CrimRxiv

U.S. and Canadian College Students' Fear of Crime: A Comparative Investigation of Fear of Crime and Its Correlates

Leah E. Daigle, Katelyn Hancock, Travis C. Chafin, Andia Azimi

Published on: Jul 08, 2021

DOI: 10.21428/cb6ab371.20738118

License: [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License \(CC-BY-NC-ND 4.0\)](https://creativecommons.org/licenses/by-nc-nd/4.0/)

Abstract

Being fearful of crime is, unfortunately, a common experience. Research shows that many factors influence a person's fear of crime, demonstrating that certain groups are generally more fearful than others. Even though they are typically young, college students express being fearful of crime on and off campus. What has yet to be investigated is whether college students who attend school in the U.S. are fearful at similar levels to their Canadian counterparts. Further, the correlates of fear of crime may also be different. To explore these issues, data from the American College Health Association's National College Health Assessment II survey of U.S. and Canadian college students are used. Results show that Canadian college students generally perceive their safety as being higher than U.S. college students, even though they face elevated victimization risks. Further, some correlates of fear of crime differ for U.S. and Canadian college students. These findings suggest the need for additional cross-national comparative work to see if patterns generalize across contexts.

Introduction

Being fearful of crime constitutes an emotional reaction such as being worried, concerned, or anxious about the potential harm or victimization that crime presents (Ferraro, 1995). Fear of crime levels are not universal and are often dependent on an individual's location (Perkins & Taylor, 2002). According to Gallup Poll data from 2019, 47% of Americans reported they worry a great deal about crime and violence, and 28% reported they worry a fair amount (Gallup, 2019). Similarly, Rollwagen (2016) found that on average, 15% of Canadians were fearful of crime in their neighborhood and 17% were fearful of crime at home. Despite these apparent differences in fear of crime for U.S. and Canadian adults, a similar comparison among college students has not been performed. Thus, it is unclear if college students' fear is comparatively similar to that of the general population.

Comparing differences in fear of crime for college students is important as fear of crime can affect students' experiences during college. Any negative consequences may be particularly problematic given the serious financial commitment it takes to attend college. In the 2018/2019 academic year, the average cost of tuition and fees for full-time undergraduate students at a four-year public university in the U.S. was \$9,200 (NCES, 2020). For Canada, the average cost of tuition as a full-time, undergraduate student at a public institution was \$6,463 for the 2019/2020 academic year (Symbol of

Statistics in Canada, 2020).¹ In addition, fear of crime may affect student behavior and performance, which may lead to missing opportunities such as avoiding sporting events, avoiding late night classes, and avoiding campus/club activities (Hibdon, Schafer, Lee, & Summers, 2016; Hignite, Marshall, & Naumann, 2018). Students may, then, feel isolated, which may potentially increase fear of crime (Braungart, Braungart, & Hoyer, 1980). Moreover, not engaging in certain campus activities and organizations may reduce students' job prospects (Stuart, Lido, Morgan, Solomon, & May, 2011). This possibility is especially likely if fear of crime affects class performance and grades, which has been found in previous research (Hughes, Gaines, & Pryor, 2015; Plassa & da Cunha, 2019). As such, it is important to understand the prevalence of fear and examining potential differences between U.S. and Canadian students.

There are reasons to believe that fear levels and their correlates may be different for U.S. and Canadian students. College students' experiences are dependent on the school context and individual differences. Since there is evidence that U.S. and Canadian college students differ in levels of and risk factors for victimization (Daigle, Johnston, Azimi, & Felix, 2019), it is possible that there may also be differences in levels of fear of crime. Moreover, the U.S. and Canada differ in salient ways especially as it relates to how campus crime is addressed and prevented, which may be reflective of larger cultural norms; thus, U.S. college students may be more attuned to thinking about crime given media attention and features of the criminal justice system as compared to Canadian college students. The U.S. criminal justice system is more punitive than the Canadian one (Cesaroni & Doob, 2003). Also, as compared to Canada, the U.S. has higher rates of homicide, aggravated assault, and robbery (Gannon, 2001; Statista Research Department, 2019a; Statista Research Department, 2019b; UCR, 2018). When comparing the nine largest metropolitan areas in the two countries, eight of the nine largest in the U.S. have significantly higher rates of violent crime than any of the nine Canadian areas (Gannon, 2001).

In general, comparative research across nations is important as macro-level factors like culture, law, and social norms, are shown to play a role in influencing micro-level interactions (Bronfenbrenner, 1977; Byrd & McKinney, 2012). It cannot be assumed that social processes that occur in one country will be the same in another and will produce the same outcomes. The variations of macro-factors across countries also suggests that social processes that produce fear of crime will differ across nations and have differing correlates. In addition, cross-national comparative research on fear of crime may highlight gaps in knowledge, inform ways to approach the fear of crime phenomenon, and help inform policies tied to reducing crime and its correlates.

The U.S. and Canada share a similar historical development and culture. Despite these similarities, there are certain cultural, societal, and legal differences between the two countries that may dictate differences in fear of crime. Since fear is an emotional reaction to stimuli that is perceived as noxious, the cultural differences between the U.S. and Canada suggests, then, that levels of fear of crime may be different based on locale.

Moreover, given the different contexts in which they live, it is possible that there are differences in levels of fear and the factors related to fear of crime between U.S. and Canadian students. To address the gaps in knowledge concerning fear of crime among college students, the current study examines fear of crime among a national sample of U.S. and Canadian students. The analysis provides a unique examination of four different proxy fear of crime measures (i.e., safety on campus, safety in community, safety at night, and safety during the day) and how U.S. and Canadian college students differ in their perceptions. It also examines factors related to fear of crime to determine if the correlates are invariant across groups.

Prevalence of Fear of Crime

Being worried, concerned, or anxious about becoming a victim of crime is quite common for people in the U.S. and other countries (Jackson, 2009; Kohm et al., 2012). According to the 2019 Gallup poll examining fear of crime, 64% of Americans thought there was more crime in the U.S. than the year before; slightly more than one-third of Americans reported that there was somewhere within a mile of where they lived that they would feel afraid to walk through at night. Studies have also found prevalence rates for fear of crime among residents of Canada (Andreescu, 2015; Rollwagen, 2016). Data from the 2014 General Social Survey (GSS) showed that slightly more than half of Canadians felt safe walking alone in their neighborhood at night (Andreescu, 2015), and findings from the 2009 GSS revealed that 17% of Canadians were fearful of crime at home (Rollwagen, 2016). Although demonstrating levels of fear in Canadian samples, these studies do not provide a comparison of fear of crime across nations; thus, a true comparison of fear of crime is not possible.²

Not only are people in general fearful of crime, research also shows that college students express similar levels of fear of crime (Hibdon, Schafer, Lee, & Summers, 2016; Hignite, Marshall, & Naumann, 2018; Kohm et al., 2012) and victimization (Maier & DePrince, 2020). For example, Rader, Rogers, and Cossman (2020) found that 39% of students indicated feeling fearful of being in the community around campus at night. The unique lifestyle factors associated with being a college student,

however, may indicate that the correlates of fear of crime differ from those correlates found in the general population (Maier & DePrince, 2020; Rader et al., 2020).

Correlates of Fear of Crime

Several theoretical perspectives help shape our understanding of fear of crime. According to the victimization-risk perspective, to understand fear of crime the factors that relate to victimization should be considered (Liska, Sanchirico, & Reed, 1988). Research has demonstrated that having a history of victimization is positively linked to fear of crime (Sironi & Bonazzi, 2016; Stafford & Galle, 1984). Despite this link, prior victimization is understudied among college student samples (Fox et al., 2009). Fox et al. (2009) found that college women were more likely to report being victims of many different crime types than men and that individuals who reported experiencing a theft or stalking victimization were more fearful of crime than those who reported experiencing a past sexual assault victimization. Although not the primary focus in much of the fear of crime literature, other factors that increase victimization risk may also be correlated with fear of crime. The lifestyle-routine activities (L/RAT) approach can be used to understand victimization risk. According to this perspective, lifestyles that bring together motivated offenders with suitable targets without the presence of capable guardians increase victimization risk (Cohen & Felson, 1979; Hindelang, Gottfredson, & Garafalo, 1979). As such, factors connected to the L/RAT perspective such as exposure to motivated offenders (Lai, Y.L., Ren, L., & Greenleaf, R., 2017), being a vulnerable target (Liska et al., 1988; Lai, et al., 2017), lack of capable guardianship (Lai, et al., 2017) and certain routine activities (Rengifo & Bolton, 2012) may likely amplify fear of crime (Mesch, 2000). Accordingly, for college students being a member of a Greek social fraternity or sorority may expose them to motivated offenders (Schwartz, DeKeseredy, Tait, & Alvi, 2006; Van Dyke & Tester, 2014) as would living in fraternity housing (Cooper, 2020). Greek social sorority membership has been linked to victimization risk (Franklin, 2015). In addition, being a sexual minority is connected to victimization risk likely because sexual minorities may be viewed as vulnerable targets and because of their increased engagement in risky behavior and mental health issues (Meyer, 2003; Rotheram-Borus, Rosario, Van Rossem, Reid, & Gillis, 1995); thus, sexual minorities may also have elevated levels of fear of crime. Other vulnerability factors such as having a disability or mental health issue, which are connected to an increase in victimization risk, may similarly increase levels of fear (Stiles, Halim, & Kaplan, 2003).

In line with the victimization-risk perspective, demographic factors that increase risk for victimization, may also influence fear of crime. Indeed, several demographic factors have been linked to fear of crime. Sex is one of the most consistent predictors of fear of crime, with females perceiving crime as a greater problem and being more fearful of crime than their male counterparts (Adjekum-Boateng & Boateng, 2017; Hutchison et al., 2007). These sex differences have been demonstrated in college student samples as well (Adjekum-Boateng & Boateng, 2017; Rader et al., 2020). Another factor commonly associated with fear is race, with researchers reporting conflicting results regarding which groups are more fearful of crime. Some findings reveal that nonwhites and minorities are more fearful of crime, and perceive much higher rates of crime compared to their White counterparts (Adjekum-Boateng & Boateng, 2017; Hipp, 2010). By contrast, some studies find that Whites have higher fear of crime perceptions (see Collins, 2016). However, college student samples tend to show more support for minorities holding greater levels of fear of crime (Adjekum-Boateng & Boateng, 2017). Another factor commonly found to influence fear of crime is age. Although some research shows that older people are more fearful of crime than their younger counterparts (Acierno, Kilpatrick, Resnick, & Rheingold, 2004), other research shows that age is actually negatively associated with concern about crime (Jackson, 2009), and is negatively associated with perceptions of safety among college students (Rader et al., 2020).

Others contend that it is not just factors connected to victimization risk that elevate fear of crime but also social disorder and other factors connected to the environment (Skogan, 1986). In this way, urban areas and those with noticeable signs of social disorder are perceived as being more dangerous than other areas as they reflect a lack of control and concern (Covington & Taylor, 1991; LaGrange, Ferraro, & Supancic, 1992); thus, people's fear of crime is higher in these areas. Levels of social cohesion in areas may also influence fear of crime. Students who attend large schools and those who live off campus, may have higher levels of fear of crime, especially on campus, than others since they may feel less connected to the large campus community.

U.S. and Canadian College Students and Fear of Crime

As the research above demonstrates, experiencing fear of crime is not uniform across individuals. Several factors influence whether or not someone is fearful of crime. Given that the college lifestyle is unique from other contexts, it is important to understand fear of crime among college students. In addition, the norms surrounding partying and dating during college many times create risky contexts in which exposure to crime and

victimization is likely. Therefore, there may be differences across college students' fear of crime, since the college experience is not uniform across students. Specifically, as is the focus of the current study, U.S. and Canadian college students differ in several ways, and these differences may influence levels of fear.

Although there is a vast amount of research on college student victimization, less attention has been given to cross-national comparisons between U.S. and Canadian students. Recent research findings reveal that U.S. and Canadian college students may have different victimization experiences. Daigle and colleagues (2019) found that compared to American college students, Canadian college students are at a greater risk of experiencing sexual and violent victimization. In another study, school-level and individual-level features were found to be related to victimization risk with some differences in the correlates of victimization for U.S. and Canadian students (Daigle, Johnson, Azimi, & Hancock, forthcoming). There are other reasons to perform cross-national evaluations of U.S. and Canadian college students' fear of crime. The college experience differs for U.S. and Canadian students in many ways. U.S. and Canadian college students may have different exposure to risk, which could influence fear of crime (Russo et al., 2013). The party lifestyle of drinking alcohol, using drugs, and "hooking up" are norms to which both groups of students are exposed, but a larger proportion of Canadian college students report binge drinking, marijuana use, and sexual experiences (Daigle, Johnston, Azimi, & Felix, 2019). One key difference between U.S. and Canada is the age at which people can legally consume alcohol. In Canada, the minimum drinking age is either 18 or 19 years old; whereas, a person must be 21 years old to legally drink in the U.S. (Kuo, Adlaf, Lee, Gliksmann, & Wechsler, 2002). In contrast, U.S. colleges have a more developed Greek social fraternity system than found in Canadian universities and many schools in the U.S. have sports teams that shape the culture and norms, especially around alcohol use.

These findings suggest that factors reflective of differences between the two nations may be driving differences in victimization and also could potentially explain differences in fear of crime. Despite the similarity in Western cultural norms across Canada and the U.S., the school context between the two countries differ. This difference is especially true as it relates to crime and victimization policies. In the U.S., all institutions of higher learning that are eligible to benefit from student aid under Title IV of the Higher Education Act of 1965 must adhere to the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (Clery Act) (Department of Education, 2016; Fisher, Hartman, Cullen, & Turner, 2002) and the SaVE Act or risk losing funding. Together, this legislation compels all American

institutions of higher learning to report crime statistics for the last three years, notify campuses constituents of campus crime, and provide prevention programming among other things. Canadian universities do not have legal requirements equivalent to the Clery Act, and only recently have Canadian universities devoted some resources to developing and implementing sexual assault prevention strategies (Quinlan, Clarke, & Miller, 2016; Weikle, 2016). A lack of focus on crime prevention on Canadian college campuses could be tied to students reporting higher levels of victimization but could also suggest that they have higher levels of fear since their perceptions may not be rooted in fact. There is evidence that suggests, however, hearing about victimization can cause fear of crime (Cook & Fox, 2011), so crime prevention efforts on American campuses may increase fear.

Moreover, the school context matters as it gives rise to certain culture and norms on college campuses--playing a role in socializing its members (Moylan & Javorka, 2020; Moylan, Javorka, Bybee, Stotzer, & Carlson, 2019). Fear of crime can also be influenced by institutional-level differences, such as the geographic locations in which these campuses are located. Canadian universities are usually located in cities (Quinlan, Clarke, & Miller, 2016) and tend to be commuter based (Pascarella & Terenzini, 2005). There are differences in the level of urbanization between the U.S. and Canada. A greater percentage of the Canadian population lives in urban areas, but the population is mostly concentrated in three urban areas. The U.S. has many mid-size cities as well as cities/regions with over 10 million in population (Rowe, 2016). Further, Canadian cities tend to be more dense (Condon, 2004; Rowe, 2016) than U.S. cities, with a greater use of public transportation by its inhabitants (Rowe, 2016). Most universities in the U.S., however, are located in suburban and rural areas and tend to be campus-based with a focus on student services (Pascarella & Terenzini, 2005). Urban locations are shown to be related to higher levels of fear of crime compared to non-urban areas (Weinrath, 2000), further suggesting that levels of fear may differ across U.S. and Canadian students so much as this finding can translate to city locations.

The current study investigates the levels of fear on campus, as measured by perceptions of safety, in the community, at night, and during the day among a sample of U.S. and Canadian college students. Levels of fear in these domains are compared for students enrolled in institutions in each country. In doing so, we provide to our knowledge the first cross-national comparison of fear of crime for college students in the U.S. and Canada. This examination goes beyond simply examining fear of crime, but includes measures tied to

perceived safety during the day, at night, on campus, and off campus. Further, the correlates of fear for these domains is examined and whether these correlates of fear are invariant for U.S. and Canadian college students is explored. Knowing the factors that are tied to fear of crime and whether they differ across student groups can help shape policy and practice.

Methods

Data and Sample

Data were derived from the Spring 2013 American College Health Association's National College Health Assessment II (ACHA-NCHA II). This survey was administered in both the U.S. and Canada. The ACHA-NCHA II is a national-level survey of college students designed to measure health behavior and related experiences of college students. The survey is administered both in the Fall and in the Spring semesters (ACHA, 2013). Data from the Spring 2013 administration are used because both U.S. and Canadian college students are included.

In total, 123,078 students enrolled in U.S. across 153 institutions are included as well as 34,039 students enrolled in Canada across 32 institutions. For the U.S. data, only institutions that employed a random sampling design or surveyed all students were included in the data (153 out of 172 schools). Web-based surveys were used in 122 institutions, with paper surveys being used in others. For inclusion in the Canadian sample, institutions must have used a random sampling technique or surveyed all students and agree to have their data included (ACHA, 2013). Only two Canadian schools were excluded based on these criteria. After listwise deletion³, a total of 135,506 students were included in the analysis, with 105,355 students in U.S. institutions and 30,151 in Canada.⁴ As shown in Table 1, students largely feel safe on campus (81%), safe in the community (61%), safe during the day (94%) and safe at night (59%). About 1 in 5 college students experienced a violent victimization and/or a stalking victimization, while 7% experienced sexual victimization.

Measures

Dependent Variables

To assess college students' perceptions of safety, four measures were used. First, a measure of *perceptions of safety on campus* was included. Students were asked how safe they feel on this campus (daytime) and on this campus (nighttime). The response options ranged from not safe at all to very safe (scored 1 to 4). To create a measure of

perceptions of safety on campus, the responses to these two questions were first dichotomized to reflect perceptions of being not safe (1) or safe (0). To create a final measure of perception of safety on campus, these two items were combined so that persons who indicated feeling unsafe either on campus during the day or on campus during the night were coded as 1, and those who indicated feeling safe both during the day and during the night on campus were coded as 0. This same strategy was used to create a measure of *perceptions of safety in the community*. Students were asked how safe they feel in the community (daytime) and in the community (nighttime). If a student indicated feeling unsafe in the community during the daytime or at nighttime, their response was coded as 1 and was coded as 0 if they reported feeling safe in the community in both the daytime and nighttime. A measure of *perceptions of safety during the day* was created by combining responses to how safe students feel on this campus during the daytime and in the community during the daytime. Again, responses were coded to reflect feeling unsafe during the day either on this campus or in the community (coded as 1) and feeling safe both during the day on this campus and in the community (coded as 0). The measure of *perceptions of safety during the nighttime* was created by combining the measures of feeling safe on this campus during the nighttime and feeling safe in the community during the nighttime. Responses in which students indicated feeling unsafe in either on campus during the nighttime or in the community were coded as 1 and those in which the student indicated feeling safe both during the nighttime on campus and in the community were coded as 0.

Independent Variables

Victimization. Three measures of victimization were included. A measure of violent victimization reflects a person experiencing physical assault or verbal threats during the previous 12 months (coded as 1) or not experiencing this behavior (coded as 0). A measure of sexual victimization reflects whether (coded as 1 if experienced at least one behavior) or not (coded as 0) a respondent reported experiencing sexual penetration without consent, attempted sexual penetration without consent, sexual touching without consent, or someone having sex with them without consent while drinking alcohol during the previous 12 months. Stalking victimization was assessed by asking respondents if they had been the victim of stalking during the previous 12 months (coded 1 for yes, coded 0 for no).

Greek Membership. Students were asked if they were affiliated with a social Greek fraternity or sorority. Yes responses were coded as 1 and no responses were coded as 0.

Gender and Sexual Orientation. Females were coded as 0, males were coded as 1, and those who indicated being transgender were coded as 2. Sexual orientation was assessed by asking students what term best describes their sexual orientation. Those who responded they were heterosexual were coded as 0 and coded as 1 on this measure if they indicated being gay/lesbian, bisexual, or unsure.

Mental Health and Disability. As measures of vulnerability that may influence fear, mental health and disability were also assessed. A mental health issues measure was created by combining responses to questions in which students were asked if they had been treated or diagnosed with fourteen different mental health issues including depression, anxiety, and bipolar disorder. Those who indicated having at least one of these mental health issues were coded as 1 and coded as 0 otherwise. The disability measure indicates whether (coded as 1) or not (coded as 0) a student has one of five disabilities—deafness/hearing loss, mobility/dexterity disability, partial sightedness/blindness, speech or language disorder, or some other disability.

Campus Characteristics. The size of the area in which the campus is located is included. It is coded as 1 if the town's population is 500,000 or more and coded as 0 if the town's population is smaller. The variable school size reflects if the number of students enrolled in the school is 20,000 or more (coded as 1) or fewer than 20,000 (coded as 0). Measures of where students live are also included. Students could live on campus (the referent), off campus, in a fraternity, or with their parents.

Demographic Characteristics. Age was measured in years. Students self-identified as being White (the referent category), Black, Hispanic, Asian, Multiracial, or other minority. Relationship status was measured as being single (coded as 1) or in a romantic relationship (coded as 0).

Analytical Plan

Analyses are conducted in several steps. First, U.S. and Canadian college students are compared at the bivariate level on their perceptions of safety on campus, in the community, during the day, and during the night along with the independent variables using Chi-square or independent samples t-tests. Then, several multivariate logistic regression analyses were performed the total sample and separately for U.S. and Canadian college students to examine factors related to perceptions of safety in these four domains. To examine if predictors of perceptions of safety differed across the models, full models with interaction terms between the country variable and each independent variable were run. For all multivariate models, robust standard errors

using the school ID as the cluster variable were used to account for the fact that students attending the same school are likely similar to each other in their perceptions of safety, and thus models will have biased standard errors (deflated). Robust standard errors statistically account for this problem (Wooldridge, 2009).

Results

The descriptive statistics for the U.S. and Canadian sample are displayed in Table 1 as well as results for bivariate analyses (chi-square or t-test for independent samples). As shown, a significantly greater percentage of U.S. students feel unsafe on campus, unsafe in the community, unsafe during the day, and unsafe at night. A greater percentage of Canadian students reported having experienced a violent victimization, being stalked, and being sexually victimized. A greater percentage of U.S. students reported involvement in a social Greek organization, being female or male, and having a mental health issue. U.S. students were less likely to attend school in locations with populations of 500,000 or more or to attend schools with 20,000 or more students. U.S. students are less likely to live off campus or with their parents, while they are more likely to live in a fraternity or on campus than Canadian students. U.S. college students are more likely to be Black, Hispanic, Asian, or multiracial compared to Canadian college students, with Canadian college students more likely to be White or in another racial minority group. Finally, a greater percentage of U.S. college students reported being single rather than in a romantic relationship.

Insert Table 1 About Here

First, models examining the factors related to perceptions of feeling unsafe on campus are examined. As displayed in Table 2 in the full model results, Canadian students do not face significantly different odds of feeling unsafe on campus than U.S. students. Other variables are related to feeling unsafe on campus. Having experienced stalking or sexual victimization is associated with an increase in the odds of feeling unsafe on campus. Being a member of a Greek organization is also related to an increase in the odds of feeling unsafe on campus. Males have lower odds than females of feeling unsafe on campus, while those with a mental health issue or a disability face greater odds of feeling unsafe on campus compared to others. Living in a fraternity or with parents is associated with greater odds of feeling unsafe on campus as compared to living on campus. As age increases, the odds of feeling unsafe on campus decrease. Each race/ethnicity variable is associated with an increase in the odds of feeling unsafe on campus when compared to White students. Single students have lower odds of feeling unsafe on campus than those in a relationship. Table 2 also displays the results

of models for U.S. students and Canadian students. In the U.S. model, all variables that are significant in the full model remain, with the exception of being multiracial. Other differences emerged. Students attending schools with 20,000 or more students face greater odds of feeling unsafe on campus compared to those attending smaller schools, and students living off campus have greater odds of feeling unsafe on campus compared to those living on campus. For Canadian students, sexual victimization experiences are not related to feeling unsafe on campus nor is school size, living in a fraternity, or age. Being multiracial increased the odds of feeling unsafe on campus for Canadian students. To examine if significant differences in the relationship between the independent variables and school country exist, a full model with interaction terms between school country and each independent variable was run. The interaction terms between being male, sexual orientation, living off campus, age, and country were all significant. These findings suggest that being male and sexual orientation exerted a greater effect on Canadian students' feelings of unsafety on campus while the effects of living off campus and age are stronger for U.S. students.

Insert Table 2 About Here

Table 2 also displays the results of models examining factors related to feeling unsafe in the community for the full model, for U.S. students, and for Canadian students. As shown, Canadian students have odds of feeling unsafe in the community that are 26% lower than U.S. students. Having been stalked, experiencing a sexual victimization, or membership in a social Greek organization are all associated with an increase in the odds of feeling unsafe in the community. Males face lower odds than females of feeling unsafe in the community. Students who have a mental health issue, who have a disability, and who live in a fraternity (compared to on-campus) face greater odds of feeling unsafe in the community. As age increases, the odds of feeling unsafe in the community decrease. Asian students and those of other races have greater odds of feeling unsafe in the community as compared to White students. Single students have lower odds of feeling unsafe in the community. All of the same factors are related to feeling unsafe in the community for U.S. students and in the same direction except for being in the other minority race category, which is not significant. There are a few differences, however, when examining the Canadian-only model. For Canadian students, being a member of a social Greek organization and living in a fraternity are not related to the odds of feeling unsafe in the community, while being non-heterosexual increased the odds of feeling unsafe in the community. Being multiracial or in the other minority race category is related to an increase in the odds of feeling unsafe in the community. When examining the full model with interaction terms

between country and each independent variable, several interaction terms were significant. Being male and non-heterosexual exerted a stronger influence on feeling unsafe in the community for Canadian students. Further being Asian, multiracial, or another minority group member are stronger factors for Canadian students.

Table 3 shows the results of the multivariate logistic regression models examining perceptions of safety during the day. As can be seen in the total model, Canadian college students have odds of feeling unsafe during the day that are 45% lower than U.S. college students. Other variables are related to perceptions of safety during the day. Having been stalked or sexually victimized increased the odds of feeling unsafe during the day. Being a member of a Greek organization also increased the odds of feeling unsafe during the day. Males face lower odds and people who are transgender face greater odds of feeling unsafe during the day as compared to females. Having a mental health issue or a disability is also associated with increased odds of feeling unsafe during the day. Each race and ethnicity variable was significantly associated with greater odds of feeling unsafe during the day relative to being White. Finally, those who are single face lower odds of feeling unsafe during the day.

Split models were run to examine the same set of factors for U.S. and Canadian college students. There are some differences in significant factors in the U.S. model when compared to the total model. Living in a fraternity for U.S. students increased the odds of feeling unsafe during day. Age is associated with a reduction in the odds of perception of safety during the day. As age increases the odds of feeling unsafe decrease. Two race/ethnicity variables are not significant in the U.S. model – being Hispanic or multiracial were not significant. All other variables that are significant in the full model are significant in the U.S. model and in the same direction. The results for the Canadian student model are also presented. For Canadian college students, similar patterns emerged, except being non-heterosexual increased the odds of feeling unsafe during the day and living off campus was related to a reduction in the odds of feeling unsafe during the day. Age is not related to perceptions of safety during the day. Being multiracial increased the odds of feeling unsafe during the day, while being single was not related. Examining the full model with interaction terms between country and the independent variables, it is revealed that several factors operate significantly different across the countries. The interaction terms between male, sexual orientation, living off campus, and age and country are significant. In this case, being male, sexual orientation, and living off campus exerted stronger effects for Canadian students and age was stronger for U.S. students.

Insert Table 3 About Here

The results for the multivariate logistic regression examining the factors that are related to feeling unsafe at night are presented in Table 3. As can be seen, Canadian college students have odds of feeling unsafe at night that are 28% lower than U.S. college students. Being a victim of violence reduced the odds of feeling unsafe at night, while being a victim of stalking or sexual victimization increased the odds of feeling unsafe at night. College students affiliated with social Greek organizations have higher odds of feeling unsafe at night, while male and transgender students have lower odds of feeling unsafe at night relative to female college students. Having a mental health issue or a disability is associated with higher odds of feeling unsafe at night. Students who live in a fraternity have higher odds of feeling unsafe at night relative to those who live on campus. Age was associated with a reduction in the odds of feeling unsafe at night —as age increases the odds of feeling unsafe at night decreases. Relative to White college students, Asian students or other minority students have higher odds of feeling unsafe at night, while single students have lower odds of feeling unsafe at night.

Table 3 also shows split-models for U.S. and Canadian college students and their perceptions of feeling unsafe at night. For U.S. college students, all variables that are significant in the total model are also significant and in the same direction, except for being another minority race, which is not significant. Some differences emerge when examining the Canadian student model. Violent victimization, being a member of a social Greek organization, being transgender, and living in a fraternity are not significant. On the other hand, sexual orientation and being Multiracial or in the other minority race group are significant. Full models with interaction terms between Canada and all independent variables were generated to examine if these differences are in fact significant. As indicated, the interaction terms for Canada and being male, sexual orientation, Asian, multiracial, and other racial minority are significant, suggesting that these effects are different across campus location in feelings of safety at night.

Discussion

Most of the studies examining college students' fear of crime have used U.S. based samples; thus, precluding a comparative analysis of factors that influence college students' perceptions of safety. The current study advances the knowledge of levels of fear of crime and its correlates for college students in the U.S. and Canada.

The findings of this research contribute to existing literature on student's perceptions of safety in two major respects. First, despite an increased risk for violent, sexual, and stalking victimization, Canadian college students have higher perceptions of safety than U.S. college students. This finding was surprising, given the positive relationship between victimization and feeling unsafe demonstrated in previous research (Reese, 2009; Rountree, 1998). Our findings are generally consistent with the victimization-risk perspective used to explain fear of crime in that many variables linked to victimization risk as well as those assessing previous victimization were associated with fear of crime for both U.S. and Canadian college students. Canadian college students' perceptions of feeling safer than U.S. students held even when controlling for personal characteristics linked to fear of crime such as prior victimization, gender, race, and sexual orientation. Also of note, Canadian college students felt safer compared to U.S. students in multiple contexts: during the daytime, during nighttime, and in their community. Canadian students, however, were not more likely to feel safe on campus.

It is possible that these findings are tied to policy. Students may be more likely to perceive a college campus as being safe when they receive timely notifications of crimes committed on and around the university; being aware of crime incidents allows for students to understand the context in which the crimes were perpetrated in order to take preventative measures (Merianos et al., 2017). Unlike the United States, Canada does not have a national requirement for its universities to report campus crime or to implement preventative measures, although since these NCHA data were released in 2013, more policies and procedures have been adopted to address sexual victimization at Canadian universities (Quinlan et al., 2016). U.S. universities eligible to receive federal aid are mandated, under the Clery Act, to report crimes annually and provide students with timely alerts of potential threats or hazardous conditions (Lee, 2017). The Clery Act, supplemented by the SaVE Act also requires universities to report campus sexual assaults, intimate partner violence, and stalking (Cox, 2018). Following the mandates of these legislative pieces is required lest U.S. institutions of higher learning risk losing federal funding and/or being financially penalized. U.S. campus adherence to this legislation has allowed for university accountability and promoted communication with students and advocacy groups (Fisher et al., 2002). Canadian universities' lack of reporting crime statistics to university members could result in inaccurate assessments of risk. Although the effect that reporting to the campus community will have on increasing safety has not been measured, it could increase students' capable guardianship and reduce target suitability.

In addition, a reason for the differences in fear could be that macrolevel influences from each respective culture have shaped Canadian and U.S. students' perceptions of safety. One such factor could be the gun control policies implemented by the Canadian government, which are considerably more restrictive than those in the U.S. The majority of people feel a greater sense of safety in locations where there is limited access to firearms and stricter gun control laws (Tasci & Sönmez, 2019). In addition, another macrolevel influence is that Canadian students tend to reside off campus more so than U.S. students, most often living with parents or in rural areas, commuting to classes in more populated environments (Daigle et al., 2019). Individuals' assessment of the likelihood of being a victim of crime involves their movement across time and space (Tasci & Sönmez, 2019). It is possible that Canadian students who live and socialize outside of urban campuses view their presence on campus as unsafe, but the limited amount of time that they are present reduces their perception of risk. Similarly, those who live off campus may feel safer off campus, although victimization of college students is more likely to occur off campus than on (Baum & Klaus, 2005; Volkwein et al., 1995).

Second, this research found additional significant differences, and a few notable similarities, between the correlates of perceptions of safety for Canadian and U.S. college students. Interestingly, violent victimization for Canadian and U.S. students was not significantly related to students' feelings of safety. Except for Canadian students at night, sexual victimization was found to be related to an increase in the odds of feeling unsafe for both student samples across all contexts; stalking victimization also is significantly related to an increase in feeling unsafe in all measures with both student samples. It is possible that violent offenses are singular instances that "teach lessons" or enhance defensive mechanisms rather than induce apprehension (Lane & Fox, 2012). Longitudinal research conducted by Shippee (2012, p. 134) suggests that victimization increases fear immediate to the incident; however, individuals who were victimized later became "desensitized...to the effects of perceived risk". Unlike violent victimization, sexual abuse and stalking might be recurring forms of victimization that create fear of future episodes. Further research is needed to determine why experiencing violent victimization is not related to perceptions of safety, but sexual and stalking victimization increase fear.

In addition, both Canadian and U.S. transgender students reported feeling safer than women during the night, on campus, and in their community. However, the odds of a transgender student feeling less safe during the day was 44 percent higher than that of women. Sexual orientation for U.S. students was not significantly correlated with

perceptions of safety, while non-heterosexual Canadian students reported elevated levels of feeling unsafe in all contexts except on campus. Transgender and Canadian non-heterosexual students feel most vulnerable during the time that the majority of university courses and businesses are active; and, because these students report feeling safer on campus, the sources of their fear are possibly outside campus. During the day, transgender students may feel more exposed and vulnerable, except on university campuses, which tend to be more liberal and accepting.

Student living arrangements also influence perceptions of safety. Living off campus and living with parents increased the odds of Canadian and U.S. students feeling unsafe on campus but were not significant in any other context. For U.S. students, living in a fraternity or sorority house increased perceptions of being unsafe in all four contexts. It should be noted that living in on-campus housing is linked to lower odds of students feeling unsafe on campus. Again, this finding could reflect the fact that familiarity breeds comfort. Universities may also simply be providing safe environments for students.

Finally, there were noticeable differences in fear of crime between countries across race and ethnicity. Compared to Whites in the sample, students who identified as Asian reported higher odds of feeling unsafe in all four contexts in both countries. However, Asian students in Canada had higher odds of feeling unsafe than U.S. students in all contexts. Canada has a higher proportion of foreign-born Asians than the United States (Lee & Boyd, 2008). Past research has attributed fear of crime in Asian populations living in Western countries to reduced acculturation, less time spent in their new country of residence, and a lack of understanding the criminal justice system (Grubb & Bouffard, 2014); thus, it is possible that these differences are found in U.S.-Asian and Canadian-Asian college students and contribute to perceptions of safety. Canadian students who identified as Black, Hispanic, multiracial, or of another racial minority group had higher odds of feeling unsafe than their U.S. counterparts, although Hispanic students only had higher odds of feeling unsafe on-campus.

When considered in total, our findings suggest that assessments of fear of crime for college students should include questions about different locations and times. Importantly, college students may feel relatively safe on campus, but many of them spend ample time off-campus. Thus, the fear they experience could shape their behaviors—they could restrict their movements or involvement in activities, which could be detrimental to their overall college experience. To address safety concerns among their students, both U.S. and Canadian universities should implement crime

prevention training programs that address individual and cultural differences. Prevention methods that are culturally competent seem to be especially important for Canadian universities, where racial minority students reported higher odds of feeling unsafe than U.S. students. And, culturally competent programs are necessary to address the unique experiences of sexual minority students. University training in both nations should be designed to include methods that are applicable outside of the university setting and at different points in the day. Finally, as noted previously, U.S. universities should consider evaluating the safety of fraternity residences, and all institutions of higher learning should consider the differential experiences of students who live on campus with those who have other living arrangements.

The current study does have its limitations. Generalization to all U.S. or Canadian university students is not possible due to the samples in the ACHA not being randomly selected at the university level, even though participants in schools were drawn at random. The data contained within the ACHA are cross-sectional, which does not allow for the establishment of causal effects. Determining how safety perceptions are influenced by victimization incidents, or engagement in other behaviors, would further benefit the development of prevention and intervention policies. Therefore, future longitudinal studies regarding perceptions of fear of crime and its correlates are needed to expand on both the comparative and victimization literatures. Furthermore, students reported how “safe” they felt on/off campus and during the day/night rather than being asked direct and specific questions about fear of crime. Subsequently the interpretation of “safety” by students could fall outside of the boundaries of criminal victimization per se; thus, it is possible that this research may have overestimated students’ fear of crime. Finally, covariates of perceptions of safety and victimization, such as crime rates, are not included in these data. We did, however, include a range of individual and school-level factors in our models, thus reducing the likelihood of missing variable bias.

Conclusion

The way that college students perceive their safety may influence their academic life. Thus, understanding the features that relate to feelings of safety is important. The current study demonstrates that not all factors influence perceptions of safety generally for U.S. and Canadian college students, suggesting the need for further cross-national comparisons. Further, the findings demonstrate that what may work to increase perceptions of safety in one context may not work in another. Increased

attention to how college students' perceptions of safety can be enhanced is a warranted line of inquiry.

References

Adjekum-Boateng, N., & Boateng, F. (2017). Differential perceptions of fear of crime among college students: The race factor. *Journal of Ethnicity in Criminal Justice*, 15(2), 138-159.

American College Health Association (2013). *American College Health Association-National College Health Assessment II: Reference Group Executive Summary Spring 2013*. Hanover, MD: American College Health Association.

Andreescu, V. (2015). Concerns about Violent Crime in France: Does Immigrant Status Make a Difference in Public Perceptions of Safety? *Journal of Identity & Migration Studies*, 9(1), 49-68.

Baum, K., & Klaus, P. (2005). *Violent Victimization of College Students, 1995-2002*. Washington, DC: Bureau of Justice Statistics.

Braungart, M. M., Braungart, R. G., & Hoyer, W. J. (1980). Age, sex, and social factors in fear of crime. *Sociological Focus*, 13(1), 55-66.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513-531.

Byrd, D. R., & McKinney, K. J. (2012). Individual, interpersonal, and institutional level factors associated with the mental health of college students. *Journal of American College Health*, 60, 185-193.

Cesaroni, C., & Doob, A. N. (2003). The decline in support for penal welfarism. Evidence of support among the elite for punitive segregation. *British Journal of Criminology*, 43(2), 434-441.

Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 44(4), 588-608.

Cook, C. L., & Fox, K. A. (2011). Fear of property crime: Examining the effects of victimization, vicarious victimization, and perceived risk. *Violence and Victims*, 26(5), 684-700.

Collins, R. E. (2016). Addressing the inconsistencies in fear of crime research: A meta-analytic review. *Journal of Criminal Justice*, 47, 21-31.

Condon, P. (2004). Canadian Cities American Cities - Our differences are the same. *Streets Blog USA*. Retrieved from https://usa.streetsblog.org/wp-content/uploads/sites/5/2013/01/patrick_condon_primer.pdf.

Covington, J., & Taylor, R. B. (1991). Fear of crime in urban residential neighborhoods: Implications of between-and within-neighborhood sources for current models. *The Sociological Quarterly*, 32(2), 231-249.

Cox, C. (2018). Saving Title IX values: The campus SaVE Act as a critical tool for survivors and allies. *Harvard Journal of Law and Gender*, 41, 429-450.

Daigle, L. E., Johnston, T., Azimi, A., & Felix, S. N. (2019). Violent and sexual victimization among American and Canadian college students: Who is more at risk and are the risk factors invariant? *Journal of School Violence*, 18, 226-240.

Daigle, L.E., Johnson, L.M., Azimi, A. & Hancock, K. Does college matter? Exploring college-level factors related to victimization risk for U.S. and Canadian college students. Forthcoming in *International Journal of Offender Therapy and Comparative Criminology*.

Department of Education. (2018). The handbook for campus safety and security reporting 2016 edition. *U.S. Department of Education*. Retrieved from <https://www2.ed.gov/admins/lead/safety/handbook.pdf>

Ferraro, K. F. (1995). *Fear of crime: Interpreting victimization risk*. Albany: State University of New York Press.

Ferraro, K. F. (1996). Women's fear of victimization: Shadow of sexual assault? *Social forces*, 75, 667-690.

Fisher, B. S., Hartman, J. L., Cullen, F. T., & Turner, M. G. (2002). Making campuses safer for students: The Clery Act as a symbolic legal reform. *Stetson Law Review*, 32, 61.

Fox, K. A., Nobles, M. R., & Piquero, A. R. (2009). Gender, crime victimization and fear of crime. *Security Journal*, 22(1), 24-39.

Franklin, C. A. (2015). *Sorority Affiliation and Sexual Assault Victimization: Assessing Vulnerability Using Path Analysis*. *Violence Against Women*, 22, 895-922.

Gallup Poll. (2019). *Crime*. Gallup. Retrieved from
<https://news.gallup.com/poll/1603/crime.aspx>
<https://news.gallup.com/poll/1603/crime.aspx>.

Gannon, M. (2001). *Crime comparisons between Canada and the United States*. Ottawa: Ontario, Canadian Centre for Justice Statistics.

Grubb, J. A., & Bouffard, L. (2014). The interrelationships between victimization, fear, and acculturation among Asian immigrants. *Victims & Offenders*, 9, 353-385.

Hibdon, J., Schafer, J., Lee, C., & Summers, M. (2016). Avoidance behaviors in a campus residential environment. *Criminology, Criminal Justice Law & Society*, 17(3), 74-89.

Hignite, L. R., Marshall, S., & Naumann, L. (2018). The ivory tower meets the inner city: Student protective and avoidance behaviors on an urban university campus. *College Student Journal*, 52(1), 118-138.

Hindelang, M. J., Gottfredson, M. R., & Garofalo, J. (1978). *Victims of personal crime: An empirical foundation for a theory of personal victimization*. Cambridge, MA: Ballinger.

Hipp, J. R. (2010). Resident perceptions of crime and disorder: How much is "bias", and how much is social environment differences? *Criminology*, 48, 475-508.

Hughes, M. R., Gaines, J. S., & Pryor, D. W. (2015). Staying away from school: Adolescents who miss school due to feeling unsafe. *Youth Violence and Juvenile Justice*, 13, 270-290.

Hutchison, P., Kruger, D., Monroe, M., Morrel-Samuels, S., & Reischl, T. (2007). Assault injury rates, social capital, and fear of neighborhood crime. *Journal of Community Psychology*, 35, 483-498.

Jackson, J. (2009). A psychological perspective on vulnerability in the fear of crime. *Psychology, Crime & Law*, 15(4), 365-390.

Kohm, S. A., Waid-Lindberg, C. A., Weinrath, M., Shelley, T. O. C., & Dobbs, R. R. (2012). The impact of media on fear of crime among university students: A cross-

national comparison. *Canadian Journal of Criminology and Criminal Justice*, 54, 67-100.

Kowarski, I. (2020). 10 colleges with the highest in-state tuition. U.S. News & World Report. Retrieved from <https://www.usnews.com/education/best-colleges/the-short-list-college/articles/colleges-with-the-highest-in-state-tuition>.

Kuo, M., Adlaf, E. M., Lee, H., Gliksman, L., Demers, A., & Wechsler, H. (2002). More Canadian students drink but American students drink more: Comparing college alcohol use in two countries. *Addiction*, 97, 1583-1592.

LaGrange, R.L., Ferraro, K. F., & Supancic, M. (1992). Perceived risk and fear of crime: Role of social and physical incivilities. *Journal of Research in Crime and Delinquency*, 29, 311-334.

Lai, Y. L., Ren, L., & Greenleaf, R. (2017). Residence-based fear of crime: A routine activities approach. *International Journal of Offender Therapy and Comparative Criminology*, 61(9), 1011-1037.

Lane, J., & Fox, K. A. (2012). Fear of crime among gang and non-gang offenders: Comparing the effects of perpetration, victimization, and neighborhood factors. *Justice Quarterly*, 29, 491-523.

Lee, E. A. S. (2017). The Clery Act on campus: Status update and gender implications. *New Directions for Community Colleges*, 2017(179), 59-66.

Lee, S. M., & Boyd, M. (2008). Marrying out: Comparing the marital and social integration of Asians in the US and Canada. *Social Science Research*, 37, 311-329.

Liska, A. E., Sanchirico, A. and Reed, M. A. (1988). Fear of crime and constrained behaviour: Specifying and estimating a reciprocal effects model. *Social Forces*, 66, 760-770.

Maier, S. L., & DePrince, B. T. (2020). College students' fear of crime and perception of safety: The influence of personal and university prevention measures. *Journal of Criminal Justice Education*, 31(1), 63-81.

Merianos, A. L., King, K. A., & Vidourek, R. A. (2017). Student perceptions of safety and helpfulness of resources. *American Journal of Health Studies*, 32, 90-101.

Mesch, G. S. (2000). Perceptions of risk, lifestyle activities, and fear of crime. *Deviant Behavior*, 21(1), 47-62.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual

populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697.

Moylan, C. A., & Javorka, M. (2020). Widening the lens: An ecological review of campus sexual assault. *Trauma, Violence, & Abuse*, 21(1), 179-192.

Moylan, C. A., Javorka, M., Bybee, D., Stotzer, R. L., & Carlson, M. (2019). Campus-level variation in the prevalence of student experiences of sexual assault and intimate partner violence. *Journal of the Society for Social Work and Research*, 10, 397-421.

National Center for Education Statistics (NCES). (2019). The price of attending an undergraduate institution. *U.S. Department of Education*. Retrieved from https://nces.ed.gov/programs/coe/indicator_cua.asp.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.

Perkins, D. D., & Taylor, R. B. (2002). Ecological assessments of community disorder: Their relationship to fear of crime and theoretical implications. In *Ecological research to promote social change* (pp. 127-170). Springer, Boston, MA.

Plassa, W., & da Cunha, M. S. (2014). Fear of crime, violence, and school performance: An analysis of the probability of school failure in Brazil. *Revista Econômica*, 21(1), 1-20.

Quinlan, E., Clarke, A., & Miller, N. (2016). Enhancing care and advocacy for sexual assault survivors on Canadian campuses. *The Canadian Journal of Higher Education*, 46(2), 40.

Rader, N. E., Rogers, S. A., & Cossman, J. S. (2020). Physical health, mental health, and fear of crime among college students: A consideration of sex differences. *Violence Against Women*, 26, 3-23.

Reese, B. (2009). Determinants of the fear of crime: The combined effects of country-level crime intensity and individual-level victimization experience. *International Journal of Sociology*, 39, 62-75.

Rengifo, A. F., & Bolton, A. (2012). Routine activities and fear of crime: Specifying individual-level mechanisms. *European Journal of Criminology*, 9(2), 99-119.

- Rollwagen, H. (2016). The relationship between dwelling type and fear of crime. *Environment and Behavior*, 48, 365-387.
- Rotheram-Borus, M. J., Rosario, M., Van Rossem, R., Reid, H., & Gillis, R. (1995). Prevalence, course, and predictors of multiple problem behaviors among gay and bisexual male adolescents. *Developmental Psychology*, 31, 75-85.
- Rountree, P. W. (1998). A reexamination of the crime-fear linkage. *Journal of Research in Crime and Delinquency*, 35, 341-372.
- Rowe, M. (2016). Comparing apples to peaches: Cities in the United States and Canada. *The Nature of Cities*. Retrieved from <https://www.thenatureofcities.com/2016/04/04/comparing-apples-to-peaches-cities-in-the-united-states-and-canada/>.
- Russo, S., Roccato, M., & Vieno, A. (2013). Criminal victimization and crime risk perception: A multilevel longitudinal study. *Social Indicators Research*, 112, 535-548.
- Schwartz, M. D., DeKeseredy, W. S., Tait, D. & Alvi, S. (2006). Male peer support and a feminist routing activities theory: Understanding sexual assault on the college campus, *Justice Quarterly*, 18, 623 - 649.
- Sironi, E., & Bonazzi, L. M. (2016). Direct victimization experiences and fear of crime: A gender perspective. *Peace Economics, Peace Science and Public Policy*, 22(2), 159-172.
- Shippee, N. D. (2012). Victimization, fear of crime, and perceived risk: Testing a vulnerability model of personal control. *Sociological Perspectives*, 55(1), 117-140.
- Skogan, W. (1986). Fear of crime and neighborhood change. *Crime and Justice*, 8, 203-229.
- Stafford, M. C., & Galle, O. R. (1984). Victimization rates, exposure to risk, and fear of crime. *Criminology*, 22(2), 173-185.
- Statista Research Department. (2019a). Rate of homicide in Canada and the United States 2000-2018. Retrieved from <https://www.statista.com/statistics/526539/canada-us-homicide-rate>
- Statista Research Department. (2019b). Canada: violent crime rate, by type 2018. Retrieved from <https://www.statista.com/statistics/524500/canada-violent-crime-rate-by->

type/

Stuart, M., Lido, C., Morgan, J., Solomon, L., & May, S. (2011). The impact of engagement with extracurricular activities on the student experience and graduate outcomes for widening participation populations. *Active Learning in Higher Education*, 12, 203-215.

Statistics Canada. (2020). Table 37-10-0120-01: Undergraduate tuition fees, Canadian students, by selected standard geographic areas and by field of study. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710012001>

Stiles, B. L., Halim, S., & Kaplan, H. B. (2003). Fear of crime among individuals with physical limitations. *Criminal Justice Review*, 28(2), 232-253.

Symbol of Statistics Canada. (2020). Tuition fees for degree programs, 2019/2020. *Symbol of the Government of Canada*. Retrieved from <https://www150.statcan.gc.ca/n1/daily-quotidien/190904/dq190904b-eng.htm>

Tasci, A. D., & Sönmez, S. (2019). Lenient gun laws, perceived risk of gun violence, and attitude towards a destination. *Journal of Destination Marketing & Management*, 13, 24-38.

Uniform Crime Report (UCR). (2018). 2018 Crime in the United States. *Federal Bureau of Investigation (FBI)*. Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s.-2018/topic-pages/aggravated-assault>.

Van Dyke, N., & Tester, G. (2014). Dangerous climates: Factors associated with variation in racist hate crimes on college campuses. *Journal of Contemporary Criminal Justice*, 30(3), 290-309.

Volkwein, J. F., Szelest, B. P., & Lizotte, A. J. (1995). The relationship of campus crime to campus and student characteristics. *Research in Higher Education*, 36, 647-670.

Weikle, B. (2016). *Universities face increasing pressure to address campus sexual assault*. Canadian Broadcasting Company, retrieved from <http://www.cbc.ca/news/canada/campus-sexualassault-1.3750355>

Weinrath, M. (2000). Violent victimization and fear of crime among Canadian Aboriginals. *Journal of Offender Rehabilitation*, 30(1-2), 107-120.

Wooldridge, J. (2009). *Introductory econometrics: A modern approach* (4th ed.).
Mason, OH: South-Western College Publishing.

Table 1. Descriptive Statistics of the Total Sample, U.S. Sample, and Canadian Sample of College Students				
	Total Sample (n=134,797)	U.S. (n=108,754)	Canada (n=26,043)	Test Statistic
	% (N)	% (N)	% (N)	χ^2 or t
Dependent Variables				
Safe on Campus				133.877**
Safe	81.09 (109,303)	80.43 (84,307)	83.40 (24,996)	
Unsafe	18.91 (25,494)	19.57 (20,517)	16.60 (4,977)	
Safe in Community				415.76**
Safe	61.36 (82,715)	59.92 (62,807)	66.42 (19,908)	
Unsafe	38.64 (52,082)	40.08 (42,017)	33.58 (29,973)	
Safe During Day				379.21***
Safe	93.86 (126,524)	93.18 (97,671)	96.24 (28,847)	
Unsafe	6.14 (8,273)	6.82 (7,147)	3.76 (1,126)	
Safe at Night				455.39**
Safe	59.42 (80,102)	57.90 (60,691)	64.76 (19,411)	

Unsafe	40.58 (54,695)	42.10 (44,133)	35.24 (10,562)	
Independent Variables				
Violent Victimization	19.32 (26,043)	18.85 (19,762)	20.96 (6,281)	66.13**
Stalking Victimization	21.91 (29,528)	21.42 (22,455)	23.60 (7,073)	64.63**
Sexual Victimization	7.19 (9,697)	6.99 (7,323)	7.92 (2,374)	30.49**
Greek Membership	8.26 (11,139)	9.87 (10,348)	2.64 (791)	1600**
Gender				84.09**
Female	66.15 (89,166)	65.52 (36,147)	66.36 (20,489)	
Male	33.63 (45,329)	34.26 (35,909)	31.43 (9,420)	
Transgender	.22 (302)	.23 (238)	.21 (64)	
Sexual Orientation (1=non-heterosexual)	9.01 (12,141)	8.95 (9,378)	9.22 (2,763)	2.10
Mental Health Issue	20.53 (27,797)	20.92 (21,927)	19.17 (5,745)	43.79**
Disability	9.71 (13,084)	9.70 (10,163)	9.75 (2,921)	.07
Locale Size (1=500,000+)	29.90 (40,308)	28.67 (30,048)	34.23 (10,260)	344.45**
School Size (1=20,000+)	45.07 (60,759)	43.62 (45,720)	50.18 (15,039)	405.05**
Living Off Campus	46.67 (62,905)	44.63 (46,779)	53.80 (16,126)	788.44**

Living in Fraternity	.83 (1,120)	1.02 (1,064)	.19 (56)	194.03**
Living Parents	21.08 (28,419)	18.33 (19,210)	30.72 (9,209)	2200**
Living On Campus (referent)	31.26 (42,144)	35.87 (37,599)	15.16 (4,545)	4600**
Age ¹	22.83 (6.28)	22.68 (6.11)	22.73 (5.63)	-1.20
Race/Ethnicity				
White (referent)	64.42 (86,834)	61.40 (64,363)	74.97 (22,471)	1900**
Black	4.36 (5,878)	4.97 (5,205)	2.25 (673)	413.52**
Hispanic	7.86 (10,591)	9.75 (10,217)	1.25 (374)	2300**
Asian	11.79 (15,886)	11.96 (12,535)	11.18 (3,351)	13.57**
Multiracial	9.38 (12,645)	9.83 (10,302)	7.82 (2,343)	110.87**
Other Minority	2.20 (2,963)	2.10 (2,202)	2.54 (761)	20.83**
Single	49.02 (66,077)	49.18 (51,551)	48.46 (14,526)	4.77*

¹ Mean and standard deviation reported; *p<.05, **p<.001

Table 2: Logistic Regression Examining Safety on Campus and in the Community						
	On Campus	In Community				
	Total	U.S.	Canada	Total	U.S.	Canada

	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)
Variable						
Canada	.75 (.56-1.00)	-	-	.74* (.57-.96)	-	--
Violent Victimization	.94 (.87-1.01)	.92 (.85-1.00)	.97 (.83-1.14)	.93 (.87-1.00)	.93 (.85-1.01)	.94 (.82-1.09)
Stalking Victimization	1.53*** (1.42-1.65)	1.51*** (1.39-1.65)	1.58*** (1.39-1.79)	1.45*** (1.34-1.56)	1.41*** (1.29-1.54)	1.59*** (1.40-1.80)
Sexual Victimization	1.19*** (1.12-1.26)	1.20*** (1.13-1.28)	1.15 (.98-1.33)	1.24*** (1.17-1.31)	1.24*** (1.16-1.32)	1.24*** (1.12-1.38)
Greek Membership	1.19*** (1.08-1.31)	1.18** (1.07-1.30)	1.19* (1.03-1.38)	1.29*** (1.17-1.43)	1.30*** (1.17-1.45)	1.12 (.96-1.30)
Gender						
Male ^t	.33*** (.30-.36)	.35*** (.32-.38)	.23*** (.20-.26)	.48*** (.44-.52)	.52*** (.48-.57)	.32*** (.28-.35)
Transgender	.80 (.60-1.06)	.74 (.52-1.07)	.99 (.71-1.38)	.79 (.62-1.02)	.79 (.59-1.06)	.80 (.49-1.30)
Sexual Orientation ^t	.98 (.92-1.05)	.95 (.88-1.03)	1.09 (.98-1.22)	1.00 (.94-1.06)	.97 (.90-1.03)	1.14* (1.03-1.26)
Mental Health Issue	1.22*** (1.17-1.27)	1.19*** (1.14-1.25)	1.32*** (1.19-1.45)	1.16*** (1.12-1.21)	1.15*** (1.09-1.20)	1.23*** (1.17-1.30)

Disability	1.25*** (1.18-1.32)	1.23*** (1.17-1.31)	1.30*** (1.13-1.48)	1.15*** (1.10-1.21)	1.13*** (1.07-1.20)	1.23*** (1.14-1.32)
Locale Size (1=500,000+)	.70 (.48-1.02)	.70 (.44-1.13)	.74 (.47-1.15)	.93 (.63-1.37)	.92 (.56-1.52)	.93 (.63-1.37)
School Size (1=20,000+)	1.28 (.99-1.64)	1.35* (1.01-1.81)	1.02 (.65-1.59)	1.40 (.85-1.52)	1.19 (.83-1.70)	.99 (.70-1.41)
Living Off Campus ^t	1.47*** (1.30-1.65)	1.52*** (1.33-1.73)	1.18* (1.02-1.37)	1.06 (.95-1.19)	1.09 (.96-1.23)	.94 (.81-1.09)
Living in Fraternity	1.78*** (1.46-2.16)	1.82*** (1.49-2.21)	.98 (.39-2.50)	1.44** (1.10-1.89)	1.47** (1.10-1.96)	.78 (.40-1.51)
Living Parents	1.91*** (1.61-2.25)	1.90*** (1.57-2.31)	1.69*** (1.30-2.18)	.99 (.84-1.17)	.95 (.77-1.16)	1.05 (.85-1.29)
Age ^t	.98*** (.97-.99)	.98*** (.97-.99)	1.00 (.99-1.01)	.97*** (.96-.97)	.96*** (.96-.97)	.97*** (.96-.98)
Race/Ethnicity						
Black	1.52*** (1.26-1.83)	1.51*** (1.23-1.54)	1.51*** (1.22-1.88)	.94 (.79-1.10)	.92 (.76-1.12)	1.01 (.81-1.27)
Hispanic	1.39*** (1.17-1.66)	1.38*** (1.16-1.64)	1.50* (1.10-2.05)	.99 (.83-1.17)	.99 (.83-1.18)	1.11 (.87-1.42)
Asian	1.43*** (1.29-1.59)	1.37*** (1.22-1.54)	1.67*** (1.34-2.08)	1.38*** (1.23-1.55)	1.30*** (1.13-1.50)	1.73*** (1.49-2.04)
Multiracial	1.09* (1.02-1.17)	1.08 (1.00-1.17)	1.11* (1.02-1.22)	.97 (.90-1.04)	.94 (.86-1.02)	1.10* (1.02-1.18)

Other	1.49*** (1.33-1.67)	1.45*** (1.27-1.66)	1.55*** (1.27-1.89)	1.13* (1.01-1.26)	1.06 (.93-1.21)	1.34** (1.11-1.62)
Single	.75*** (.72-.77)	.74*** (.71-.77)	.77*** (.71-.82)	.84*** (.81-.86)	.83*** (.81-.86)	.85*** (.80-.90)
Log pseudolikeli hood				-86752.27	-68553.73	-17988.46

*p<.05, **p<.01, ***p<.001

^t interaction term between country (US/Canada) and variable significant at p<.05

Table 3: Logistic Regression Examining Safety During the Day and at Night						
	Safety During Day	Safety at Night				
	Total	U.S.	Canada	Total	U.S.	Canada
	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)	Odds Ratio (CI)
Variable						
Canada	.55* (.33-.90)	-	--	-	-	-
Violent Victimization	1.04 (.92-1.18)	1.04 (.91-1.19)	1.04 (.76-1.43)	.91* (.83-.99)	.97 (.85-1.12)	.91* (.83-.99)

Stalking Victimization	1.44*** (1.29-1.62)	1.43*** (1.26-1.62)	1.56** (1.17-2.07)	1.47*** (1.35-1.60)	1.58*** (1.39-1.79)	1.47*** (1.35-1.60)
Sexual Victimization	1.44*** (1.32-1.57)	1.42*** (1.29-1.57)	1.54*** (1.27-1.86)	1.24*** (1.17-1.33)	1.23*** (1.10-1.38)	1.24*** (1.17-1.33)
Greek Membership	1.32*** (1.16-1.49)	1.29*** (1.13-1.48)	1.44* (1.00-2.06)	1.29*** (1.16-1.43)	1.13 (.96-1.32)	1.29*** (1.16-1.43)
Gender						
Male ^t	.86*** (.80-.93)	.89** (.82-.96)	.70*** (.59-.83)	.49*** (.45-.53)	.30*** (.27-.34)	.49*** (.45-.53)
Transgender	2.44*** (1.81-3.29)	2.38*** (1.68-3.38)	2.58*** (1.53-4.34)	.72* (.55-.94)	.69 (.42-1.14)	.72* (.55-.94)
Sexual Orientation ^t	1.00 (.91-1.10)	.94 (.85-1.04)	1.35*** (1.15-1.59)	.99 (.93-1.06)	1.15** (1.04-1.27)	.99 (.93-1.06)
Mental Health Issue	1.23*** (1.16-1.49)	1.18*** (1.11-1.27)	1.55*** (1.32-1.81)	1.16*** (1.10-1.21)	1.25*** (1.20-1.31)	1.16*** (1.10-1.21)
Disability	1.23*** (1.13-1.34)	1.20*** (1.10-1.32)	1.42** (1.15-1.75)	1.15*** (1.08-1.21)	1.24*** (1.14-1.35)	1.15*** (1.08-1.21)
Locale Size (1=500,000 +)	1.09 (.74-1.61)	1.14 (.73-1.79)	.83 (.41-1.70)	.87 (.53-1.44)	.91 (.62-1.34)	.87 (.53-1.44)
School Size (1=20,000+)	.85 (.61-1.18)	.91 (.64-1.30)	.59 (.31-1.15)	1.20 (.84-1.70)	1.01 (.71-1.44)	1.20 (.84-1.70)
Living Off Campus ^t	.92 (.80-1.07)	.97 (.83-1.13)	.62*** (.49-.78)	1.11 (.98-1.25)	.97 (.82-1.13)	1.11 (.98-1.25)

Living in Fraternity	1.36 (.98-1.89)	1.39** (.99-1.95)	1.01 (.36-2.87)	1.47** (1.13-1.91)	.82 (.42-1.60)	1.47** (1.13-1.91)
Living Parents	1.21 (.98-1.49)	1.19 (.94-1.50)	1.18 (.85-1.63)	1.04 (.86-1.27)	1.09 (.96-1.32)	1.04 (.86-1.27)
Age ^t	1.00 (.99-1.00)	.99* (.98-1.00)	1.02 (.99-1.04)	.97*** (.96-.98)	.97*** (.96-.98)	.97*** (.96-.98)
Race/Ethnicity						
Black	1.65*** (1.30-2.10)	1.58** (1.22-2.05)	2.46*** (1.79-3.37)	.96 (.80-1.17)	1.02 (.80-1.29)	.96 (.80-1.17)
Hispanic	1.21* (.96-1.51)	1.18 (.94-1.49)	1.51 (.94-2.41)	1.04 (.88-1.23)	1.19 (.92-1.53)	1.04 (.88-1.23)
Asian	1.71*** (1.49-1.98)	1.57*** (1.34-1.83)	2.66*** (2.19-3.22)	1.32*** (1.15-1.52)	1.72*** (1.44-2.05)	1.32*** (1.15-1.52)
Multiracial	1.15* (1.01-1.30)	1.11 (.97-1.28)	1.35* (1.07-1.70)	.96 (.88-1.05)	1.10** (1.03-1.18)	.96 (.88-1.05)
Other	1.64*** (1.38-1.95)	1.51*** (1.24-1.84)	2.27*** (1.62-3.18)	1.11 (.98-1.25)	1.37*** (1.15-1.62)	1.11 (.98-1.25)
Single	.82*** (.77-.86)	.80*** (.76-.85)	.92 (.77-1.09)	.74*** (.71-.77)	.82*** (.78-.88)	.74*** (.71-.77)
Log pseudolikelihood	-86752.27	-25783.85	-4562.35	-69091.86	-18241.67	-69091.86

*p<.05, **p<.01, ***p<.001

^tinteraction term between country (US/Canada) and variable significant at .05

Footnotes

1. The average cost of attending college in the U.S. full-time at private nonprofit institutions was \$35,900 in 2018/2019 (NCES, 2020). Further, tuition at public universities in Canada is dependent on field of study as well as provincial location, with \$10,193 being the highest average cost of tuition (Statistics Canada, 2020). Comparatively, the 10 most expensive public institutions of higher learning in the U.S. had an average tuition of about \$19,200 (Kowarski, 2020). [↵](#)
2. We also note that comparisons across studies and countries is difficult given the differences in measurement and question wording used. [↵](#)
3. The average percent missing on our variables was 1.55%. Only one variable had greater than 5% missing, which was an indicator of mental health diagnosis. Because of the small amount of missing data on any one variable and our very large sample, we performed a complete case analysis, rather than handling missing data other ways. Given the sample size, we do not have concerns about power [↵](#)
4. The sample size changes slightly across models due to missing cases on the dependent variables. Sample sizes are noted in the tables. [↵](#)