Living together in socially polarized contexts: vulnerability and resilience in the university community

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Introduction

The Research and Action on Social Polarizations (RAPS) team presents in the report entitled

«Living together in socially polarized contexts: vulnerability and resilience in the university community»

the results of a survey conducted with students from eight Quebec universities in 2020/2021 (see appendix 1).

Conducted during the COVID-19 pandemic, this research examines the determinants of sympathy for violent radicalization in Quebec universities. It is the first time that data has been collected from university students; this project follows on from a project carried out in college institutions on the same subject (Rousseau et al., 2022). The report presented here provides a descriptive summary of the results that will be supplemented in subsequent scientific articles based on more in-depth analyses. These will address, among other things, the role of the Internet and the question of group affiliations and social support.

Background research

Social polarization is a tangible trend around the world. Although it is a historically recurrent phenomenon, the current wave of polarization stands out because of the characteristics of communication in the era of globalization and the level of uncertainty about the future of the planet. This context provokes questions and opens the possibility of necessary transformations in our societies but is also associated with an increase in various forms of conflict and the ideological legitimization of forms of violence, often referred to as "violent radicalization" (VR). VR is a complex phenomenon, defined as a process in which violence gradually becomes a means to achieve a specific political, social, or religious goal (Schmid, 2013). In congruence with the growth of anti-immigrant and xenophobic sentiments in Europe and North America, extreme right and ultra-conservative right-wing movements are also developing in Quebec (Gagnon, 2020; Morin et al., 2019; Nadeau et al., 2021; Perry et Scrivens, 2015). To analyze them and develop effective prevention strategies, a socio-ecological framework[1] seems appropriate since it allows for the identification of multiple levels of preventive action tailored to a specific context (World Health Organization, 2008).

With the COVID-19 pandemic, social and systemic inequalities have become more visible and accentuated. This context has also contributed to an upsurge of all forms of violence associated with hopelessness, increasing polarization within our society (Venkatesh et al., 2021). The coincidence between local dynamics of exclusion and the multiplication of international conflicts, all relayed into people's private lives in real time by the media, nourishes social polarizations, some of which are accompanied by various forms of radicalization leading to violence. These could be justified by religious, ethnic, nationalistic, xenophobic, or sexist rhetoric (Bramadat et Dawson, 2018; King et Taylor, 2011; Morin et Aoun, 2021; Theodorou, 2014). The stigmatization and social exclusion of minorities provide a clear example of the consequences of social polarization. These are manifested in phenomena like the wave of anti-Asian hate incidents, but also include more positive developments like in the call for racial and social justice carried by the Black Lives Matter movement in the spring of 2020. Stressful experiences during the pandemic may also contribute to greater support for VR and have implications for schools and educational environments. For example, recent events highlight the

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1   The social-ecological framework suggests that an individual's development occurs through different systems (e.g., micro, meso, macro) (Bronfenbrenner, 2001). According to the author, the development of individuals and communities is defined as "1) the development of individuals and communities is the product of interactions with environments; 2) the individual (or communities) and their environments interact in a continuous manner… that generates mutual adaptation of the subject and its environments; 3) the product of this adaptation is equilibrium, defined by well-being"

disturbing increase in gun crimes in Montreal, often related to gang conflicts involving youth. The recent murder of a teenager in front of his school in October 2021, the armed assault of a teacher by a 16-year-old student, and similar incidents in early 2022 are concrete examples that remind us of the urgent need to address the issue of violence among youth.

In addition, recent systematic reviews of the consequences of the pandemic on youth well-being conclude that COVID-19 negatively affects youth mental health and exacerbates educational disparities (Loades et al., 2020; Nearchou et al., 2020). These findings highlight the urgent need to better understand the risk and protective factors to promote well-being and prevent youth violence, as well as to better prepare school employees to take action and intervene directly in educational settings.

To date, empirical evidence exploring the role played by the broader social context in the complex interplay of risk and protective factors associated with youth support for VR has been sparse. However, findings from the RAPS team's research project, which began in 2015, and those presented by the UNESCO-Prev Chair in 2021, suggests that perceived discrimination and exposure to violence among university students both represent significant risk factors for VR support (Morin et al., 2019; Rousseau et al., 2019; Rousseau et al., 2018). Social support and religion are shown to be protective factors that reduce the negative impact of social adversity on VR (Rousseau et al., 2019; Rousseau et al., 2018). Depression and mental health problems were found to be other important risk factors (Rousseau et al., 2019), while having a positive view of the future was found to be protective, especially for more depressed youth (Miconi, Oulhote, et al., 2020). Between 2015 and 2017, we observed a significant increase in levels of depression among youth. In terms of socio-demographics, we observed that over time, sympathy for VR is progressively observed to a greater extent in younger groups. In 2015, young adults ages 22 to 24 scored higher than their younger counterparts in support for VR, whereas in 2017, it was the 16 to 21 age group that was the most at risk (Rousseau et al., 2020). In addition, between 2015 and 2017, the importance attributed to one's collective identity (i.e., the importance of the individual attributes to a group with which the subject identifies) became a stronger risk factor. This finding may be related to the polarization around identity issues in Quebec society (whether linguistic, religious/secular, national, political, and related to gender identity and sexual orientation). At last, regional differences (e.g., in terms of socio-political climate and cultural/ethnic diversity of the population) also play a role in shaping the impact of discrimination and violence on support for VR. This suggests that prevention and intervention programs must be adapted to local realities, particularly the socio-political climate and the linguistic, ethnic, and cultural diversity of the setting (Miconi, Calcagnì, et al., 2020).

Implications

Universities reach a very large number of young adults belonging to both the majority and minority ethnic, religious, and racial backgrounds (including both non-immigrant and immigrant students). Therefore, universities play a crucial role in devising cross-sectoral interventions that can promote coexistence and tolerance and curb the intolerant and extremist discourses that fuel support for VR. Our research will contribute to a better understanding of the impact of sensitive and divisive socio-political contexts on young adults' mental health and social adjustment in educational institutions and in our society. Therefore, the findings presented in this report contribute to the bases for the development of programs aimed to improve inclusion and respect for all forms of diversity in the Quebec university community, such as the one produced by Morin et al. (2019) entitled: *La prévention de la radicalisation et de l'extrémisme violents en milieu universitaire au Québec [Preventing Violent Radicalization and Extremism in Quebec Universities].*

Objectives

The overall goal of our research was to **examine the association between social adversity** (e.g., experiences of discrimination and bullying, exposure to violence) **and support for VR among university students in Québec**. Specifically, we wanted to identify associations between sociodemographic characteristics, social adversity, psychological distress, presence of a life purpose and positive vision of the future, Internet use, collective identity, and support for VR. Data collection took place mostly during the second wave of the COVID-19 pandemic, providing a unique context for assessing levels of distress and coping among youth during these difficult and polarizing times. In summary, our aim was to highlight the complex interplay of macro-, meso-, and micro-level factors in shaping the processes that can lead to social solidarity and/or sympathy for violent action, in a pandemic context that can be a source of psychological distress and social tension.

✗ Methodology

Data collection took place between approximately January 2020 and March 2021. Participants were recruited through partnerships with Quebec universities. The only inclusion criterion was to be enrolled at the university. Participants were invited by email from the educational institution to complete an online questionnaire. The research protocol and procedures were approved by the McGill Faculty of Medicine Institutional Review Board and by the various ethics committees of all participating universities.

Description of the sample

A total of 2,167 students between the ages of 17 and 71 from eight Quebec universities completed the survey, with an average age of 27 years (SD=8.35). Of these, 68% (n=1479) identified as women, 29% (n=623) as men, and nearly 2% (n=39) as transgender or gender diverse (TGD). Most students (48.5%, n=1050) were born in Canada to Canadian-born parents (third generation or more), while 35% (n=759) were first-generation immigrants (i.e., born abroad) and 16% (n=339) were second-generation immigrants (i.e., born in Canada with at least one parent born abroad). Immigrant students came from a variety of origins, nearly 10% (n=205) were from Europe, 7% (n=159) were from Asia, just over 5% (n=113) were from North Africa/Maghreb/Middle East, 5% (n=119) were from North America (excluding Canada), and nearly 8% (n=163) were from another origin. Most respondents reported having no religious affiliation (58.1%, n=1258), while a significant minority practiced Christianity (28.2%, n=611), a small minority practiced Islam (5.9%, n=128) or another religion (7.3%, n=159). Concerning financial difficulties, students were asked to respond with a four-point Likert scale (1 = never to 4 = very often): *During your youth, did your family experience difficulties related to lack of money?* Nearly 45% (n=964) reported never having experienced financial difficulties in their household growing up, slightly more than one third (37.9%, n=821) reported sometimes having experienced financial difficulties, and 18% reported experiencing it often (10.4%, n=225) or very often (7.1%, n=154). A total of 47% (n=1025) of the students reported French as their preferred language, 32% (n=688) reported English, and 19% (n=420) reported being bilingual (i.e., both English and French as their preferred languages). More than half of the participants (52.3%, n=1134) were enrolled in an undergraduate program, 24% (n=523) were graduate students, and 15% (n=324) were postgraduate students. A small minority, 1% (n=24) of participants, were post-doctoral students. Most students were from the Social Sciences and Humanities (including Business) (44.3%, n=961), 20% (n=443) from the Health and Life Sciences, 16% (n=337) from the Pure and Applied Sciences and Engineering and Computer Science, 13% (n=279) from the Arts and Literature, and 6% (n=129) from other fields. It should be noted that 32% (n=686) of the participants completed the survey before the first lockdown on March 13th, 2021 (see Table 1, Appendix 2).

Measures

The different questionnaires used to measure support and sympathy for VR are briefly presented in this section. A full description of each of these scales, in addition to those used for all variables of interest, can be found in Appendix 4.

Support for VR (RIS): This variable is measured using the Radicalism Intention subscale of the *Activism and Radicalism Intention Scales* (ARIS) developed by Moskalenko and McCauley (2009). Specifically, participants are asked to rate their willingness to support or participate in violent or illegal behavior on behalf of a group or organization they identify with. Possible scores range from 4 to 28, and a high score indicates more support.

Sympathy for VR (SyfoR): this variable was measured using the *Sympathy for Violent Radicalization Scale* (Bhui et al., 2014). This questionnaire asks participants to rate their degree of sympathy or disapproval of violent behaviors, such as the use of violence in political protests. Possible scores range from 8 to 56, and a high score indicates more support.

Results ✔

This section presents the results of the preliminary analyses. Descriptive results were summarized using means and standard deviation for continuous variables (e.g., age) and frequencies and percentages for categorical variables (e.g., gender). To identify potential protective factors and risk factors for support and sympathy for VR, we implemented mixed-effects regression models, controlling for variations that may be associated with a site effect that are not presented in this report. Comprehensive tables of all results presented can be found in Appendix 2 (descriptive analyses) and 3 (results from multivariable regression models).

Support for VR (RIS) and sympathy for VR (SYFOR)

While susceptibility to VR is present among young people surveyed in Quebec, it is worth mentioning that the levels of support and sympathy for VR remain moderate (RIS scores between 4 and 28; SYfoR scores between 8 and 56).

Results suggest a mean score of 11.5 (SD=6.53) among students for support for VR, and a mean score of 20.0 (SD=10.6) for sympathy for VR among students (see Table 1, Appendix 2). It should be noted that the average scores are comparable to those obtained from college students (RIS: 11.3 (SD=6.26); SyfoR: 19.9 (SD=9.88) (Rousseau et al., 2022).

Socio-demographic variables

Results show that younger students, those who identify as a gender minority, and those for whom first language is English are at greater risk of supporting VR. Students who report a religious affiliation[1] have lower VR scores compared to students who report no religion (see Table 1, Appendix 3). In addition, results indicate that financial difficulty among students is not statistically associated with VR.

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1   To measure this concept, respondents were asked, "What is your current religion or belief system?"

Contexts and motives for discrimination and violence
(SOCIAL ADVERSITY)

Perceived discrimination was measured using the *Perceived Discrimination Scale*, which explores the experiences of structural discrimination in eight life areas: employment, workplace, housing, education, public services, health services, social services, and the judicial system (Noh et al., 1999).

A significant majority of the students surveyed (71.2%, n=1543) reported having experienced discrimination. However, the percentages vary across contexts and the underlying reasons. First, it is worth mentioning that 25% (n=551) of the students reported having experienced discrimination within the school context. The most common reasons for discrimination were related to gender (35.6%, n=771), language (29.9%, n=6470), and origin (25.7%, n=556) (see Table 2, Appendix 2). As for exposure to violence, three questions from the *Quebec Health Survey Project on Cultural Communities* were used (Rousseau et Drapeau, 2004). Among the students surveyed, 57% (n=1234) said they had been victims of violence or had witnessed violence during an event involving a relative. Our results show that perceived discrimination and experienced violence remains an important risk factor among students for support for VR (see Table 5, Appendix 3).

To summarize, our results suggest that older students, first- and second-generation students, and students who encounter financial difficulties report more experiences of social adversity like discrimination or violence. Those who identify as men and Francophones report less discrimination than those who identify as women and Anglophones, respectively (see Table 2, Appendix 3). This finding raises questions about the underlying reasons for the adverse social experiences of these groups. In fact, the results could reflect in part the impact of a social context characterized by the rise of xenophobic and masculinist attitudes in North America and in Quebec. For example, in 2020, a 37% increase in hate crimes reported to police in Canada was observed, and those targeting race or ethnicity almost doubled compared to the previous year, accounting for most of the increase (Statistique Canada, 2021). In addition, the report by the Canadian Femicide Observatory for Justice and Accountability suggests a significant increase of 77% in the number of femicides between 2019 and 2020 (Canadian Femicide Observatory for Justice and Accountability, 2020). These movements have been fueled by the effects of the pandemic, such as prolonged confinement, loss of jobs and income, unequal exposure to the virus, and limits on rights, which have exacerbated pre-existing inequalities within our society and intensified othering processes and the search for scapegoats (Blair et al., 2022; Cleveland et al., 2020; Hooper et al., 2020; Miconi, Li, Frounfelker, Santavicca, et al., 2021; Miconi, Li, Frounfelker, Venkatesh, et al., 2021). These results suggest that there is a great need to redress the balance in order to minimize the social adversity and stigma that some groups face.

Bullying

In recent years, cyberbullying—a form of bullying that occurs through electronic contact—has become an important public health issue, largely affecting adolescents and young adults. Our results suggest that bullying victimization, whether experienced online or in person, is a risk factor for depression, but not for support for VR (see Tables 4 and 5, Appendix 3). This suggests that the effect of bullying victimization on support for VR may be indirect via depression (Miconi et al., 2022). Further analyses are needed to test this hypothesis.

Psychological distress

In the rapidly evolving context in which VR may occur (National Consortium for the Study of Terrorism and Responses to Terrorism, 2015; NCSTRT), the situation related to the COVID-19 pandemic contributed to high levels of uncertainty and has been associated with increasing feelings of helplessness and hopelessness, as well as with increased psychological distress worldwide, especially among young people (Loades et al., 2020; Nearchou et al., 2020). Furthermore, several studies confirm the existence of a positive association between depressive symptoms and support for VR (Misiak et al., 2019; Rousseau et al., 2019). To address the psychological distress observed among students during the pandemic, we measured symptoms of depression.

DEPRESSION

Depression was measured using the 15-item *Hopkins Symptom Checklist-25* (HSCL-25) (Derogatis et al., 1974). The mean score of students surveyed in terms of depression was 1.98 (*SD*=0.60) on a scale of 1 to 4 (1 = *not at all depressed* and 4 = *extremely depressed*). Moreover, 56% of students (n=1215) were above the clinical cutoff of 1.75. Furthermore, result suggests that depression is a significant risk factor among students for support for VR (RIS) (*B*=0.87, *SE*=0.15, *p*<0.001) and VR sympathy (SyfoR) (*B*=1.54, *SE*=0.25, *p*<0.001) (see Table 7, Appendix 2).

It should also be noted that younger students, those who identify as a gender minority, and students who report more economic difficulty report more psychological distress (see Table 2, Appendix 3).

Time spent online and preference for online social interactions

Time spent on the Internet was measured using two questions: I*n a typical week, how many hours do you spend on social networks during a day during the week?* and *In a typical weekend day, how many hours do you spend on social networks?* Subsequently, preference for online social interactions was measured by asking respondents to position themselves in relation to items like: *"I am more comfortable online," "I feel safe when I am online,"* and *"I can be myself when I am online."* Respondents were asked to indicate their answer choice, using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) with scores ranging from 13 to 91. According to the results, students spent an average of 2.80 (*SD*=3.11) hours per day on social media and the average score of preference for online social interaction was 36.5 (*SD*=13) (see Table 6, Appendix 2).

Results suggest that preference for online social interactions over offline social interactions is a risk factor for VR (*B*=0.51, *SE*=0.15, *p*<0.001) and depression (*B*=0.06, *SE*=0.01, *p*<0.001). As for time spent on the Internet, results show that it is also a risk factor associated with sympathy for VR (*B*=0.19, *SE*=0.08, *p*<0.05) and depression (*B*=0.02, *SE*=0.004, *p*<0.001). Specifically, this means that more time spent on social media and a stronger preference for online social interactions are significantly and positively associated with higher sympathy and support for VR (see Table 3, Appendix 3). It is important to remember that these are not causal relationships, and that bidirectional relationships can be identified. In some cases, social media can accelerate the process of VR of individuals (Hassan et al., 2021). Indeed, some individuals will tend to isolate themselves and prefer virtual relationships to non-virtual ones, making virtual relationships a coping strategy to deal with psychological distress (Morin et al., 2019). This strategy of seeking support through virtual relationships may increase vulnerability to VR in some cases, while being protective in other cases.

Collective identity

Collective identity was assessed using two subscales developed by Luhtanen and Crocker (1992) *Collective Self-Esteem Scale* (CSES). These scales focus on the individual's perception of the importance of group identity in two areas: the importance of belonging to a social group for one's personal identity and the importance of public collective self-esteem (i.e., the value attributed by other people to one's social group). The results showed that the importance of collective identity for personal identity was significantly associated with VR, in that a higher importance attributed to one's identification with a group was related to higher support for VR. In contrast, a positive public view of one's group was a protective factor for VR.

Furthermore, the analyses suggest a complex association between collective identity and support for VR. Group identification may represent a risk or protective factor, depending on the characteristics of the group identity in question. For instance, students who reported a sense of belonging to certain identity groups were found to be at higher risk of support for VR, such as students who identified as belonging to a political ([RIS] B=4.24, SE=0.31, p<0.001; [SyfoR] B=6.09, SE=0.53, p<0.001), gender ([RIS] B=1.28, SE=0.31, p<0.001; [SyfoR] B=1.97, SE=0.52, p<0.001) or sexual orientation group ([RIS] B=1.32, SE=0.37, p<0.001) reported higher scores of support for VR. In contrast, students who identified with some specific groups were at lower risk of supporting VR. Namely, an identification with a religious group ([RIS] B=-1.11, SE=0.45, p<0.05; [SyfoR] B=-1.59, SE=0.53, p<0.05), a professional group ([RIS] B=-1.08, SE=0.26, p<0.001; [SyfoR] B=-1.39, SE=0.44, p<0.01) or hobby group ([RIS] B=-0.73, SE=0.26, p<0.01; [SyfoR], B=-1.15, SE=0.44, p<0.01) were all protective and associated with lower support for VR (see Table 8, Appendix 3).

Vision of the future and presence of a meaning in life

Vision of the future was measured using three items regarding the vision of the future of the world, the community, and oneself. Participants were asked to indicate their level of agreement using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) to items such as: *"I feel the future holds many opportunities for me"* or *"I have confidence in the future of the world."* The presence of meaning in life (B= -0.85, SE=0.15, p<0.001) and a positive view of the future (B= -1.10, SE=0.14, p<0.001) were protective factors for support for VR (see Table 7, Appendix 3). Specifically, students who reported higher presence of meaning in life and/or a more positive view of the future were at lower risk of supporting VR.

Implications for practice

In terms of prevention and intervention, our results strengthen the evidence base for some existing programs and suggest new directions for future prevention and intervention initiatives in the field.

Prevention

During the pandemic, universities and governments attempted to minimize the impact of the pandemic on the student population in many ways. These initiatives included various funding, telephone hotlines, self-care guides, and calls for solidarity, all of which recognized and attempted to respond to the distress and isolation students experienced. The results of this survey suggest that similar supports may need to be retained or expanded beyond the pandemic to provide social support and help counter attitudes of legitimization of violence within the student community in the short and long-term.

Confirming some of the prevention initiatives endorsed by educational communities (e.g., the guide produced by IRIPI in 2022 aimed at the secondary level), our results confirm that prevention and intervention programs and policies should aim to foster an inclusive and non-discriminatory school climate in order to reduce youths' experiences of victimization and thus minimize the negative consequences of these experiences on mental health and support of VR. Our results showed that discrimination and victimization are a reality of great concern among students. Consistent with the findings of Morin et al.'s (2019) study, these experiences, which often occur in the university school setting (25%), have a negative impact not only on students' well-being, but also on their attitudes toward violence. Although such initiatives exist in some university settings, these initiatives do not sufficiently reach students. It is therefore necessary to identify and develop initiatives to ensure that students are reached. It also suggests that universities would benefit from continuing to invest in initiatives to improve school climate and initiate an inclusive dialogue with students and staff around socially polarizing issues in order to promote the well-being of all and reduce the risk of violence. These initiatives should be evaluated to determine whether they are effective and to what extent they should be disseminated more broadly. In line with the recommendations made in the report by Morin et al. (2019), school staff should receive training in preventing racism and discrimination to reduce social polarization. Our results also highlight the importance of difficult experiences for vulnerable young adults, and in particular the association of financial difficulty with social adversity that also requires specific social and organizational responses.

Given that preference for online social interaction and time spent online have been shown to be risk factors, increasing digital literacy may be necessary to address the challenges posed by misinformation and cyberbullying. While the use of social media during the pandemic represented a potential resource to counteract the isolation associated with social distancing among youth, our data suggest that it may have been also a source of increased alienation and victimization. While it seems important to promote healthy Internet-use habits and cultivate critical thinking among youth online, effective actions to address this issue are far from clear and will require specific work in the university context.

Our results also highlighted the polarizing role of group identities among youth, reflecting broader polarization around identities that we have observed in our societies in recent years (Rousseau et al., 2020). Students' group identities can be a risk factor when the group they identify with is stigmatized or perceived negatively in our society and when one group becomes extremely important to students' identity. This confirms the importance of supporting multiple identities in order to foster a healthy living together (IRIPI, 2022). An additional recommendation is to help students explore their professional identities, which have been shown to be a potential protective factor. Finally, considering the protective aspect of nurturing the presence of a meaning in life and a positive vision of the future, it is important to think about multiple ways to help and support students' sense of purpose within the curriculum and extracurricular activities, with accommodations for students with diverse academic abilities. This becomes even more important in the current pandemic context, which exacerbates uncertainties.

Intervention

Our research confirms that levels of psychological distress are extremely high among young adults, showing the need to increase support and access to mental health care by focusing on services that are easily and quickly accessible to all university students.

It should also be noted that gender minorities report higher rates of depression and discrimination, which are two important risk factors for support for VR. People who identify as transgender and gender diverse have an urgent need for support that should not be ignored. Finally, as the Table nationale de lutte contre l'homophobie et la transphobie des réseaux de l'éducation [National Education Network Anti-Homophobia and Transphobia Table] suggests, it would be relevant to reflect on the resurgence of homophobic and transphobic discourse in a context where gender identity is at the forefront of political and social debates (Table nationale de lutte contre l'homophobie et la transphobie des réseaux de l'éducation, 2020). These societal dynamics affect schools and the school climate, and it is important to reflect on such dynamics in order to better understand this phenomenon in its social and individual dimensions and to support those who identify as gender minorities, while promoting an open dialogue around gender diversity issues.

Conclusion

This report is intended to provide colleges with rapid information about the preliminary findings of this study. It does not represent all that is being done in the field by the universities and is intended as a first step in mobilizing this new knowledge. The RAPS research team would be very interested in discussing directly with you the interpretation of these data, their limitations, and, of course, their implications for your practices.

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Appendix

Appendix 1: Interactive map of participating universities

TABLE 1: INTERACTIVE MAP OF PARTICIPATING UNIVERSITIES

To access the interactive map, please use the following link:

https://www.google.com/maps
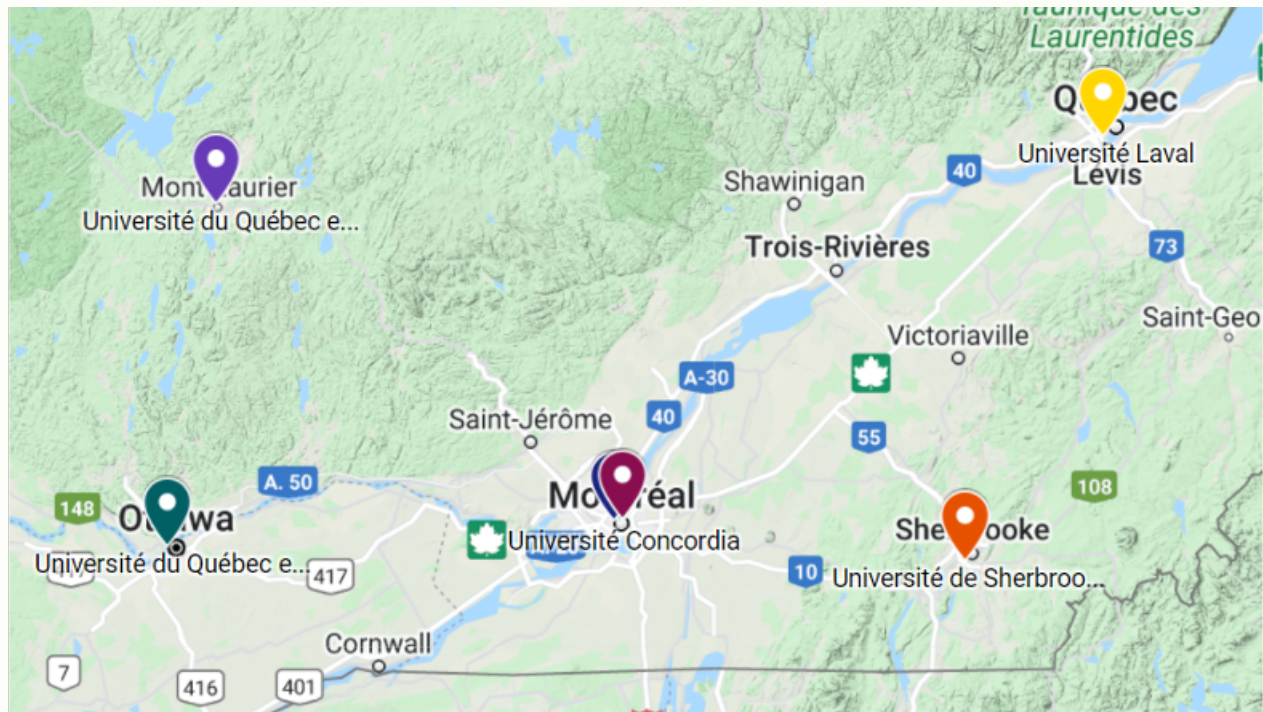
- Concordia University
- McGill University
- Université de Montréal
- Université de Sherbrooke
- Université du Québec à Montréal
- Université du Québec en Abitibi-Témiscamingue
- Université du Québec en Outaouais
- Université Laval

Appendix 2: Descriptive statistics

TABLE 1: DESCRIPTIVE INFORMATION ON VARIABLES OF INTEREST AMONG PARTICIPANTS

	Total (N=2167)
Gender	
Female	1479 (68.3 %)
Male	623 (28.7 %)
Transgender and gender diverse	39 (1.8 %)
Missing	26 (1.2 %)
Age	
Mean (SD)	27.1 (8.35)
Median [Min, Max]	24.0 [17.0, 71.0]
Missing	9 (0.4 %)
Age (group)	
17–21	593 (27.4 %)
22–25	628 (29.0 %)
26–29	345 (15.9 %)
30+	592 (27.3 %)
Missing	9 (0.4 %)
Generation	
Third or above	1050 (48.5 %)
First	759 (35.0 %)
Second	339 (15.6 %)
Missing	19 (0.9 %)
Religion	
No religion	1258 (58.1 %)
Christianity	611 (28.2 %)
Islam	128 (5.9 %)
Other	159 (7.3 %)
Missing	11 (0.5 %)

TABLE 1: DESCRIPTIVE INFORMATION ON VARIABLES OF INTEREST AMONG PARTICIPANTS

	Total (N=2167)
Country of birth	
Canada	1399 (64.6 %)
Asia	159 (7.3 %)
Europe	205 (9.5 %)
North Africa/Maghreb/Middle East	113 (5.2 %)
North America (excluding Canada)	119 (5.5 %)
Other	163 (7.5 %)
Missing	9 (0.4 %)
Status in Canada	
Citizen/Permanent Resident/Refugee	1747 (80.6 %)
Temporary visa (e.g., International student, asylum seeker)	414 (19.1 %)
Missing	6 (0.3 %)
Financial difficulties	
Never	964 (44.5 %)
Sometimes	821 (37.9 %)
Often	225 (10.4 %)
Very often	154 (7.1 %)
Missing	3 (0.1 %)
First language	
English	440 (20.3 %)
French	1167 (53.9 %)
Other	542 (25.0 %)
Missing	18 (0.8 %)

TABLE 1: DESCRIPTIVE INFORMATION ON VARIABLES OF INTEREST AMONG PARTICIPANTS

	Total (N=2167)
Primary language	
French	1025 (47.3 %)
English	688 (31.7 %)
Both	420 (19.4 %)
Missing	34 (1.6 %)
Currently employed	
No	1092 (50.4 %)
Yes	1075 (49.6 %)
If yes, how many hours per week	
Mean (SD)	20.9 (12.6)
Median [Min, Max]	17.0 [0, 80]
Missing	1092 (50.4 %)
Student status	
Undergraduate	1134 (52.3 %)
Graduate	523 (24.1 %)
Post-graduate	324 (15.0 %)
Post-doctoral	24 (1.1 %)
Missing	162 (7.5 %)
Faculty	
Art and Literature	279 (12.9 %)
Life and health sciences	443 (20.4 %)
Social sciences and humanities, including business	961 (44.3 %)
Pure and applied sciences, engineering and computer science	337 (15.6 %)
Other	129 (6.0 %)
Missing	18 (0.8 %)

TABLE 1: DESCRIPTIVE INFORMATION ON VARIABLES OF INTEREST AMONG PARTICIPANTS

	Total (N=2167)
RIS	
Mean (SD)	11.5 (6.53)
Median [Min, Max]	10.0 [4.00, 28.0]
Missing	21 (1.0 %)
SYFOR	
Mean (SD)	20.0 (10.6)
Median [Min, Max]	17.0 [8.00, 56.0]
Missing	126 (5.8 %)

TABLE 2: CONTEXTS AND REASONS OF DISCRIMINATION

	Total (N=2167)
Discrimination context: looking for a job	
No	1745 (80.5 %)
Yes	413 (19.1 %)
Missing	9 (0.4 %)
Discrimination context: workplace	
No	1621 (74.8 %)
Yes	532 (24.6 %)
Missing	14 (0.6 %)
Discrimination context: looking for an apartment or house	
No	1911 (88.2 %)
Yes	244 (11.3 %)
Missing	12 (0.6 %)
Discrimination context: school	
No	1603 (74.0 %)
Yes	551 (25.4 %)
Missing	13 (0.6 %)
Discrimination context: service to the public	
Non	1772 (81.8 %)
Yes	386 (17.8 %)
Missing	9 (0.4 %)
Discrimination context: health and/or social services	
No	1863 (86.0 %)
Yes	295 (13.6 %)
Missing	9 (0.4 %)

TABLE 2: CONTEXTS AND REASONS OF DISCRIMINATION

	Total (N=2167)
Discrimination context: justice and/or police	
No	1925 (88.8 %)
Yes	228 (10.5 %)
Missing	14 (0.6 %)
Discrimination reasons: language	
No	1486 (68.6 %)
Yes	647 (29.9 %)
Missing	34 (1.6 %)
Discrimination reasons: religion/faith	
No	1893 (87.4 %)
Yes	234 (10.8 %)
Missing	40 (1.8 %)
Discrimination reasons: political views	
No	1824 (84.2 %)
Yes	303 (14.0 %)
Missing	40 (1.8 %)
Discrimination reasons: sexual orientation	
No	1897 (87.5 %)
Yes	228 (10.5 %)
Missing	42 (1.9 %)
Discrimination reasons: gender	
No	1359 (62.7 %)
Yes	771 (35.6 %)
Missing	37 (1.7 %)
Discrimination reasons: race/ethnicity	
No	1583 (73.1 %)
Yes	556 (25.7 %)
Missing	28 (1.3 %)

TABLE 2: CONTEXTS AND REASONS OF DISCRIMINATION

	Total (N=2167)
Discrimination reasons: migration status	
No	1898 (87.6 %)
Yes	232 (10.7 %)
Missing	37 (1.7 %)
Discrimination reasons: disability	
No	1988 (91.7 %)
Yes	134 (6.2 %)
Missing	45 (2.1 %)
Discrimination reasons: other	
No	1768 (81.6 %)
Yes	265 (12.2 %)
Missing	134 (6.2 %)
Discrimination (at least one reported experience)	
No	593 (27.4 %)
Yes	1543 (71.2 %)
Missing	31 (1.4 %)

TABLE 3 : VIOLENCE

	Total (N=2167)
Violence	
No	926 (42.7 %)
Yes	1234 (56.9 %)
Missing	7 (0.3 %)

TABLE 4: VISION OF THE FUTURE

	Total (N=3431)
Presence of meaning in life	
Mean (SD)	24.3 (6.82)
Median [Min, Max]	25.0 [5.00, 35.0]
Missing	20 (0.9%)
Search for a meaning in life	
Mean (SD)	22.3 (7.62)
Median [Min, Max]	23.0 [5.00, 35.0]
Missing	33 (1.5%)
Future orientation	
Mean (SD)	14.1 (4.23)
Median [Min, Max]	14.0 [3.00, 21.0]
Missing	18 (0.8%)

TABLE 5: IMPORTANCE OF COLLECTIVE IDENTITY FOR PERSONAL IDENTITY AND PUBLIC SELF-ESTEEM

	Total (N=2167)
Importance of identity	
Mean (SD)	18.5 (5.35)
Median [Min, Max]	19.0 [4.00, 28.0]
Missing	49 (2.3 %)
Public self-esteem	
Mean (SD)	18.6 (5.59)
Median [Min, Max]	19.0 [4.00, 28.0]
Missing	48 (2.2 %)

TABLE 6: INTERNET TIME AND PREFERENCE FOR ONLINE SOCIAL INTERACTIONS

	Total (N=2167)
Internet Time (Mean per day)	
Mean (SD)	2.80 (3.11)
Median [Min, Max]	2.00 [0, 24]
Missing	34 (1.6 %)
Preference for online social interactions	
Mean (SD)	36.5 (13.0)
Median [Min, Max]	36.0 [13.0, 88.0]
Missing	286 (13.2 %)

TABLE 7: DEPRESSION

	Total (N=2167)
Dépression	
Mean (SD)	1.98 (0.603)
Median [Min, Max]	1.87 [1.00, 4.00]
Missing	62 (2.9 %)
Dépression seuil clinique	
Below clinical cutoff	890 (41.1 %)
Above clinical cutoff	1215 (56.1 %)
Missing	62 (2.9 %)

APPENDIX 3: RESULTS OF MULTIVARIABLE ANALYSES (MIXED-EFFECT REGRESSION MODELS)

All the regression models below control for the nested nature of the data within universities (mixed effects models). All models include and control for gender, age, country of birth, religion, financial hardship, and first language. Note that Tables 4 and 5 also control for discrimination, violence, and bullying.

TABLE 1: REGRESSION MODEL OF SOCIO-DEMOGRAPHIC VARIABLES ON SUPPORT FOR VIOLENT RADICALIZATION (RIS AND SYFOR) AND DEPRESSION

	Dependent variables		
	RIS (VR support) β(SE)	SYFOR (VR sympathy) β(SE)	Depression β(SE)
Gender			
Female	Ref.	Ref.	Ref.
Male	0.52 (0.30)	2.54*** (0.49)	−0.14*** (0.03)
Transgender and gender diverse	5.82*** (1.01)	6.79*** (1.76)	0.36*** (0.09)
Age (years)	−0.12*** (0.02)	−0.26*** (0.03)	−0.02*** (0.002)
Country of birth			
Canada	Ref.	Ref.	Ref.
Asia	−2.71*** (0.60)	−3.55*** (1.01)	0.02 (0.06)
Europe	0.48 (0.48)	0.84 (0.78)	−0.01 (0.05)
North Africa/Maghreb/ Middle East	−2.28** (0.78)	−4.24*** (1.28)	−0.06 (0.07)
North America (excluding Canada)	2.47*** (0.63)	4.21*** (1.04)	0.07 (0.06)
Other	−0.13 (0.57)	−0.79 (0.95)	−0.16** (0.05)

Note. SE = standard error. *p<0.05; **p<0.01; ***p<0.001

TABLE 1: REGRESSION MODEL OF SOCIO-DEMOGRAPHIC VARIABLES ON SUPPORT FOR VIOLENT RADICALIZATION (RIS AND SYFOR) AND DEPRESSION

	Dependent variables		
	RIS (VR support) β(SE)	SYFOR (VR sympathy) β(SE)	Depression β(SE)
Religion			
No religion	Ref.	Ref.	Ref.
Christianity	−2.01*** (0.31)	−2.23*** (0.52)	−0.04 (0.03)
Islam	−1.56* (0.70)	−3.35** (1.14)	0.05 (0.07)
Other	−0.51 (0.54)	−1.93* (0.90)	0.04 (0.05)
Financial difficulties			
Never	Ref.	Ref.	Ref.
Sometimes	0.28 (0.30)	0.95 (0.50)	0.09** (0.03)
Often	0.03 (0.47)	0.31 (0.78)	0.25*** (0.04)
Very often	0.79 (0.56)	1.31 (0.91)	0.30*** (0.05)
Primary language			
English	Ref.	Ref.	Ref.
French	−1.07* (0.44)	−3.00*** (0.70)	−0.03 (0.04)
Other	−1.90***(0.48)	−2.26** (0.78)	0.02 (0.05)

Note. SE = standard error. *p<0.05; **p<0.01; ***p<0.001

TABLE 3: REGRESSION MODEL OF INTERNET TIME AND PREFERENCE FOR ONLINE SOCIAL INTERACTIONS ON DEPRESSION AND SUPPORT FOR VIOLENT RADICALIZATION

	Dependent variables		
	RIS (VR support) β(SE)	SYFOR (VR sympathy) β(SE)	Depression β(SE)
Time spent on the Internet (Average time)	0.04 (0.05)	0.19* (0.08)	0.02*** (0.004)
Preference for online social interactions (Scale sum)	0.51*** (0.15)	0.36 (0.25)	0.06*** (0.01)

Note. SE = standard error.
*p<0.05; **p<0.01; ***p<0.001

TABLE 4: REGRESSION MODEL OF SOCIAL ADVERSITY ON DEPRESSION

	Dependent variables
	Depression β(SE)
Discrimination	
No	Ref.
Yes	0.13*** (0.03)
Violence	
No	Ref.
Yes	0.03 (0.03)
Intimidation	
No	Ref.
Yes/Online	0.06*** (0.01)
Yes/In person	0.07*** (0.01)

Note. SE = standard error.
*p<0.05; **p<0.01; ***p<0.001

TABLE 5: REGRESSION MODEL OF SOCIAL ADVERSITY AND DEPRESSION ON SUPPORT AND SYMPATHY FOR VIOLENT RADICALIZATION

	Dependent variables	
	RIS Support VR β(SE)	SYFOR Sympathy VR β(SE)
Discrimination		
No	Ref.	Ref.
Yes	0.94** (0.33)	1.50** (0.55)
Violence		
No	Ref.	Ref.
Yes	1.10*** (0.29)	1.87*** (0.48)
Intimidation		
No	Ref.	Ref.
Online	−0.02 (0.16)	−0.29 (0.26)
In person	0.08 (0.16)	0.11 (0.26)
Depression	0.87*** (0.15)	1.54*** (0.25)

Note. SE = standard error.
*p<0.05; **p<0.01; ***p<0.001

TABLE 6: REGRESSION MODEL OF COLLECTIVE SELF-ESTEEM ON SUPPORT AND SYMPATHY FOR VIOLENT RADICALIZATION

	Dependent variables	
	RIS Support VR β(SE)	SYFOR Sympathy VR β(SE)
Importance of collective identity	0.75*** (0.13)	0.92*** (0.22)
Public self-esteem	−1.12*** (0.14)	−1.56*** (0.23)

Note. SE = standard error.
*p<0.05; **p<0.01; ***p<0.001

TABLE 7: REGRESSION MODEL OF FUTURE ORIENTATION ON SUPPORT FOR VIOLENT RADICALIZATION

	Dependent variables			
	RIS VR support β(SE)	SYFOR VR sympathy β(SE)	RIS VR support β(SE)	SYFOR VR sympathy β(SE)
Positive vision of the future	−1.10*** (0.14)	−1.98*** (0.22)		
Search for meaning in life			0.25 (0.14)	0.16 (0.24)
Presence of a meaning in life			−0.85*** (0.15)	−1.52*** (0.24)

Note. SE = standard error.
*p<0.05; **p<0.01; ***p<0.001

TABLE 8: REGRESSION MODELS OF IDENTITY GROUPS ON SUPPORT FOR VIOLENT RADICALIZATION

	Dependent variables	
	RIS VR support β(SE)	SYFOR VR sympathy β(SE)
Group (national/ethnicity)	−0.32 (0.29)	0.35 (0.48)
Group (political movement)	4.24*** (0.31)	6.09*** (0.53)
Group (religions)	−1.11* (0.45)	−1.59* (0.76)
Group (age)	−0.17 (0.27)	−0.66 (0.46)
Group (gender)	1.28*** (0.31)	1.97*** (0.52)
Group (sexual orientation)	1.32*** (0.37)	1.04 (0.62)
Group (professional)	−1.08*** (0.26)	−1.39** (0.44)
Group (hobbies)	−0.73** (0.26)	−1.15** (0.44)

Note. SE = standard error.
*p<0.05; **p<0.01; ***p<0.001

Appendix 4: Measurements scales for variables of interests

Sympathy for violent radicalization (Bhui et al., 2014)

Sympathy for Violent Radicalization: a modified version of the Sympathies for Radicalization Scale (Syfor) was used to assess the student's degree of sympathy or condemnation for eight acts of violent protest (e.g., using bombs or weapons to fight injustice). The participant responds on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with a higher score signifying greater sympathy for violent radicalization. The Syfor was developed in a British context and the items were adapted slightly to the Canadian context (e.g., people in Canada instead of people in Britain to introduce the questions). The SyfoR provides a good internal consistency of α = 0.89.

Radicalization Intentions (Moskalenko et McCauley, 2009)

The Radicalism Intention Scale (RIS) is a subscale of the Activism and Radicalism Intention Scale (ARIS). This questionnaire assesses an individual's willingness to support illegal and violent behavior on behalf of their group or organization. It consists of four items rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with a higher total score indicating greater support for violent radicalization. A total score summing all items was used in this study. The scale has been previously validated with ethnically diverse populations (α =0.85).

Perceived Discrimination (Noh et al., 1999)

Explores the experience of structural discrimination in eight life domains (i.e., employment, workplace, housing, education, public services, health services, social services, and the judicial system). Participants were asked to indicate the experience of discrimination in any of the eight selected life domains in a questionnaire, in a dichotomous (yes/no) format. Two groups (1) those who experienced discrimination in at least one of the domains (i.e., at least one "yes" response), and (2) those who did not report discrimination in any domain (i.e., all "no" responses).

Exposure to violence (Rousseau et Drapeau, 2004)

Exposure to violence was measured using three questions taken from the Quebec Health Survey on Cultural Communities project. Participants were asked to indicate, in a yes/no format, whether they had (1) witnessed or been a victim of violence related to a social and/or political context; (2) had a personal experience of persecution; and (3) witnessed or been a victim of violent events involving someone close to them (e.g., family, friend). Participants who answered "yes" to at least one of these questions were classified as exposed to violence..

Psychological distress

Depression and anxiety (Derogatis et al., 1974)

Depression was assessed using the Hopkins Symptom Checklist-25 (HSCL-25) depression (15 items) subscale. We asked participants to rate the extent to which they were bothered by symptoms of depression in the past week (e.g., sleep difficulties, eating difficulties, negative mood) on a 4-point Likert scale ranging from 1 (not at all) to 4 (extremely). Symptom severity was calculated by averaging responses, with scores of 1.75 and above indicating high depression symptoms (above clinical threshold). Internal reliability measured by Cronbach's alpha for this scale was $\alpha = .90$.

Bullying victimization

Bullying victimization was measured using statements that offered a choice of responses (yes/no) on a 4-point Likert scale ranging from 1= never to 4 = very often. Sample statements include:

- Have you been cyberbullied or harassed (i.e., email, social media, or texting)? Never / Sometimes / Often / Very often

- Have you been bullied or harassed in person? Never / Sometimes / Often / Very often

Internet

Time spent on social media

- How many hours do you spend on social media per day during the week?

- How many hours do you spend on social media per day on the weekend?

Preference for online social interaction (Davis et al., 2002

Preference for online social interaction is measured using the Online Cognition Scale (Davis et al., 2002). Using 13 items, respondents are asked how they feel when they are online, using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores indicate that the respondent feels more comfortable in online than in offline interaction. The internal reliability measured by Cronbach's alpha for this scale was $\alpha = 0.86$

Here are some example items:
- I am most comfortable online
- I feel safest when I am on the Internet
- People accept me for who I am online

Collective Identity (Luhtanen et Crocker, 1992)

Collective identity was assessed using eight items grouped into two subscales of the Collective Self-Esteem Scale (CSES) measuring individual perception of the importance of group identity in two domains i.e., the importance of belonging to a social group to one's identity, and public collective self-esteem (i.e., the value attributed by other people to one's social group). Responses were scored on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The scale showed good internal reliability for importance to identity (α=0.78) and public collective self-esteem (α=0.87).

Vision of the future and meaning in life

Future orientation (Saigh, 1997)

Positive future orientation was measured using an adaptation of the Children's Future Orientation Scale (CFOS). It is assessed using three items regarding future views of the world, community, and self, scored on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). A total score was obtained by averaging all questions. Higher scores indicate more positive attitudes toward the future. The internal reliability of the positive view of the future was α=0.80.

Items included:

- I feel that the future offers me many opportunities

- I feel that the future offers many opportunities for my community

- I have confidence in the future of the world

The presence and search for meaning in life
(Steger et al., 2006)

The presence and search for meaning in life is assessed using the Meaning in Life Questionnaire (MLQ). The Meaning in Life Questionnaire includes five items that measure the degree to which individuals feel their lives are meaningful (Presence subscale) and five items that reflect individuals' motivation and desire to find or deepen meaning in their lives (Search subscale). Items are scored on a five-point Likert-type scale ranging from 1 (almost never) to 5 (almost always). The MLQ has been used with both adolescent and adult samples and has shown good reliability, validity and stable factor structure. In our sample, the Cronbach's Alpha for the Presence of and Search of a Meaning in Life scales were both $\alpha = .89$.

Some of the items include:

- I understand the meaning of my life

- My life clearly has a purpose

- I have found satisfying meaning in my life

- I am searching for a purpose or vision for my life

- I am looking for meaning in my life