.81 (0.58 to 1.14)
Province/territory					
British Columbia	1,805 (21.5)	81 (26.6)	1,724 (21.3)	4.5 (3.6 to 5.6)	Referent
Alberta	1,065 (12.7)	30 (9.9)	1,035 (12.8)	2.8 (1.9 to 4.0)	0.63 (0.42 to 0.95)
Saskatchewan	289 (3.4)	8 (2.6)	281 (3.5)	2.8 (1.3 to 5.6)	0.62 (0.30 to 1.26)
Manitoba	342 (4.1)	9 (3.0)	333 (4.1)	2.6 (1.3 to 5.1)	0.59 (0.30 to 1.16)
Ontario	3,368 (40.2)	119 (39.1)	3,249 (40.2)	3.5 (2.9 to 4.2)	0.79 (0.60 to 1.04)
Quebec	1,049 (12.5)	44 (14.5)	1,005 (12.4)	4.2 (3.1 to 5.6)	0.93 (0.65 to 1.34)
Atlantic	447 (5.3)	13 (4.3)	434 (5.4)	2.9 (1.6 to 5.1)	0.65 (0.36 to 1.15)
Territories	23 (0.3)	0 (0.0)	23 (0.3)	0.0	—

Note: N = 8,388. CI = confidence interval; RR = relative risk comparing prevalence of SOCE exposure to that of referent group; SN2011 = Sex Now 2011.

<sup>a</sup>Percentage calculated using column total as denominator.

<sup>b</sup>Percentage calculated using row total as denominator.

<sup>c</sup>Response to question: “How do you see yourself: gay, bisexual, other?”

<sup>d</sup>Self-reported ethnicity of First Nations, Métis, or Inuit.

with those earning ≥\$60,000). SOCE exposure was lower among those residing in Alberta as compared with those residing in British Columbia (no other interprovincial comparisons were statistically significant; Table 1). No statistically significant differences were apparent by age-group, educational attainment, or area of residence (i.e., urban, suburban, or rural).

Exposure to SOCE was positively associated ( $P < 0.05$ ) with 4 of the 5 negative psychosocial health outcomes examined: loneliness, regular illicit drug use, suicidal ideation, and suicide attempt (Table 2). SOCE exposure was also positively associated ( $P < 0.05$ ) with both forms of social support (religious and gay community) and both forms of professional support (talk therapy and pharmaceutical prescription).

**Table 2.** Psychosocial Health Outcomes and Social and Professional Support Access Associated with Exposure to Sexual Orientation Change Efforts (SOCE) among Sexual Minority Canadian Men.

Variable	n (%) among Those Exposed to SOCE, N = 304	n (%) among Those Not Exposed to SOCE, N = 8,084	RR (95% CI)
<b>Psychosocial health outcomes</b>			
Lonely most or all of time	72 (23.7)	1,044 (12.9)	1.83 (1.49 to 2.26)
Regular binge alcohol use	44 (14.5)	1,105 (13.7)	1.06 (0.80 to 1.40)
Regular illicit drug use <sup>a</sup>	16 (5.3)	157 (1.9)	2.71 (1.64 to 4.47)
Suicide ideation (ever)	212 (69.7)	3,972 (49.1)	1.42 (1.31 to 1.53)
Suicide attempt (ever)	90 (29.6)	962 (11.9)	2.49 (2.07 to 2.99)
<b>Social and professional supports</b>			
Involved with religious group or church	46 (15.1)	585 (7.2)	2.09 (1.58 to 2.76)
Involved with gay community group	81 (26.6)	1,028 (12.7)	2.09 (1.72 to 2.55)
Discussion with health provider <sup>b</sup>	252 (82.9)	4,150 (51.3)	1.61 (1.53 to 1.71)
Medication for depression or anxiety	172 (56.6)	2,727 (33.7)	1.68 (1.51 to 1.86)

Note: N = 8,388. CI = confidence interval; RR = relative risk comparing prevalence of variable in those exposed to SOCE to prevalence in those not exposed.

<sup>a</sup>Cocaine, crystal, ecstasy,  $\gamma$ -hydroxybutyrate (GHB), ketamine, or heroin.

<sup>b</sup>Ever had a session to discuss emotional issues with a care provider.

## Discussion

We estimate that 3.5% of sexual minority men in Canada have been exposed to SOCE at some time in their life. Assuming that 4% of the population are sexual minorities,<sup>23</sup> this estimate corresponds to approximately 20,000 Canadian sexual minority men. The burden of exposure is in fact much larger because our survey excluded sexual minority men who do not frequent sexual minority websites or community channels and therefore are not part of the sampling frame for the study as well as sexual minority women. Accordingly, our estimate is lower than the 7% estimate recently generated in the United States.<sup>11</sup> Thirty percent of the men we surveyed who reported SOCE exposure attempted suicide at least once; on this basis, again, 3.5% is likely an underestimate due to the survival bias introduced by prior losses to suicide.

Exposure to SOCE was unevenly distributed across the population of sexual minority men. In particular, transgender respondents, Indigenous and racial minority men, and those earning <\$30,000 annual income were more likely than cisgender, White, and higher-income-earning respondents to have experienced SOCE. In many cases, seeking (or being compelled to attend) SOCE occurs in a religious context that stigmatizes or rejects minority sexualities.<sup>1</sup> Thus, the higher prevalence of SOCE exposure in Indigenous men may be a function of the lasting effects of colonization on Indigenous communities, specifically the imposition of Christian traditions and practices that have weakened connections to the rich histories and traditional teachings around sexualities and genders (e.g., Two-Spirit) among Indigenous communities.<sup>24</sup> Additional research is needed to further explicate the associations we have observed between race, income, and SOCE experiences. Many transgender people are exposed to gender identity change efforts or “reparative

practices”;<sup>17,25</sup> thus, the higher rates of SOCE among trans respondents to this survey may be explained by the “double stigma” experienced by those who simultaneously occupy sexual minority and gender minority social positions. This intersection of identities and effects serves as a reminder that efforts to stem SOCE should also address the ways in which trans people are disproportionately exposed to practices attempting to alter their gender identity (and possibly also their sexual orientation) and/or delay or impede a medical or social transition.<sup>14</sup>

SOCE exposure was reported by every age-group of this survey and in every province, suggesting that these practices are not ceasing in Canada, despite statements from professional bodies who denounce SOCE. On this basis, we hypothesize that while SOCE have been marginalized within professional practice in Canada, they have not been eradicated from settings outside health-care providers’ offices. Notably, the two provinces with the highest prevalence estimates—British Columbia and Quebec—were two of the first jurisdictions in Canada to enact laws and policies to protect sexual minorities from discrimination and other forms of structural stigma.<sup>26</sup> This suggests that additional policy mechanisms are needed to address the ongoing practice of SOGICE in Canada and that these policy mechanisms require specificity to fully eradicate SOGICE. A model law for “reparative practices” (notably including those targeting gender or gender identity) has been proposed, and this law addresses the need for specificity by defining a broad yet detailed set of practices/treatments used to “repress, discourage, or change a person’s sexual orientation, gender identity, gender modality, gender expression, or any behaviours associated with a gender other than the person’s gender assigned at birth,” also listing practices that are not included in “reparative practices” (to ensure that the law does not unintentionally reduce

access to sexual and gender minority-affirming services), and targeting the legislation to those who engage in or refer an individual to “reparative practices” as well as those who grant or fund such practices.<sup>14</sup>

The health outcomes associated with SOCE in this survey were similar to those reported elsewhere, namely loneliness, substance use, depression, anxiety, suicidal ideation, and suicide attempts.<sup>2,8</sup> Those exposed to SOCE were more likely to have received multiple forms of social and professional support—possibly a reflection of greater mental health needs, greater social connectivity, or greater help-seeking behavior. Given the often severe psychological harms associated with SOCE,<sup>1</sup> we suggest that all SOCE survivors should have a discussion with a mental health provider (or other support worker, health professional, or healer) about any lasting psychological sequelae caused by SOCE.

As a nonprobability sample, we cannot precisely determine how representative *Sex Now* is of the total population of sexual minority men in Canada. Cross-sample comparisons of *Sex Now* 2011 to 2012 with gay and bisexual men respondents to the Canadian Community Health Survey (CCHS) suggest that *Sex Now* respondents were more likely than gay and bisexual men in the CCHS sample to reside in a rural area, be employed, and earn at least \$60,000 annually and were less likely to be Indigenous or single.<sup>27</sup> In the current analysis, Indigenous identity was positively associated with SOCE, and income negatively associated with SOCE exposure. These differences in sociodemographic characteristics therefore may have led to an underestimation of the total population prevalence of SOCE exposure. The proportionate distribution of sexual identities among gay and bisexual men was similar between the two surveys: 67% of gay and bisexual *Sex Now* respondents and 69% of gay and bisexual men CCHS respondents identified as gay.<sup>27</sup>

Some of the associations we observed may be attributable to measured or unmeasured variables that constitute confounding or mediating factors. For instance, in Canada, Indigenous people and other racialized minority people experience lower levels of income than do those of European ancestry—an inequitable pattern resulting from the lasting effects of colonialism and ongoing experiences of racism.<sup>28</sup> Thus, the association we observed between race (Indigenous and other racialized minority people) and SOCE may be at least partially explained by the mediating effect of income. While establishing causal inference was not the objective of this study, we conducted a sensitivity analysis to evaluate this exploratory hypothesis; in a multivariable model (including race and income), the adjusted RR for Indigenous respondents was 1.88 [95% CI, 1.05 to 3.37], and the adjusted RR for other racialized minority respondents was 1.78 [95% CI, 1.34 to 2.36]. On this basis, we conclude that there is likely a remaining effect of racialized experiences/conditions on SOCE exposure, explained by factors other than income. Future studies should explore these causal

pathways in detail to redress this racial inequity in SOCE exposure in Canada.

We are unable to know whether SOCE preceded the psychosocial health outcomes identified by participants; however, reverse causation is unlikely given that the major drivers of seeking SOCE correspond to environmental attitudes—for example, family religiosity—rather than intraindividual factors.<sup>2</sup> Even if loneliness, depression, anxiety, or suicidal ideation preceded SOCE attendance, the history of these factors minimally suggests that SOCE survivors should be assessed for any current, ongoing mental health struggles. Finally, our sample excluded sexual minority women and gender minority people (transgender and nonbinary persons) who do not identify as gay or bisexual men, and trans men constituted only 1% of the total sample. Additional research is needed to further describe SOGICE exposure among sexual minority women and gender minority people in Canada, who also likely experience a high burden of SOGICE exposure, based on data from the United States (i.e., 14% of transgender respondents in one recent survey).<sup>11,17</sup> Given the high SOGICE prevalence estimates among sexual minority women and transgender people in the United States and the well-established harms associated with SOGICE, action to curtail these practices should not prerequisite Canadian data for all sexual and gender minority subgroups.

## Conclusions

SOCE exposure remains prevalent and associated with substantial psychosocial morbidity among sexual minority men in Canada. Many of those who are exposed require intervention and support from the Canadian health-care system. Unfortunately, denouncements by various health-care professional bodies have not brought an end to the ineffective and harmful practice of SOGICE; in fact, the denouncements may have driven SOGICE “underground” or into settings beyond the health-care practitioner’s office. We therefore call on all levels of government in Canada—including the federal government—to take action to ban SOGICE and provide support to SOGICE survivors. Indeed, SOGICE bans have recently been enacted by several US states and countries including Taiwan and Malta.<sup>4,20,29</sup> Following the approach of these governments, eradicating SOGICE may require an amendment to the criminal code as well as other multilevel legislative actions.<sup>14</sup> Finally, we recommend acceleration of research to understand better the settings where SOGICE is being conducted and to characterize more fully the psychosocial health needs of SOGICE survivors.

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### Data Access

Data were collected under the condition that the data not be transferred beyond the Community-Based Research Centre (CBRC) and Affiliated Researchers. The CBRC may be able to provide access to aggregated data upon request. For details, visit [https://www.cbrc.net/contact\\_us](https://www.cbrc.net/contact_us).


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### References

- Shidlo A, Schroeder M, Drescher J. *Sexual conversion therapy: ethical, clinical, and research perspectives*. Binghamton (NY): The Haworth Press; 2001.
- Ryan C, Toomey RB, Diaz RM, Russell ST. Parent-initiated sexual orientation change efforts with LGBT adolescents: implications for young adult mental health and adjustment. *J Homosex*. 2020;67(2):159-173.
- Wyatt-Nichol H. Sexual orientation and mental health: incremental progression or radical change? *J Health Hum Serv Adm*. 2014;37(2):225-241.
- Byne W. Regulations restrict practice of conversion therapy. *LGBT Health*. 2016;3(2):97-99.
- Canadian Psychological Association. CPA policy statement on conversion/reparative therapy for sexual orientation [Internet]; 2015 [cited 2019 Sep 26]. <https://cpa.ca/docs/File/Position/SOGII%20Policy%20Statement%20-%20LGB%20Conversion%20Therapy%20FINALAPPROVED2015.pdf>.
- Scasta D, Bialer P. Position statement on issues related to homosexuality [Internet]. American Psychiatric Association; 2013 [cited 2019 Sep 26]. <https://www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-2013-Homosexuality.pdf>.
- Veltman A, Chaimowitz G. Mental health care for people who identify as lesbian, gay, bisexual, transgender, and (or) queer. *Can J Psychiatry*. 2014;59(11):1-8.
- Flentje A, Heck NC, Cochran B. Experiences of ex-gay individuals in sexual reorientation therapy: reasons for seeking treatment, perceived helpfulness and harmfulness of treatment, and post-treatment identification. *J Homosex*. 2014;61(9):1242-1268.
- Movement Advancement Project. LGBT policy spotlight: conversion therapy bans [Internet]; 2015 [cited 2019 Sep 26]. <http://lgbtmap.org/policy-and-issue-analysis/policy-spotlight-conversion-therapy-bans>.
- Flentje A, Heck NC, Sorensen JL. Substance use among lesbian, gay, and bisexual clients entering substance abuse treatment: comparisons to heterosexual clients. *J Consult Clin Psychol*. 2015;83(2):325-334.
- Mallory C, Brown T, Conron K. Conversion therapy and LGBT youth [Internet]. Los Angeles (CA): Williams Institute; 2018 [cited 2019 Sep 26]. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Conversion-Therapy-LGBT-Youth-Jan-2018.pdf>.
- Vander Wal Gritter W. Preventing and addressing the harm caused by sexual orientation and gender identity change efforts: a brief submitted to the Standing Committee on Health for the Committee's study of LGBTQ2 health in Canada [Internet]. Generous Space; 2019 Sep 26. <https://www.ourcommons.ca/Content/Committee/421/HESA/Brief/BR10439056-br-external/GenerousSpaceMinistries-e.pdf>.
- Salway T, Card K, Ferlatte O, et al. Protecting Canadian sexual and gender minorities from harmful sexual orientation and gender identity change efforts: a brief submitted to the Standing Committee on Health for the Committee's study of LGBTQ2 health in Canada [Internet]. Vancouver: University of British Columbia; 2019 Sep 26. <https://www.ourcommons.ca/Content/Committee/421/HESA/Brief/BR10447600-br-external/SalwayTravis-2-e.pdf>.
- Ashley F. Model Law—prohibiting reparative practices; 2019. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3398402](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3398402).
- Ashley F. Gatekeeping hormone replacement therapy for transgender patients is dehumanising. *J Med Ethics*. 2019;45(7):480-482. doi:10.1136/medethics-2018-105293.
- The Trevor Project. National survey on LGBTQ youth mental health, conversion therapy & change attempts [Internet]; 2019 [cited 2019 Sep 26]. <https://www.thetrevorproject.org/survey-2019/?section=Conversion-Therapy-Change-Attempts>.
- Turban JL, King D, Reisner SL, Keuroghlian AS. Psychological attempts to change a person's gender identity from transgender to cisgender: estimated prevalence across US States, 2015. *Am J Public Health*. 2019;109(10):1452-1454. doi:10.2105/AJPH.2019.305237.
- Butterfield M. How gay conversion therapy got a foothold in Canada. *Huffington Post Canada*. 2018 Oct 9.
- Hackl M. A constitutional cop-out: federal government passes the buck on conversion therapy. *Rabble*. 2019 Mar 28.
- Fitzsimons T. Rep. Maloney introduces bill to ban taxpayer funding of "conversion therapy." *NBC News*. 2019 Mar 28.
- Ferlatte O, Dulai J, Hottes TS, Trussler T, Marchand R. Suicide related ideation and behavior among Canadian gay and bisexual men: a syndemic analysis. *BMC Public Health*. 2015;15:597.
- Gilbert M, Hottes TS, Kerr T, et al. Factors associated with intention to use internet-based testing for sexually transmitted infections among men who have sex with men. *J Med Internet Res*. 2013;15(11):e254. doi:10.2196/jmir.2888.
- Salway T, Plöderl M, Liu J, Gustafson P. Effects of multiple forms of information bias on estimated prevalence of suicide attempts by sexual orientation: an application of a Bayesian

- misclassification correction method to data from a systematic review. *Am J Epidemiol.* 2019;188(1). doi:10.1093/aje/kwy200.
24. Truth and Reconciliation Commission of Canada. Honouring the truth, reconciling for the future: summary of the final report of the truth and reconciliation commission of Canada [Internet]; 2015 [cited 2019 Sep 26]. <http://publications.gc.ca/site/eng/9.800288/publication.html>.
  25. Turban JL, Beckwith N, Reisner SL, Keuroghlian AS. Association between recalled exposure to gender identity conversion efforts and psychological distress and suicide attempts among transgender adults. *JAMA Psychiatry.* 2019;1-19. doi:10.1001/jamapsychiatry.2019.2285.
  26. Clément D. Sexual orientation—Canada's human rights history [Internet]. Edmonton: Department of Sociology, University of Alberta; 2019 [cited 2018 Sep 26]. <https://historyofrights.ca/encyclopaedia/main-events/sexual-orientation/>.
  27. Hottes TS, Gesink D, Ferlatte O, et al. Concealment of sexual minority identities in interviewer-administered government surveys and its impact on estimates of suicide ideation among bisexual and gay men. *J Bisex.* 2016;16(4):427-453. doi:10.1080/15299716.2016.1225622.
  28. Siddiqi A, Shahidi FV, Ramraj C, Williams DR. Associations between race, discrimination and risk for chronic disease in a population-based sample from Canada. *Soc Sci Med.* 2017; 194(1):135-141. doi:10.1016/j.socscimed.2017.10.009.
  29. Taiwan finalizes conversion therapy ban [Internet]; [cited 2020 Jan 21]. <https://medium.com/shanghaiist/taiwan-finalizes-conversion-therapy-ban-adb417e5ff44>.