

A Snapshot of Hate: Subjective Psychological Distress After a Hate Crime: An Exploratory Study on Victimization of Muslims in Canada


Kathleen Kennedy-Turner*, Carolyn Côté-Lussier[†] and Denise Helly[‡]

Across Canada, hate crimes, especially those motivated by race, ethnicity, or religion, are still prevalent. For example, in 2019, 46% of police-reported hate crimes were motivated by race or ethnicity, and 32% were motivated by religion (Moreau, 2021). In Canada, Muslims are the second most targeted religious group in terms of hate crimes. However, Canadian research on the nature of hate crime victimization amongst Muslims and the impacts on their health and well-being is limited. The present study sought to use exploratory survey data to assess the demographic characteristics of those experiencing both verbal and physical assaults based on their religion. Further, we assessed whether those that experienced these assaults also experienced psychological distress (such as feeling nervous or hopeless). Based on a sample of 230 participants (58% women), it was found that individuals that self-identified as visibly Muslim were 3 times more likely, and those living in Vancouver were 9 times more likely, to report having been physically assaulted. Furthermore, having been physically assaulted, being a woman, residing in Vancouver, or self-identifying as visibly Muslim were factors associated with higher levels of psychological distress. This study is the first of its kind exploring the effects of hate crimes on Muslims across Canada. The impacts of hate crime on the psychological well-being of this marginalized population, especially for Muslim women, suggests a need for more research on the psychological distress of these individuals.


Keywords

hate crime • psychological distress • verbal aggression and physical assault • Muslim • marginalized populations

*Institut National de Recherche Scientifique, k.kennedyturner@gmail.com

 <https://orcid.org/0000-0003-3435-8695>

[†]Institut National de Recherche Scientifique, Carolyn.Cote-Lussier@inrs.ca

 <https://orcid.org/0000-0002-4475-4926>

[‡]Institut National de Recherche Scientifique, denise.helly@inrs.ca

Correspondence concerning this article should be addressed to Kathleen Kennedy-Turner, Institut National de Recherche Scientifique–Urbanisation Culture Société.

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Introduction

In Canada, in 2019, 32% of police-reported hate crimes were motivated by religion (Moreau, 2021; Current Study Table 1). Despite a marked decrease in hate crimes against Muslims from 2017 to 2018, they were still the second most targeted religious group. Muslims in Canada have historically been treated poorly. Specifically, one-third of Muslims in Canada in the past 5 years remark that they have experienced discrimination or have been treated unreasonably because of their religion, language, or cultural background (EnviroNics Institute, 2016). Muslims were overrepresented as victims of hate crimes as early as 2011. Specifically, Canadian Muslims represented 20% of all victims of hate crime motivated by religion, while representing only 3.2% of the population (Allen, 2015). Further, hate-crimes targeting Muslims in Canada increased by 9% from the previous year (Moreau, 2021). In a study among Ontario and Québec Muslims, Ameli and Merali (2014) found that 11% of respondents had experienced some form of physical assault. The prevalence of violent hate crimes against Muslims is nearly ten-fold when compared to level 1 assaults—which includes physical assault and verbal threats—in the general Canadian population which is less than 1% (Statistics Canada, 2020). Further, Muslims are more likely to experience hate crimes that are violent in nature. These hate crimes disproportionately affect Muslim women, highlighting a heightened victimization risk due to the intersection of ethnicity and gender (Perry, 2014; Moreau, 2021). Canadian Muslims are additionally more likely to experience hate crimes due to the intersection of their religion and ethnicity. In Canada, 90% of Muslims are members of a visible minority¹ group. Specifically, a third of Canadian Muslims are of South Asian background, a third of Arab background, and a third of other visible minority groups (Allen, 2015). This suggests that religion may work in conjunction with race and ethnicity in motivating hate crimes against Canadian Muslims. Indeed, in 2019, of the 46% of hate crimes based on race or ethnicity, Arab and West Asian Canadians were amongst the visible minority groups most frequently targeted (Moreau, 2021).

Increase in Islamophobia in Canada

In the past few years alone, there have been several high-profile cases of hate crimes against Canadian Muslims. On January 29, 2017, six Muslim people were shot dead in a Québec City Mosque (Austen & Smith, 2017). On September 12, 2020, a Muslim person standing outside of a mosque near Toronto was stabbed to death (CBC News, 2020). Additionally, on June 6, 2021, four Muslim people were killed by a driver who purposefully hit them with a car in London, Ontario (Westoll & LeBel, 2021). Though these are just a few high-profile incidents highlighted by Canadian media, these events are not isolated. Hate crime trends like those just mentioned have encouraged efforts by the Canadian government to “collect data to contextualize hate crime reports and to conduct needs assessments for impacted communities” (Canada Parliament, House of Commons, Member motion, 2017). These efforts include assessing different sources of information pertaining to hate crimes, including police reports and surveys.

While police-recorded hate crimes represent one source of information on the experiences of the Canadian Muslim community, additional evidence on the occurrence, nature, and impact of hate crimes is provided by self-reporting and media reports. For example, a survey of Canadian

1. A visible minority is defined by Statistics Canada as “A visible minority refers to whether a person is a visible minority or not, as defined by the Employment Equity Act. The Employment Equity Act defines visible minorities as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour”. The visible minority population consists mainly of the following groups: South Asian, Chinese, Black, Filipino, Arab, Latin American, Southeast Asian, West Asian, Korean and Japanese.” (<https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=DEC&Id=45152>)

Table 1. Hate Crimes in Canada, 2014 to 2018

Motivation	2014		2015		2016		2017		2018	
	#	%	#	%	#	%	#	%	#	%
Race or ethnic origin (total)	611	48	641	48	666	48	878	43	780	44
Black	238	19	224	17	214	15	321	16	283	16
East or South East Asian	52	4	49	4	61	4	61	3	56	3
South Asian	49	4	48	4	72	5	67	3	75	4
Arab or West Asian	69	5	92	7	112	8	142	7	111	6
Native American	37	3	35	3	30	2	31	2	35	2
White	49	4	38	3	36	3	46	2	37	2
Other race or ethnic origin ¹	106	8	130	10	125	9	169	8	159	9
Race or ethnic origin not specified	11	1	25	2	16	1	41	2	24	1
Religion (total)	429	34	469	35	460	33	842	41	639	36
Jewish	213	17	178	13	221	16	360	18	347	20
Muslim	99	8	159	12	139	10	349	17	173	10
Catholic	35	3	55	4	27	2	39	2	35	2
Other religion	49	4	41	3	37	3	57	3	46	3
Religion not specified	33	3	36	3	36	3	37	2	38	2
Sexual orientation	155	12	141	11	176	13	204	10	173	10
Other motivation	77	6	86	6	88	6	117	6	171	10
Unknown motivation	23	N/A	25	N/A	19	N/A	32	N/A	35	N/A
Total	1295	100	1362	100	1409	100	2073	100	1798	100

Note: The information in this table corresponds to data reported by police services serving 99.95% of the Canadian population. Hate crimes for which the motive was unknown are excluded from the calculation of the percentages. Percentages may not add up to 100 due to rounding. Adapted from Statistique Canada, Centre canadien de la statistique juridique et de la sécurité des collectivités, Programme de déclaration uniforme de la criminalité fondé sur l'affaire. Retrieved from <https://www150.statcan.gc.ca/n1/fr/pub/85-002-x/2020001/article/00003-fra.pdf?st=9fKLkafM>.

¹Includes motivations based on race or ethnicity not reported elsewhere (e.g., Latin American, South American), as well as hate crimes that target more than one race or more than one ethnic group.

²Includes motivations based on a religion not declared elsewhere (e.g., Sikh, Hindu, Buddhism).

³Includes motivations based on mental or physical health disabilities, gender, age, and other similar factors (e.g., profession or political views).

N/A = Unable to calculate.

Muslims in 2002 by the Canadian Council on American Islamic Relations found that 56% of respondents experienced at least one anti-Muslim incident in the twelve months since 9/11 (CAIR-CAN, 2002). Further, the Canadian Islamic Congress (CIC, 2003) noted a 1600% increase in the incidence of anti-Muslim hate crimes reported to them following the incidents of 9/11. Comparatively, hate crimes against Muslims in the US have been found to be 5 times more common than before the 9/11 attacks (Samari, 2016). Additionally, in a poll recorded after 9/11, it was found that 60% of Americans reported adverse sentiments toward Muslims (Samari, 2016). Further, the Council on American-Islamic Relations reported that after the attacks in Paris, France on November 13, 2015, there was an increase in threats, violence, and discriminatory acts targeting Muslim Americans and those perceived as Muslim (Samari, 2016). In addition, negative media coverage contributes to the perpetuation of Islamophobic views because in social situations, Muslims are seen as the “enemy” (Considine, 2017). Further perpetuating Islamophobia, attacks committed by Muslims had an average of 449% more coverage in the media than attacks committed by non-Muslims (Considine, 2017). Negative media depictions and self-reported increases in Islamophobia post-9/11 may help explain the disproportionate hate crimes experienced by Muslims, not only in Canada but internationally as well.

Consequences of Islamophobia and Psychological Well-Being

Islamophobia against Muslim Canadians has been reported in the form of negative attitudes towards this marginalized population (Wilkins-Laflamme, 2018). The consequences of Islamophobia are widespread and impact many facets of well-being. Islamophobia leading to hate crimes can have negative impacts both socially and psychologically. For example, Muslim Canadians that have experienced hate crimes have reported economic burdens due to having to change jobs, having to use a car out of fear of harassment on the public transport system, and even having to change to more secure living locations (Mercier-Dalphoné & Helly, 2021).

The economic burden from these hate crimes is not the only consequence of Islamophobia. Psychological distress and decreased well-being are also commonly reported effects of hate crimes (Lefevor et al., 2018; Padela & Heisler, 2011). Psychological distress is defined as non-specific symptoms of stress, anxiety, and depression such as feeling nervous, restless or fidgety, hopeless, sad, and worthless (Kessler et al., 2002; Viertiö et al., 2021). Further, psychological distress can also be defined as specific clinical features, including symptoms of depression, anxiety, and somatic symptoms (such as lack of energy or headaches) (Drapeau et al., 2012). Psychological distress can have far-reaching effects on overall health, including an increased mortality risk (Barry et al., 2020). Therefore, understanding the psychological consequences of Islamophobia and hate crimes is incredibly important.

Experiencing crime of any nature is distressing, but hate crimes are particularly damaging as victims are more likely to experience psychological distress, such as feeling nervous, anxious, or depressed; anger; and safety concerns compared to victims of other types of crime (Altemeyer, 1996; Boeckmann & Turpin-Petrosino, 2002; Gerstenfeld, 2011). For example, findings on the impacts of hate crimes against sexual and religious minorities in America indicate that victims of religiously-motivated hate crimes experience increased psychological distress (Lefevor et al., 2018; Padela & Heisler, 2011). This discrimination is not only associated with psychological distress but can lead to various other health problems like depression, anxiety, substance abuse, and suicide (Assari & Lankarani, 2017). Specifically, Lowe et al. (2018) found that discrimination against Muslim American college students was associated with a high mental health burden, with 42.9% of students being classified as having symptoms of major depression or generalized anxiety disorder.

Similarly, in Canada, there is evidence that the intersection of race and religion contributes to the experience of psychological distress. Specifically, Rousseau et al. (2011) found that psychological distress was significantly more elevated among Arab Canadians that were Muslim. However, these authors did not examine the impact of hate crimes on the psychological distress of these populations. Expanding on previous findings regarding experiences of distress among Canadian Muslims (Rousseau et al., 2011) and the mental health impacts of hate crimes on American Muslims (Lefevor et al., 2019, and Padela & Heisler, 2011), the current study assessed the psychological distress that follows hate crime experiences among Muslims in Canada. Psychological distress can have far-reaching effects on overall health (such as anxiety disorders) (Barry et al., 2020). Therefore, understanding the psychological impact of religion and race-based (such as Islamophobia motivated) hate crimes on Muslims in Canada is imperative to improving the health and well-being of racial and religious minority populations.

Present Study

The primary goals of the present study were to document and describe Canadian Muslims' experiences of hate crime, including the extent, nature, and context of these crimes, and to examine the correlation of psychological distress after experiencing a hate crime. The first objective was to consider diversity in hate crime experiences among Muslim communities, for example, by considering differences based on gender, age, immigration history, ethnicity, and geographic region. The second objective was to consider the impacts of victimization on self-reported psychological distress. Specifically, the research questions were: 1) Which factors predict the probability of being a victim of verbal aggression (1a) or physical assault? (1b), and 2) Which factors predict overall psychological distress after victimization? This study addressed these questions based on survey data collected from Muslims across Canada. The results indicated that 74% of total participants reported experiencing verbal aggression, and 63% reported experiencing physical assaults. While there were no discernible risk factors for verbal aggression, living in Vancouver and self-identifying as visibly Muslim was associated with a greater likelihood of physical assault. Being physically assaulted, being a woman, and self-identifying as visibly Muslim were all associated with experiencing greater psychological distress after hate crime victimization. These findings provide a valuable snapshot of the experiences of Muslims living in Canada, further contributing to research on hate crimes against marginalized populations.

Measures and Methods

Sampling Strategy

To develop a random sample, we used an innovative sampling strategy known as Respondent-Driven Sampling (RDS). RDS is based on Markov chain mathematics and social networking theory, and has been successfully employed by researchers seeking to identify and conduct research with hard-to-reach populations that may be widely dispersed. Briefly, RDS begins by identifying a small number (15 in this case) of "seed" respondents in the target community. These seeds must be motivated individuals who will be asked to distribute the survey to three different people in the identified community, and so on. This method is described in greater detail in Perry and Alvi (2011).

For this survey, six Canadian cities were selected (Calgary, Edmonton, Montreal, Ottawa, Toronto, and Vancouver). The researchers, onsite research assistants, and members of local Muslim organizations facilitated the identification and solicitation of 15 initial seeds per city,

emphasizing diverse representation from across Muslim communities. The seeds were preferentially selected based on whether they had a large social network, were respected members of the community, and would be able to recruit others to participate in the study (Heckathorn, 1997; 2002). The seeds were provided with a link for the online survey, as well as contact information for the research team, including community collaborators.

To be eligible to participate, the respondents had to identify as Muslim. To recruit survey respondents through chain referrals, all survey respondents, including the seeds, were asked to recruit three other individuals to complete the survey as well. Information about how to refer someone to the study was included in the survey. To prevent duplicate responses, each person was assigned a unique identification number that they entered in the survey. If participants did not have access to a computer or other device, participants were able to complete the survey at a partner agency site or at the university of one of the research team members.

Measures

The survey consisted of 48 questions about experiences related to being Muslim, being the victim of a hate crime, psychological distress, and sociodemographic information. The questions were adapted from a pilot study conducted in Ontario, Canada (Perry & Alvi, 2011). The survey was available in both French and English, and took approximately 45 minutes to complete.

Ethnic Identification

Participants were asked to identify their own ethnicities. These were then regrouped into 7 categories: *Asian, Canadian/European, Maghreb, Middle Eastern, Sub-Saharan African, Turk, and Mixed ethnicity*. Mixed ethnicity was given to any participant that indicated more than one ethnicity. These regrouped categories were recoded as dummy (binary) variables. For example, for Asian ethnicity (*yes* = 1; *no* = 0). See Table 2 for demographics.

Table 2. Sample Demographic Statistics Compared to the Canadian Muslim Population

Variable	Sample demographics		Canadian Muslim population ¹	
	N	%	N	%
Gender				
1. Men	84	41.0	391,465	51.3
2. Women	119	58.0	369,060	48.7
3. Other	2	1.0	N/A	N/A
Total	205	100.0	760,525	100.0
Born in Canada				
1. Yes	60	26.1	83,895	11.5
2. No	170	73.9	643,330	88.5
Total	230	100.0	727,225	100.0
Region				
Calgary and Edmonton	9	4.0	72,205	11.2
Ottawa	22	9.8	46,835	7.3
Montréal	62	27.7	155,340	24.1

(Continued)

Table 2. (Continued)

Variable	Sample demographics		Canadian Muslim population ¹	
	N	%	N	%
Toronto	50	22.3	311,700	48.4
Vancouver	27	12.1	58,160	9.0
Total	224	100.0	644,240	100.0
Age range				
18–24	36	19.4	164,155 ²	22.9
25–30	26	14.0	176,145 ³	24.7
31–34	27	14.5	N/A	N/A
35–40	44	23.7	179,260 ⁴	25.1
41–44	19	10.2	N/A	N/A
45–50	20	10.8	126,095 ⁵	17.7
51+	14	6.1	68,410 ⁶	9.6
Total	186	100.0	714,065	100.0
Education				
No certificate, diploma, or degree	2	1.0	59,370	10.8
High school diploma or equivalent	14	6.9	101,220	18.4
Trades or apprenticeship certificate or diploma	2	1.0	31,800	5.8
Certificate or diploma from a college, CEGEP, or other	20	9.9	73,185	13.3
University certificate or diploma below bachelor's degree	10	4.9	43,820	8.0
Bachelor's university degree	71	35.0	126,195	22.9
Master's university degree	64	31.5	114,315 ⁷	20.8
Degree in medicine, dentistry, veterinary medicine	2	1.0	N/A	N/A
Doctorate degree	18	8.9	N/A	N/A
Total	203	100.0	549,910 ⁸	100.0
Self-identified as visibly Muslim				
1. Yes	140	63.9	N/A	N/A
2. No	79	36.1	N/A	N/A
Total	219	100.0	N/A	N/A
Ethnic group				
Asian (e.g. Afghan, Bangladeshi, Indian, Pakistani, etc.)	63	27.3	N/A	N/A
European (e.g. Canadian, American, British, French, etc.)	8	3.5	N/A	N/A

Variable	Sample demographics		Canadian Muslim population ¹	
	N	%	N	%
Maghreb (e.g. Algerian, Tunisian, Moroccan, etc.)	44	19.0	N/A	N/A
Middle East (e.g. Arabic, Iranian, Iraqi, Lebanese, Syrian, etc.)	37	16.0	N/A	N/A
Turk	18	7.8	N/A	N/A
Sub-Saharan African (e.g. Ethiopian, Kenyan, Somalian, etc.)	13	5.6	N/A	N/A
Mixed Ethnicity	43	18.6	N/A	N/A
Total	226	100.0	N/A	N/A

Note:

¹Demographics derived from the Canadian National Household Survey, 2011 and are for people aged 15 years and over. The sample percentage is the valid percent and is based on the total listed.

²Ages 15–24.

³Ages 25–34.

⁴Ages 35–44.

⁵Ages 45–54.

⁶Ages 55–64.

⁷For education, the levels were based on those aged 25–64.

⁸This includes any university certificate higher than a bachelor's degree.

⁹Demographics for the Canadian population ethnic groups are not grouped in a comparable way to the current manuscript groupings and therefore were not included. N/A = Not available.

Gender

Participants were asked to identify their gender (*man* = 1, *woman* = 0, *other* = NA). There were two cases that identified their gender as *other* and were therefore considered as “missing” in the analyses as there were too few to consider this third group.

Age Group

Participants were asked to identify their age group in years (*18–24* = 1, *25–30* = 2, *31–34* = 3, *35–40* = 4, *41–44* = 5, *45–50* = 6, *51+* = 7).

Born in Canada

Participants were asked whether they were born in Canada (*yes* = 1 or *no* = 0).

Region

Participants were asked to identify the region they were living in at the time of the survey (*Calgary or Edmonton* = 1, *Ottawa* = 2, *Toronto* = 3, *Vancouver* = 4, *Montréal* = 5). For the regression

analyses, each of these levels were recoded into dummy variables (for example, lived in Ottawa (*yes* = 1; *no* = 0)).

Education

Participants were asked to indicate their highest educational attainment (*No certificate, diploma, or degree* = 1; *High school diploma or equivalent* = 2; *Trades or apprenticeship certificate or diploma* = 3; *Certificate or diploma from a college, CEGEP, or other* = 4; *University certificate or diploma below bachelor's degree* = 5; *Bachelor's university degree* = 6; *Master's university degree* = 7; *Degree in medicine, dentistry, veterinary medicine* = 8; *Doctorate degree* = 9).

Visibly Muslim

Participants were asked if they felt they were easily identifiable as Muslim (*yes* = 1; *no* = 0).

Victimization

Participants were asked a total of 18 questions on how many times in the last year and since their arrival to Canada had they been verbally (for example, “*received phone calls, texts, or emails that were humiliating or insulting*”) or physically assaulted (for example, “*had things purposely thrown at you*”). If participants stated that an event occurred greater than 0 times to any of the verbal aggression questions, this was coded as “yes” for being the victim of verbal aggression (*yes* = 1; *no* = 0). If the participants answered “yes” to any of the physical assault questions, this was coded as “yes” for being the victim of physical assault (*yes* = 1; *no* = 0). See Table 3 for reported frequencies of victimization across the different sociodemographic characteristics.

Psychological Distress

This measure consisted of 14 items. Participants were asked how they felt after being a victim of verbal aggression or physical assault. They were asked to answer *Yes*, *No*, or *I don't know* to statements such as, “*I felt afraid*.” An exploratory factor analysis revealed that five items should be retained to create a factor of psychological distress (for example, the factor loadings were all greater than .5, which is considered fair–good; Tabachnick & Fidell, 2007). These items with frequencies in brackets were: 1) “*I felt ashamed/guilty*” (18%); 2) “*I felt afraid*” (39%); 3) “*I felt depressed*” (36%); 4) “*I lost confidence*” (30%); and 5) “*I was less productive at work*” (21%).

A factor score was generated for each participant based on these items ($M = -0.03$, $SD = 1.00$). The higher the score, the more distress the participant experienced.

Statistical Analyses

The first set of analyses included descriptive statistics for the demographic characteristics of those that reported being a victim of verbal aggression or physical assault. To address the research questions, three regression models were used. To address the first research questions (1a and 1b), two separate logistic regression models were estimated with verbal aggression and physical assault as the outcome variables. Gender; age group; education; ethnic group; self-identifying as visibly Muslim, Immigrant, or Canadian born; and the geographical region they are in were the independent variables. To address the second research question, a third linear regression model

Table 3. Cross-tabulations of Frequency of Hate Crimes by Type and by Independent Variables

Variable	Verbal aggression		Physical assault	
	N	%	N	%
Gender				
Men	55	36.9	47	38.8
Women	94	63.1	74	61.2
Total	149	100.0	121	100.0
Born in Canada				
Yes	44	27.3	35	26.9
No	117	72.7	95	73.1
Total	161	100.0	130	100.0
Region				
Calgary/Edmonton	40	25.6	30	24.0
Ottawa	17	10.9	14	11.2
Montréal	44	28.2	35	28.0
Toronto	32	20.5	26	20.8
Vancouver	23	14.7	20	16.0
Total	156	100.0	125	100.0
Age range				
18–24	29	21.0	25	22.3
25–30	22	15.9	18	16.1
31–34	19	13.8	16	14.3
35–40	30	21.7	24	21.4
41–44	14	10.1	9	9.9
45–50	15	10.9	13	11.6
51+	9	6.5	7	6.3
Total	138	100.0	112	100.0
Education				
No certificate, diploma, or degree	1	.7	0	1.0
High school diploma or equivalent	13	8.7	9	7.1
Trades or apprenticeship certificate or diploma	0	0.0	0	1.0
Certificate or diploma from a college, CEGEP, or other	15	10.0	11	9.2
University certificate or diploma below bachelor's degree	7	4.7	4	4.6
Bachelor's university degree	53	35.3	49	35.7
Master's university degree	45	30.0	38	31.6
Degree in medicine, dentistry, veterinary medicine	1	0.7	0	1.0
Doctorate degree	15	10.0	12	8.7
Total	150	100.0	123	100.0

(Continueud)

Table 3. (Continued)

Variable	Verbal aggression		Physical assault	
	N	%	N	%
Self-identified as visibly Muslim				
Yes	104	66.2	88	68.8
No	53	33.8	40	31.3
Total	157	100.0	128	100.0
Ethnic group				
Asian (e.g., Afghan, Bangladeshi, Indian, Pakistani, etc.)	41	25.8	37	28.7
European (e.g., Canadian, American, British, French, etc.)	5	3.1	4	3.1
Maghreb (e.g., Algerian, Tunisian, Moroccan, etc.)	34	21.4	28	21.7
Middle East (e.g., Arabic, Iranian, Iraqi, Lebanese, Syrian, etc.)	30	18.9	22	17.1
Turk	5	3.1	5	3.9
Sub-Saharan African (e.g., Senegalese, Ethiopian, Kenyan, etc.)	11	6.9	9	7.0
Mixed Ethnicity	33	20.8	24	18.6
Total	159	100.0	129	100.0

Note: The percentage is the valid percent and is based on the total listed.

predicting psychological distress included the same independent variables with the addition of verbal aggression and physical assault as independent variables.

Results

Sample Demographics

The sample consisted of 231 participants². The percentages reported in text are the rounded valid percentages (excluding missing cases). The sample had slightly more women (58%) than men (41%). Two participants reported not identifying with either man or woman (1%), but given the low case count, they were excluded from the regressions. Within the sample, 74% were not born in Canada. The ethnicities in order of decreasing frequency were Asian (27%), Maghreb (19%), Mixed Ethnicity (19%), Middle Eastern (16%), Sub-Saharan African (6%), Turk (8%), and Canadian/European (4%). Most of the participants were younger than 40 years old (72%). The sample had overall high levels of education. For example, 35% reported having a Bachelor's degree, 32% reported having a Master's degree, and 9% reported having a Doctoral degree. Approximately 1% of the sample reported not having any degree.

2. One participant didn't answer enough of the questions to be included in any analyses and variables varied in missingness from 0.4%-32.5% of data; cases with missing data were excluded from the analyses.

In terms of other characteristics, 64% of the sample reported that they self-identified as visibly Muslim. See Table 2 for more demographic information and how the key variables compare to the population of Muslims in Canada.

Demographics of Those That Experienced Hate Crimes

In the current sample, 74% reported being a victim of verbal aggression, and 63% reported being a victim of physical assault. To further understand the socio-demographics of those that experienced assaults, cross-tabulations were used (see Table 3). The key observations from the current sample are that higher levels of verbal aggression or physical assaults respectively were observed in women (63%; 61%), those not born in Canada (73%; 73%), persons residing in Montréal (28%; 28%), persons between the ages 18–24 (21%; 22%) and between the ages 35–40 (22%; 21%), those self-identifying as visibly Muslim (66%; 69%), and persons identifying as Asian (26%; 29%). See Table 3 for hate crime frequencies presented by these independent variables.

Predictors of Verbal Aggression (Model 1)

In the logistic regression model with verbal aggression as the outcome, the model fit was $\chi^2 = 27.11$, $df = 15$, $p = .028$, $r^2 = .15$ (Cox & Snell R-Square). There were no significant associations between sociodemographic characteristics and having been a victim of verbal aggression. See Table 4a.

Table 4a. Logistic Regression Results for Verbal Aggression

	B	S.E.	OR
Gender (Man = 1; Woman = 0)	-.584	.440	.557
Born in Canada (Yes = 1; No = 0)	-.156	.542	.855
Age group	-.063	.122	.939
Educational attainment	-.014	.129	.986
Self-identified as visibly Muslim (Yes = 1; No = 0)	.443	.439	1.558
Region Calgary and Edmonton	.298	.670	1.347
Region Ottawa	1.288	.902	3.627
Region Toronto	1.412	.849	4.103
Region Vancouver	1.670	.998	5.311
Ethnicity Asian	-.628	1.323	.534
Ethnicity Maghreb	.586	1.353	1.797
Ethnicity Middle East	.255	1.331	1.290
Ethnicity Sub-Saharan African	.305	1.491	1.356
Ethnicity Turk	-2.420	1.505	.089
Ethnicity Mixed	.351	1.324	1.421

Note: $\chi^2 = 27.11$, $df = 15$, $p = .028$, $r^2 = .15$ (Cox & Snell R-Square). $N = 166$

The reference group for the region was Montreal. The reference group for the ethnicity was Canadian/European.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Predictors of Physical Assault (Model 2)

In the logistic regression model with physical assault as the outcome, the model fit was $\chi^2 = 31.37$, $df = 15$, $p = .008$, $r^2 = .17$ (Cox & Snell R-Square). The only significant associations with the likelihood of being a victim of physical assault were self-identifying as visibly Muslim and living in Vancouver. Specifically, when the participant self-identified as visibly Muslim, they were three times more likely to have experienced a physical assault compared to those that did not self-identify as visibly Muslim ($b = 1.18$, $OR = 3.27$, $p = .004$). If the participant lived in Vancouver, they were nine times more likely to have experienced a physical assault compared to living in Montréal ($b = 2.24$, $OR = 9.42$, $p = .009$). See Table 4b.

Impacts of Victimization

Participants were asked to report on how they felt psychologically after experiencing verbal aggression or physical assaults. The final measure as described above represents a factor score derived from the following feelings: feeling ashamed/guilty, feeling afraid; feeling depressed; feeling a loss of confidence; and feeling less productive at work.

Predictors of Psychological Distress (Model 3)

In the regression model with psychological distress as the outcome, the model fit was $F(17, 104) = 3.099$, $df = 17$, $p < .001$, $r^2 = .34$. The significant associations with psychological distress

Table 4b. Logistic Regression Results for Physical Assault

	B	S.E.	OR
Gender (Man = 1; Woman = 0)	-.018	.393	.982
Born in Canada (Yes = 1; No = 0)	-.387	.476	.679
Age group	-.065	.111	.937
Educational attainment	.170	.112	1.186
Self-identified as visibly (Yes = 1; No = 0)	1.184**	.408	3.268
Region Calgary and Edmonton	.004	.555	1.004
Region Ottawa	.794	.678	2.213
Region Toronto	1.066	.666	2.904
Region Vancouver	2.242**	.864	9.417
Ethnicity Asian	.713	1.040	2.039
Ethnicity Maghreb	1.311	1.098	3.711
Ethnicity Middle East	1.073	1.064	2.924
Ethnicity Sub-Saharan African	1.626	1.228	5.085
Ethnicity Turk	-.992	1.243	.371
Ethnicity Mixed	1.173	1.053	3.230

Note: $\chi^2 = 31.37$, $df = 15$, $p = .008$, $r^2 = .17$ (Cox & Snell R-Square). $N = 164$

The reference group for the region was Montreal. The reference group for the ethnicity was Canadian/European.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table 4c. Regression Results for Psychological Distress

	B	S.E.
Gender (Man = 1; Woman = 0)	-.491**	.178
Born in Canada (Yes = 1; No = 0)	.236	.211
Age group	.051	.052
Educational attainment	-.068	.050
Self-identified as visibly Muslim (Yes = 1; No = 0)	.461*	.192
Region Calgary and Edmonton	.310	.260
Region Ottawa	.331	.295
Region Toronto	.335	.299
Region Vancouver	.843*	.341
Ethnicity Asia	-.621	.492
Ethnicity Maghreb	-.800	.509
Ethnicity Middle East	-.769	.486
Ethnicity Sub-Saharan African	-.540	.555
Ethnicity Turk	.106	.609
Ethnicity Mixed	-.483	.486
Verbal aggression	.223	.377
Physical assault	.700***	.199

Note: $F(17, 104) = 3.099$, $df = 17$, $p < .001$, $r^2 = .34$.

The reference group for the region was Montreal. The reference group for the ethnicity was Canadian/European.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

were being a woman (coded as zero) ($b = -.49$, $p = .007$), self-identifying as visibly Muslim ($b = .46$, $p = .018$), residing in Vancouver ($b = .84$, $p = .015$), and being a victim of physical assault ($b = .70$, $p < .001$). See Table 4c.

Discussion

Hate crimes are harmful for victims as they tend to experience marked changes in their health and well-being after experiencing such events (Barry et al., 2020; Boeckmann, & Turpin-Petrosino, 2002; Gerstenfeld, 2011; Lefevor et al., 2018; Padela & Heisler, 2011). In particular, religiously motivated hate crimes and Islamophobia in Canada contribute to the distress experienced by Muslims living in Canada (Wilkins-Laflamme, 2018). This study sought to explore the distressing experiences of Canadian Muslims in response to hate crime victimization, providing a snapshot of the consequences of hate crimes against Muslims from different metropolitan areas across Canada.

The primary goal of the present study was to document and describe Canadian Muslims' experiences of hate crime, including examining predictors of psychological distress after experiencing these hate crimes. The findings from the current study are in line with previous research about racially and religiously motivated hate crimes and the psychological distress associated with being victims of these crimes (Barry et al., 2020; Boeckmann, & Turpin-Petrosino, 2002; Gerstenfeld, 2011; Lefevor et al., 2018; Padela & Heisler, 2011). Specifically, in the current study, self-identifying as visibly Muslim resulted in a three-fold increase in probability of experiencing physical assault. Additionally, participants residing in Vancouver compared to Montréal also had a greater probability of experiencing physical assault. Though the increased victimization risk for those identifying as visibly Muslim is in line with previous research, the increased risk of experiencing physical assault for those living in Vancouver is surprising. For instance, recent legislative changes in Québec would have led to the expectation that Islamophobia may be more likely in the city of Montreal compared to Vancouver. This is particularly the case given the passing of Bill 21 in 2019, which prohibits wearing religious symbols in the workplace for civil servants, employees in positions of authority, and public sector teachers (<https://www.thecanadianencyclopedia.ca/en/article/bill-21>). Future research investigating the particular climate leading to more physical assaults of Muslims living in Vancouver is warranted.

Further, in the current study, psychological distress was predicted by being a woman, self-identifying as visibly Muslim, residing in Vancouver compared to Montreal, and being a victim of physical assault. Moreover, compared to Ameli and Merali (2014), the current sample exhibited higher incidence of physical assault (56.3% versus 11%). One such reason why this sample might have a higher incidence of physical assault could be due to the slight overrepresentation of Muslim women. This would align with statistics across Canada where Muslim women are most often the target of physical hate crimes (Moreau, 2021). Further, there may be a self-selection bias, where victims were more likely to respond to the survey because the hate crimes they experienced caused distress. This could have led to an overrepresentation of individuals in the sample who experienced hate crimes, and specifically physical assault. The present findings are also in line with previous research demonstrating that women are more likely to experience psychological distress (Viertiö et al., 2021). The results of the current study provide further evidence of psychological distress in response to hate crime victimization among Canadian women who are Muslim. Further, the present results suggest that the Muslim community, and Muslim women in particular, may need additional support to address issues related to the experience of hate crimes and the negative consequences, such as psychological distress. Lastly, the present findings help elucidate the intersectionality of religious, racioethnic, and gender identity in the context of experiencing hate crimes, and the impacts of such experiences on mental health.

Although this study provides an exploratory overview of the predictors and impacts of hate crimes against Muslims, there are several limitations. First, the sample is small. Despite more than 500 invitations having been sent and with a response rate of 45%, there were still only 230 participants. Second, the sample is not representative of the broader Muslim population, and therefore the results might not be generalizable. The participants had much higher educational attainment than the Canadian Muslim population (Statistics Canada, 2011). Those with lower educational attainment may have been more difficult to reach using a respondent-driven sampling methodology. Additionally, language proficiency might have represented an additional barrier for those not fluent in English or French. The sample, which drew more heavily from residents of Montreal, was also not representative of the distribution of the Muslim population across Canada, who tend to primarily reside in Toronto. This is

partially due to difficulties with recruiting in that location. Though the results of this study might not reflect the experiences of the broader Muslim community, this study was able to obtain information from a hard-to-reach population, allowing us to better understand the impacts of hate crimes on Muslims.

Despite these limitations, this study demonstrated an important first step in establishing research examining the impacts of hate crime on Muslims and the psychological distress they experience, especially for Muslim women. The results presented here demonstrate the interconnectedness of factors such as gender and ethnicity in explaining hate crime experiences of Canadian Muslims. Future research and policy should consider these sociodemographic contexts to elucidate and address the impacts of hate crimes (such as psychological distress). By understanding the effects of hate crimes on Muslim populations, we can better address the needs of these communities and appropriately allocate resources in order to improve the health and well-being of these populations.

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