

## AN EXAMINATION OF 2SLGBTQIA+ PSYCHOLOGICAL WELLBEING IN CANADA AND THE UNITED STATES

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### Abstract

Compared to the general population, members of the 2SLGBTQIA+ community demonstrate lower mental health, psychological wellbeing, and life satisfaction (Conlin et al., 2019). An online questionnaire was administered to 534 participants across Canada (59.5%) and the United States (40.5%) to assess psychological wellbeing across sexual orientation and gender identity. Respondents were separated into four distinct categories to identify group differences: sexual minority (44.6%), gender minority (4.5%), double minority (sexual + gender minority; 26%), and non-minority (24.9%). A series of Chi-square tests and analyses of variance (ANOVA) were used to identify differences across groups and region. 2SLGBTQIA+ participants reported significantly higher anxiety, depression, and loneliness (family, social) as well as lower life satisfaction than non-2SLGBTQIA+ participants. Further, significant group differences were found on some psychosocial measures; for example, double minority participants reported the lowest satisfaction with life and highest family loneliness relative to both sexual and non-minority categories. Overall, there were no differences between 2SLGBTQIA+ participants in Canada and the United States. Results demonstrate the continued disparity between 2SLGBTQIA+ and non- 2SLGBTQIA+ populations in psychological wellbeing, with some poorer outcomes for double minority participants and limited differences between 2SLGBTQIA+ participants in Canada and the United States.

**Keywords:** *Psychological wellbeing, mental health, sexual minority, gender minority, 2SLGBTQIA+.*

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### 1. Introduction

Mental health concerns are common in Canada and the United States. In both countries, approximately 20% of adults experience a mental illness or addiction each year (SAMSHA, 2021; Smetanin, 2011). Further, in the United States, suicide is the second leading cause of death. Additionally, during the COVID-19 pandemic, 25% of Canadians reported mental health problems (Statistics Canada, 2021). Members of the LGBTQ+ population demonstrate lower mental health and psychological wellbeing than members of the general population (Barry et al., 2020; Conlin et al., 2019). Using data from the 2015-16 CCHS, Hickey (2021) found significantly higher levels of depression and anxiety for lesbian, gay, and bisexual Canadians compared to the general population. Data from two large surveys conducted in the United Kingdom and Australia found that participants who identified as LGB scored lower on satisfaction of life due to both direct and indirect effects of stigmatization and discrimination (Powdthavee & Wooden, 2015). Overall, stigma, prejudice, and discrimination experienced by LGBTQ+ people can be chronically stressful and cause negative health and wellbeing outcomes (Kelleher, 2009).

Discrimination and stigmatization based on sexual orientation is predictive of psychological disorders (Chakraborty et al., 2011). A meta-analysis of 25 studies including a total of 214,344 heterosexual and 11,971 homosexual participants indicated that suicide attempts among LGB individuals were double that of the general population for lifetime prevalence and that depression and anxiety was 1.5 times higher for LGB individuals (King et al., 2008). Lastly, research indicates that sexual minorities may have a higher risk for some psychological disorders because of the detrimental effects of social stigma (Johnson et al., 2008; Mays & Cochran, 2001; Wright et al., 2000).

There also appear to be differences in the effects of sexual orientation and gender identity on psychological distress within the 2SLGBTQIA+ community. A study of 3,083 non-heterosexual and 552 non-cisgender Canadians indicated significantly greater levels of depression and anxiety among transgender and non-binary individuals (Rutherford et al., 2021). Although cisgender participants reported wanting help for depression (12%) and anxiety (26%), 47% of transgender respondents indicated

that they wanted help for depression and 49% reported needing help with anxiety (Rutherford et al., 2021). Further, transgender individuals were more likely to have received care from a registered counsellor, psychiatrist, social worker, or clinical psychologist as compared to cisgender respondents (Rutherford et al., 2021), which substantiates concerns about psychological wellness.

In the United States, a study using the health records of 6,459 patients found that almost every mental health condition, including depression, were more common among those who identified as transgender (Goodman, 2018). Further, self-harm and suicidal thoughts were significantly higher among transgender youth than cisgender youth (Goodman, 2018). It is interesting to note that researchers also found that gender-affirming therapies were associated with less body image related mental health concerns (Goodman, 2018). These findings are particularly alarming for the transgender population as laws are being enacted to restrict access to needed healthcare and mental health services.

### 1.1. Current study

The aim of this study was to provide a better understanding of the psychological wellness between 2SLGBTQIA+ and non-2SLGBTQIA+ individuals in Canada and the United States. The current study used data collected from an online questionnaire administered through Qualtrics to members of the 2SLGBTQIA+ community and members of the general population in Canada and the United States.

## 2. Method

### 2.1. Participants

The final sample size consisted of 534 participants ( $Mean_{Age} = 26.70$  years,  $SD = 9.22$ ); 318 Canadians and 216 Americans participated. All participants were categorized as non-minority (straight and cisgender;  $n = 238$ ), sexual minority (non-heterosexual cisgender;  $n = 139$ ), gender minority (heterosexual gender minority;  $n = 24$ ), or double minority (non-cisgender and non-heterosexual;  $n = 133$ ) based on their combined responses to questions regarding sexual orientation and gender identity.

### 2.2. Measures

The measures included the General Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006; Cronbach's  $\alpha = .89$ ), the short form of the Social and Emotional Loneliness Scale for Adults (SELSA-S; DiTommaso et al., 2004; Cronbach's  $\alpha$  scores = .82 to .89), the Satisfaction with Life Scale (SWLS; Diener et al., 1985; Cronbach's  $\alpha = .87$ ), the Patient Health Questionnaire-9 (PHQ-9; Spitzer et al., 1999; Cronbach's  $\alpha = .89$ ) to indicate depressive symptoms; and the RAND 36-Item Short Form Health Survey (RAND-36; Ware & Sherbourne, 1992; Cronbach's  $\alpha = .78$  to .93) as an indication of overall health and quality of life.

### 2.3. Procedure

This project was reviewed by the University of New Brunswick Research Ethics Board. Participants were recruited from social media sites and private online groups. The sample included undergraduate students from the University of New Brunswick Saint John Department of Psychology Participant Pool. After providing informed consent, participants completed a demographic questionnaire, followed by the questionnaires, which were presented in randomized order.

## 3. Results

### 3.1. Comparing 2SLGBTQIA+ and non-2SLGBTQIA+ respondents

Members of the 2SLGBTQIA+ population reported significantly higher scores on the GAD-7 and PHQ-9 and significantly lower scores on the SWLS: Satisfaction with Life and the RAND-36 subscale of mental health (see Table 1). Compared to non-2SLGBTQIA+ individuals, 2SLGBTQIA+ respondents had significantly higher scores on SELSA-S family and social loneliness subscales.

Table 1. Differences in psychological wellness between 2SLGBTQIA+ and non-2SLGBTQIA+ respondents.

Variable	Non-2SLGBTQIA+ <i>M (SD)</i>	2SLGBTQIA+ <i>M (SD)</i>	<i>t</i>	Effect Size (Cohen's <i>d</i> )
GAD-7 (Anxiety)	15.38 (5.66)	17.19 (5.45)	3.73***	.33
PHQ-9 (Depression)	18.05 (5.75)	20.79 (6.12)	5.26***	.46
SWLS (Life Satisfaction)	23.88 (6.43)	20.24 (6.90)	-6.22***	.54
RAND-36 Mental Health	53.47 (21.16)	43.57 (18.56)	-5.65***	.50
SELSA-S (Social Loneliness)	14.21 (6.68)	15.68 (6.60)	2.51*	.22
SELSA-S (Family Loneliness)	12.21 (6.52)	16.84 (7.40)	7.45***	.66
SELSA-S (Romantic Loneliness)	17.59 (9.79)	18.38 (8.99)	0.96	.09

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

### 3.2. Comparing differences within 2SLGBTQIA+ respondents

There were statistically significant differences in psychological wellness of the non-minority group and the sexual and double minority groups (see Table 2). Significant differences were found across all three minority status groups on the SWLS, with double minority participants reporting the lowest satisfaction with life. Finally, although there were no differences in social and romantic loneliness, non-minority participants reported the lowest levels of family loneliness, with double minority participants reporting the greatest family loneliness.

Table 2. Differences in psychological wellness across non-minority, sexual minority, and double minority groups.

Variable	Non-Minority		Sexual Minority		Double Minority		F
	M	SD	M	SD	M	SD	
GAD-7 (Anxiety)	15.38 <sub>a</sub>	5.66	16.89 <sub>b</sub>	5.77	17.80 <sub>b</sub>	5.07	8.70 ***
PHQ-9 (Depression)	18.05 <sub>a</sub>	5.75	20.13 <sub>b</sub>	6.09	21.63 <sub>b</sub>	6.18	16.26 ***
SWLS (Life Satisfaction)	23.88 <sub>a</sub>	6.43	21.50 <sub>b</sub>	6.99	19.05 <sub>c</sub>	6.68	22.79 ***
RAND-36 Mental Health	53.47 <sub>a</sub>	21.16	46.79 <sub>b</sub>	18.83	39.61 <sub>c</sub>	18.18	21.06 ***
SELSA-S (Social Loneliness)	14.21 <sub>a</sub>	6.68	15.36 <sub>a</sub>	6.62	15.37 <sub>a</sub>	6.57	1.85
SELSA-S (Family Loneliness)	12.21 <sub>a</sub>	6.52	15.16 <sub>b</sub>	7.14	18.69 <sub>c</sub>	7.59	35.37 ***
SELSA-S (Romantic Loneliness)	17.59 <sub>a</sub>	9.79	19.37 <sub>a</sub>	9.57	17.05 <sub>a</sub>	8.56	2.27

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . Subscripts indicate statistically significant post hoc comparisons.

Although the gender minority group (individuals who identified as a gender minority but not a sexual minority) could not be included in the general analysis due to limited sample size, exploratory *t*-tests were performed to identify differences on our measures of psychological wellness between the gender minority group and double minority group. There were statistically significant differences on the SELSA-S: Social loneliness; double minority respondents reported significantly lower social loneliness than gender minority participants. Overall, the limited number of significantly different variables across the minority status categories may indicate that these two groups are generally indistinct from one another, however it is important to note the small sample of the gender minority group limits our ability to draw specific comparisons.

### 3.3. Comparing Canada and the United States

When comparing 2SLGBTQIA+ participants in Canada and United States using a series of *t*-tests, few significant differences were found (see Table 3). 2SLGBTQIA+ Americans reported significantly better RAND-36 mental health scores compared to Canadian respondents; however, participants from the United States reported significantly higher social loneliness than Canadians, with no statistically significant differences observed on the subscales measuring family and romantic loneliness. Levels of depression, anxiety, or satisfaction with life among 2SLGBTQIA+ participants did not differ significantly between Canada and the United States.

Table 3. Differences in psychological wellness of 2SLGBTQIA+ participants between Canada and the United States.

Variable	Canada (n = 133) M (SD)	United States (n = 163) M (SD)	t	Effect Size (Cohen's d)
GAD-7 (Anxiety)	17.89 (5.96)	16.63 (4.96)	1.94	.23
PHQ-9 (Depression)	21.40 (6.46)	20.29 (5.81)	1.55	.18
SWLS (Life Satisfaction)	19.83 (7.34)	20.58 (6.53)	-0.92	.11
RAND-36 Mental Health	40.88 (19.12)	45.82 (17.84)	-2.28*	.27
SELSA-S (Social Loneliness)	13.69 (6.70)	17.32 (6.07)	-4.78***	.57
SELSA-S (Family Loneliness)	16.30 (8.16)	17.28 (6.71)	-1.09	.13
SELSA-S (Romantic Loneliness)	18.34 (10.59)	18.41 (7.46)	-0.07	.01

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## 4. Discussion

Levels of anxiety and depression were significantly elevated in participants who identified as 2SLGBTQIA+, relative to the control sample of non-2SLGBTQIA+ participants. Interestingly, in this sample, there were few differences between sexual minority and double minority (sexual + gender minority) participants. 2SLGBTQIA+ participants also demonstrated significantly lower life satisfaction, with non-minority participants showing the highest satisfaction with life, followed by sexual minorities

who reported significantly higher satisfaction than the double minority group. These results of lower psychological wellbeing and greater psychological distress are consistent with previous research showing continued disparities between populations (Barry et al., 2020; Bostwick et al., 2010; Chakraborty et al., 2011; Cochran et al., 2003; Conlin et al., 2019; Diamont & Wold, 2003; Gilmour, 2019; Hickey, 2021; Roberts et al., 2010). For example, a meta-analysis of 25 studies composed of 214,344 heterosexual and 11,971 homosexual participants indicated significantly higher rates of depression and anxiety among LGB individual compared to those who were non-LGB (King et al., 2008).

At the group level, 2SLGBTQIA+ participants also reported significantly higher levels of family and social loneliness compared to non-2SLGBTQIA+, with double minority participants reporting the highest level of family loneliness than the other groups. Although only some forms of loneliness showed significant differences across groups, some research has shown significantly greater loneliness for gender diverse youth compared to cisgender (Anderssen et al., 2020). Interestingly, in a global sample of LGBTQ individuals, marginalization was significantly associated with higher social and emotional loneliness (Elmer et al., 2022). Further, greater involvement in the LGBTQ+ community was associated with higher marginalization but was also associated with lower social and emotional loneliness (Elmer et al., 2022), which could help explain some of the current results.

Lastly, Canadian 2SLGBTQIA+ participants demonstrated lower social loneliness than American participants. Interestingly, Americans and Canadians reported similar levels of depression, anxiety, satisfaction with life, family loneliness, and romantic loneliness. Consistently, similar rates of depression were reported on the Joint Canada/United States Survey of Health, however, when only individuals without health insurance were examined, significantly higher rates were found in the United States (Vasiliadis et al., 2007).

## 5. Conclusion

Our results demonstrate the continued disparities between 2SLGBTQIA+ and non-2SLGBTQIA+ populations, with some results suggesting that further marginalized subgroups face greater psychological difficulties. Interestingly, limited differences were found between 2SLGBTQIA+ participants in Canada and the United States. A limited sample size in some subgroups resulted in not being able to explore some 2SLGBTQIA+ populations and aggregating groups. As a result, we were not able to capture the unique experiences of these diverse populations and communities. However, we hope these results will continue to improve our understanding of the experiences of 2SLGBTQIA+ communities to support the development of policy, practitioner education, and strategies to address barriers to mental wellbeing.

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