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The Role of Culture in Mental Illness Perspectives in the Quebec Population

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Abstract

The study assesses the variations in perspectives toward mental illness in the Quebec general population. The study sampled 293 individuals living within the province of Quebec, targeting a culturally diverse sample. They were sampled through a small liberal arts university and community associations. The study used a quantitative self-report approach comprising questions regarding cultural background (e.g., ethnicity) and personal factors (e.g., education level) as well as perspectives, knowledge, and behaviors towards mental illness. Significant differences in perspectives towards mental illness emerged for cultural background based on time spent in Canada, for knowledge (greater knowledge associated with more positive perspectives towards mental illness), and multiple personal factors, except for gender. The results provide a more comprehensive view of variations based on cultural background and personal factors associated with mental illness stigma in the Quebec population.

Keywords: Cross-cultural psychology, mental illness stigma, cultural perceptions towards mental illness

The Role of Culture in Mental Illness Perspectives in the Quebec Multi-Ethnic Population

Mental illness is the leading cause of disability in Canada (Canadian Mental Health Association (n.d.)) and is considered one of the main causes of disability worldwide, touching over 10% of the population (Ritchie & Roser, 2018; World Health Organization, 2019). Sadly, mental illness is inextricably linked to stigma to this day which further exacerbates the issue (Thornicroft et al., 2007). Much work has been done in Canada and elsewhere to reduce mental health related stigma and discrimination and improve accessibility to necessary resources whether in the workplace through training programs such as Mental Health Awareness Training (Dimoff, Kelloway, & Burnstein, 2016), in communities with Mental Health First Aid (Morgan et al., 2018), or even legally with the Charter of Human Rights and Freedom providing equal importance to mental and physical disabilities (Act, 1982). Nevertheless, stigma is still present, with a recent survey reporting that 46% of Canadians view mental illness as a condition people use to excuse bad behavior (Dimoff & Kelloway, 2019).

Arguably, the problem of stigma towards mental illness is itself critically linked with one's cultural belief system which, as Gersten (1997) has noted, influences not just how mental illness will be diagnosed and treated but also its related psychological consequences (i.e., the experience of the mental illness). Extensive research has focused on addressing concerns related to stigma towards mental illness, however, it mostly focuses on the perspective of those suffering from it, and only more recently has started incorporating cultural concerns (Clement et al., 2015). For example, Clement et al.'s (2015) meta-analysis has demonstrated that stigma toward mental illness has a small to moderate negative effect on seeking help and treatment. It is well documented that stigma creates a barrier in seeking and receiving adapted mental health care in Canada (Knaak et al., 2017) while further contributing to self-stigma in individuals suffering from mental illness (Vogel et al., 2013). However, the path from stigma to treatment seeking is unclear. First, it is important to understand how stigma is defined. It comprises two general elements, public stigma and self-stigma. Surprisingly, self-stigma rather than public stigma appears to limit individuals the most in seeking out treatment according to a recent meta-analysis (Schnyder et al., 2017). Thus, interventions to reduce stigma towards mental illness must consider personal attitudes and beliefs.

Very few studies have thus far examined the factors associated with stigmatizing attitudes (Furnham & Wong, 2007; Kurihara et al., 2000), yet many individuals suffering from mental illness tend to become isolated and feel rejected from their social network (Dixon et al., 2016), and, furthermore, they resist going to consult a mental health practitioner, particularly first-generation immigrants, due to the stigma they experience or fear if they are identified as having a mental illness (Bauldry & Szaflarski, 2017; Chen et al., 2009). A better understanding of the factors related to the negative perspectives individuals harbor regarding mental illness would be helpful in increasing sensitivity and developing adequate

interventions to reduce stigma in the general population. But, of course, as an important step toward this goal we first need to develop a better understanding of what is and is not part of the stigma surrounding mental illness.

Defining Stigma

Stigma towards mental illness has been defined by leaders in the field as involving a lack of knowledge combined with related attitudes (prejudice) and behaviors (discrimination) (Thornicroft et al., 2007). This definition summarizes well the work of Taylor and Dear who were in the first, 40 years ago, to address stigmatizing attitudes towards mental illness from a general population perspective (Taylor & Dear, 1981). Taylor and Dear (1981) adapted questionnaires tailored to hospital personnel and medical students to the general population in Canada. They operationalized stigma as a combination of four components: authoritarianism, benevolence, social restrictiveness, and community mental health ideology (CMHI). The presence of stigma involved high levels of authoritarianism and social restrictiveness and low levels of benevolence and community mental health ideology Authoritarianism relates to seeing individuals with mental illness as inferior and requiring "coercive handling." Benevolence refers to having a positive paternalistic view, seeing individuals with mental illness sympathetically, which stems from humanistic and religious principles. Social restrictiveness relates to viewing individuals with mental illness as threatening to society. Lastly, CMHI refers to a framework where individuals value the presence of mental health services and the integration of individuals with mental illness within the community. They revised multiple questions from already existing questionnaires, including the Opinions about Mental Illness (OMI) and Community Mental Health Ideology (CMHI) questionnaires, and developed their own questions where no available questions related to their population of interest, to create the Community Attitudes towards the Mentally Ill (CAMI) questionnaire. Factors that were associated with differences on the CAMI scale included gender, age, marital status, age of children, educational and occupational status, tenure, regular church attendance and denomination, and personal knowledge of mental health care. Income was not a significant predictor of attitudes toward mental illness nor was having children over 18 years old. Based on these results, Taylor and Dear (1981) assessed how individuals would vary in their openness to having mental health services in their community using both attitudinal and behavioral approaches.

A review of the literature since Taylor and Dear's work highlights various factors related to stigmatizing attitudes towards mental illness and those suffering from it including religious affiliation (Koenig & Larson, 2001), education level (Girma et al., 2013), personality (Yuan et al., 2018), and gender (Taylor & Dear, 1981). However, one element that was not initially included but has since been shown to stand out is the relationship between cultural background and stigmatizing attitudes (Furnham & Wong, 2007; Kurihara et al., 2000). Interesting differences between cultures in factors associated with stigmatizing attitudes towards mental illness have been observed in highly diverse countries including England

(Bhavsar et al., 2019), Ethiopia (Girma et al., 2013), and Slovakia (Letovancová et al., 2017) and it would be valuable to explore it's expression in the Quebecois population.

Beliefs Regarding Mental Illness in Different Cultures

As described previously by Gersten (1997), cultures vary in their understanding, perception, and treatment of mental illness. A qualitative interview performed in the USA comparing White Americans with Hispanic and Asian Americans highlighted differences in the causes attributed to mental illness (Bignall et al., 2015). For all groups, personal characteristics, and traits (e.g., laziness) were the most common believed causes. When looking at individual groups, Hispanics identified spiritual causes and normalization (i.e., recognizing the behaviors as normal – e.g., "that's just how people are") as the main factors contributing to the development of mental illness while Asian Americans identified normalization as the main cause. Lastly, White American participants identified trauma as the main cause of mental illness. In contrast, a comparison of British (in England) and Chinese (in China and Hong Kong) populations' perspectives regarding schizophrenia identified that the British viewed biological and social factors as major factors in both causes and treatments of schizophrenia while the Chinese viewed superstition as the main cause and treatment for schizophrenia (Furnham and Wong, 2007). Broadening the scope to Africa, the main causes attributed to mental illness in Malawi include drug or alcohol misuse, possession by evil spirits, and traumatic events or shock (Crabb et al., 2012) while in Ethiopia, the main causes attributed to mental illness include stress, poverty, and rumination which community members explained that they identified by witnessing individuals talking to themselves, engaging in self-neglect, or talking too much (Girma et al., 2013).

Beyond Cultural Barriers: Personal Factors as Predictors of Stigmatizing Attitudes

Perceptions regarding mental illness tend to differ between cultures as demonstrated through the literature in the prior sections. However, cultural differences may not be a sufficient explanation for the differences between individuals in attitudes towards mental illness. Various personal factors also appear to play a role such as education level, age, and gender and have been documented for many years (Girma et al., 2013; Koenig & Larson, 2001; Taylor & Dear, 1981).

Education level is associated with differences in perspectives towards mental illness, with higher education associated with more positive perspectives towards mental illness in Ethiopia (Girma et al., 2013), Slovakia, (Letovancová et al., 2017), and Canada (Taylor and Dear, 1981). Additionally, considering age, older individuals have been identified as more authoritarian and socially restrictive, while being less benevolent and community mental health oriented, demonstrating more negative attitudes (Taylor and Dear, 1981). This finding

has been replicated in other countries including Pakistan with university students (Khan et al., 2016) and in Slovakia with community members (Letovancová et al., 2017). In contrast, older age was associated with lower stigma towards mental illness in Ethiopia and England (Bhavsar et al., 2019; Girma et al., 2013). Lastly, regarding sex, women have traditionally demonstrated more positive attitudes towards mental illness than men in Canada (Taylor & Dear, 1981) and abroad in the Czech Republic, England, and Slovakian general populations (Bhavsar et al., 2019; Letovancová et al., 2017; Winkler et al., 2016), in Pakistani students (Khan et al., 2016), and in Spanish children (Vila-Badia et al., 2016). Nevertheless, no sex-based differences emerged in the Ethiopian or Malawian populations (Crabb et al., 2012; Girma et al., 2013).

Additional personal factors that have been shown to be related to mental illness stigma include marital status, religious affiliation, and personality. These factors have not been studied as much but still demonstrate potentially interesting differences between individuals and may play a role in explaining the factors associated with the development of stigmatizing attitudes. In Taylor and Dear's (1981) study, married and widowed individuals held less sympathetic views than single, separated, and divorced individuals. Although it has not been explored much since then, it would be valuable to explore further as it may explain the age differences if responsibilities such as children and household care are considered. Certain personality traits appear to be associated with stigmatizing attitudes. A study performed by Yuan et al. (2018) in Singapore assessed the relationship between stigma towards mental illness and the International Personality Item Pool-five factor model. Overall, the results showed a negative association between stigma and agreeableness and openness to experience while certain aspects of stigma were positively correlated with extraversion, conscientiousness, and neuroticism. It is undoubtedly an aspect that must be explored more before definitive conclusions can be made.

Furthermore, religious affiliation has been shown to yield significant differences based on frequency of church attendance and types of denominations with frequent attendees showing less sympathetic attitudes, related to higher authoritarianism and social restrictiveness and lower benevolence and community mental health ideology (CMHI) (Taylor & Dear, 1981). These results, however, differed based on denominations with Pentecostal and Greek Orthodox groups showing the most authoritarian and least benevolent views while the Baptists and Salvation Army showed the least authoritarian views, with Baptist and United Church members showing the most benevolence (Taylor & Dear, 1981). A review of historical studies exploring the connection between religion and mental health by Koenig and Larson (2001) demonstrates that believers have demonstrated more anxious or depressive symptoms compared to non-believers in a few occasions and that religion has clearly been used to promote hatred or prejudice towards mental illness, yet other studies have shown beneficial aspects of religious affiliation for those suffering from mental illness as well as providing a more positive perspective of mental illness. Nonetheless, cultural differences are apparent towards the perceived usefulness of religion in coping with mental illness as well as its association with perceptions towards mental

illness with Americans reporting a more favorable perspective towards religion than Swedes (Koenig & Larson, 2001).

Familiarity with Mental Illness / Mental Health Services

Cultural factors are undoubtedly associated with differences in the environment, yet it is important to distinguish between the two as environmental factors may go beyond one's culture, especially as an individual acculturates to new and divergent cultures (Bauldry & Szaflarski, 2017). Environment encompasses "circumstances, objects, and conditions" surrounding an individual (Merriam-Webster, n.d.). A particularly striking element that emerges in various cultures consists of people's knowledge of and familiarity with mental health services. In Singapore, Spain, and Ethiopia, being more knowledgeable about mental health was associated with significant reductions in stigmatizing attitudes (Bedaso et al., 2016; Yuan et al., 2018; Vila-Badia et al., 2016). Furthermore, being familiar with mental health care services either by having used them personally or having someone close to you who has a mental illness and who has used them, has been associated with significantly more positive views towards mental illness in Canada and Slovakia (Letovancová et al., 2017; Taylor & Dear, 1981). In contrast, interaction with individuals who had a mental illness did not result in significant differences for Pakistani students (Khan et al., 2016). Furthermore, a social stigma intervention for adolescents performed in Spain revealed that knowing someone with a mental illness reduces authoritarianism and social restrictiveness scores significantly, considering the negative elements of perspectives towards mental illness (Vila-Badia et al., 2016).

The Present Study

Extensive research has been conducted regarding mental illness stigma, particularly from the perspective of victims. However, more recently, the research field has also directed its attention to address the causes and factors related to stigmatizing attitudes to better understand the phenomenon of stigma and further reduce the presence of stigma in society and through this research, many countries have been identified as demonstrating stigmatizing attitudes towards mental illness with both shared and unique factors. Nonetheless, to this day, very little research has focused on the population of Quebec. Quebec welcomes thousands of immigrants every year and is considered an ethnodiverse province (Duffin, 2019). Thus, it is valuable to explore how perspectives towards mental illness vary within Quebec from a cultural perspective.

The purpose of this study was to broaden awareness and sensitivity towards mental illness in the Quebec public by assessing the general population's perspectives toward mental illness including their awareness of mental illness and behaviors towards individuals suffering from mental illness. The following hypotheses were presented for the current study

based on previous literature:

(1) Stigmatizing attitudes towards mental illness will emerge in the Quebec population with statistically significant differences between cultural groups, and more specifically between recent immigrants, long-term immigrants to Quebec, and non-immigrant Quebecers.

(2) Greater knowledge about mental illness or experience with mental health services will be associated with more positive attitudes towards mental illness, while having little or no knowledge or experience with mental health services will be associated with more negative attitudes towards mental illness.

(3) Personal factors beyond culture will be related to perspectives towards mental illness. It is expected that significant differences will emerge based on personality scores, as well as gender, age, educational level, and religious affiliation in support of previous literature. However, the direction of the effect is unclear as results have been inconsistent across different cultural groups.

Methods

The current study assessed how various cultural groups residing within Quebec varied in their perception of mental illness and those suffering from it - as well as how those differences were associated with knowledge about mental illness and behaviors towards individuals suffering from mental illness using a quantitative self-report questionnaire approach. Culture was defined both in terms of ethnicity and in the duration of time spent in Canada, being consistent with previous acculturation literature which posits that the longer someone lives in a culture, the more they become acculturated to it (Cheung et al., 2011). It also explored how the differences in perceptions could be explained by individual and environmental differences including personality, religious affiliation, and personal experience with mental health services.

Participants

The sample consisted of 293 participants drawn from a small liberal arts university in Quebec, community organizations, local stores, arenas, and non-governmental immigration organizations within Quebec via convenience sampling. Participants were recruited through paper flyers, digital flyers on social media platforms, and by email. Data was collected from two groups of people – established Canadians (long-term immigrants – over 10 years - including white Canadians) and non-established Canadians (recent immigrants – 0-10 years). They were proficient in reading English or French and at least 14 years of age.

Materials

Demographics. A list of 17 relevant demographic questions was presented to participants. Sample questions included “what is your ethnicity?” and “what is your age?,” each with

unique answer options (see Table 1). The questions were selected based on previous research demonstrating associations with certain demographics and perceptions towards mental illness (e.g., Bhavsar et al., 2019; Taylor & Dear, 1981).

Table 1
Participant Demographics

Characteristic	*n*	%
Gender		
Male	77	26
Female	213	72
Other	1	.3
Prefer not to say	2	.7
Age		
14-24 years old	193	65.2
25-34 years old	49	16.6
35-44 years old	26	8.8
45-54 years old	15	5.1
Over 55 years old	10	3.4
Ethnicity		
White	209	70.6
Hispanic/Latino	11	3.7
Black	34	11.5
Native American/Indigenous	2	.7
Asian/Pacific Islander	9	3
Other	27	9
Prefer not to say	1	.3

Note. N = 293.

Community Attitudes towards Mental Illness (CAMI: Taylor & Dear, 1981). This 40-item scale measures stigma and attitudes of the participant towards mental illness using a 5-point Likert scale from “Strongly Disagree” to “Strongly Agree” with a “Prefer not to answer” option. Sample questions included “There is something about people with mental illness that makes it easy to tell them from normal people” and “We need to adopt a far more tolerant attitude toward people with mental illness in our society.” Due to the negative impact and connotation of words such as “mentally ill” (Granello & Gibbs, 2016), the terminology of the questionnaire has been modified in the following ways to ensure that the questionnaire has the same impact as it originally did: (1) All mentions of ‘mentally ill’ were converted to ‘people with mental illness’ or ‘mental illness’ as was appropriate, (2) the term ‘mental hospital’ was changed to ‘psychiatric hospital,’ and the term ‘become mentally ill’ was changed to ‘develop a mental illness.’ A recent review of stigma scales identified the CAMI as having good methodological quality with three of the four subscales having Cronbach's alpha coefficients above .70 which is in the acceptable range and is consistent with the coefficients from the

original study (.68 – .88) (Sastre-Rus et al., 2019). The current study showed strong reliability for the CMHI and Benevolence subscales with respective Cronbach's alphas of .84 and .77, and acceptable reliability for Social Restrictiveness and Authoritarianism with Cronbach's alphas of .68 and .57 respectively. The kurtosis of the social restrictiveness subscale was beyond the desirable range at 4.42 and could potentially explain why the reliability for this subscale is lower (see Table 2).

Mental Illness Knowledge Scale (MAKS: Evans-Lacko, Little, Meltzer, et al., 2010). This scale consists of 12 items on a 5-point Likert scale ranging from "Agree Strongly" to "Disagree Strongly", with options "Don't know" and "Prefer not to say" on the right extremity. It evaluates participants' knowledge of mental health and awareness of mental illness diagnoses with questions such as "If a friend had a mental health problem, I know what advice to give them to get professional help" and "People with severe mental health problems can fully recover." A recent systematic review demonstrated that the MAKS scale has strong content validity and reliability (Wei et al., 2016). The scale has been translated and used in Sweden and demonstrates acceptable reliability and validity with a Cronbach's alpha between .67 and .71 (Hansson et al., 2016). The current study showed acceptable reliability with a Cronbach's alpha of .50. The kurtosis was slightly beyond the desirable range at 3.59 and could potentially explain why the reliability is lower in the current study (see Table 2).

Reported and Intended Behaviour Scales (RIBS: Evans-Lacko, Rose, Little, et al., 2011). This 8-item scale assesses participants' reported (past and current) and intended (future) action-based discrimination toward people with mental illness. The first four questions use a "Yes/No" answer format with options "Don't know" and "Prefer not to say". The intended behavior uses a 5-point answer scale from "Agree Strongly" to "Disagree Strongly", with options "Don't know" and "Prefer not to say". Sample questions include "Do you currently have, or have you ever had, a neighbor with a mental health problem?" and "In the future, I would be willing to work with someone with a mental health problem." The scale has been translated and used in Sweden and demonstrates good reliability with a Cronbach's alpha between .85 and .87 (Hansson et al., 2016). It has also been used in England and demonstrates good test-retest reliability with a Lin's concordance statistic of .75 (Henderson et al., 2016). The intended behavior scale in the current study showed strong reliability with a Cronbach's alpha of .82. However, the kurtosis was beyond the desirable range at 4.16, thus the results must be interpreted cautiously (see Table 2).

Big Five Inventory (John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008). This 40-item scale assesses personality traits including openness to experience, extraversion, conscientiousness, neuroticism, and agreeableness using a 5-point Likert scale with options "Disagree Strongly" to "Agree Strongly". Sample items include: "I am someone who is talkative" and "I am someone who is depressed, blue." The scale has been used in cross-cultural samples with various translations and has yielded coefficient alphas between .70 to .80 and test–retest reliability between .75 to .90 (Benet-Martinez & John,

1998). In the current study, the extraversion, agreeableness, conscientiousness, neuroticism, and openness subscales showed good reliability with respective Cronbach's alphas of .83 (EX), .74 (AG), .79 (CO), .85 (NE), and .73 (OP) (see Table 2).

Table 2

Descriptive Statistics and Reliability Analysis for Scales Used in Study

				Normality	
Scale	*M*	*SD*	**α**	Skew	Kurtosis
Community Attitudes towards Mental Illness (CAMI)					
Authoritarianism	1.98	.54	0.57	0.74	1.22
Benevolence	4.31	.50	0.77	-0.91	0.78
Social Restrictiveness	1.89	.56	0.68	1.44	4.42
Community Mental Health Ideology (CMHI)	4.03	.63	0.84	-0.50	-0.10
Mental Health Knowledge Schedule (MAKS)					
Overall Knowledge	2.36	.76	0.50	1.22	3.59
Reported and Intended Behavior Scale (RIB)					
Future Behavior	1.76	.95	0.82	1.80	4.16
Neuroticism	3.17	.89	0.85	-0.12	-0.62
Openness	3.78	.59	0.73	-0.37	0.05
Balanced Inventory of Desirable Responding (BIDR)					
Self-Deceptive Enhancement (SDE)	5.72	3.29	0.70	0.55	-0.17
Impression Management (IM)	7.23	3.73	0.75	0.42	0.02

Balanced Inventory of Desirable Responding (BIDR: Paulhus, 1991). This 40-item scale uses two concepts to identify socially desirable responses, self-deceptive enhancement (SDE), reports that are positively biased, and impression management (IM), deliberate responses to appear well socially. The scale uses a 7-point Likert type scale with options "Not true", "Somewhat", and "Very true" at the far left, middle, and far right respectively. Sample items include: "My first impressions of people usually turn out to be right" and "I sometimes try to get even rather than forgive and forget." It was a useful tool in this study since it pertained to views that are not held in positive regard by society as thus some individuals may have felt hesitant to express their actual views. A review of the BIDR scale since its creation identified a reliability coefficient for the IM subscale of .74 and of .68 for the SDE subscale, and the overall scale had a good reliability coefficient at .80 (Li & Bagger, 2007). In the current study, the IM and SDE subscales demonstrated good reliability with Cronbach's alphas of .75 and .70 respectively (see Table 2).

Results

The goal of the study was to broaden awareness regarding factors associated with stigmatizing attitudes towards mental illness within Quebec. To achieve this goal, three hypotheses, addressing cultural differences, knowledge and behaviors, and personal characteristics, were presented and have been analyzed in this section.

Relationship Between Culture and Perspectives towards Mental Illness

It was hypothesized that (1) stigmatizing attitudes towards mental illness will emerge in the Quebec population with statistically significant differences between cultural groups, and more specifically between recent immigrants, long-term immigrants to Quebec, and non-immigrant Quebecers. Individuals who have spent more time in Quebec are expected to have lower scores on Authoritarianism and Social Restrictiveness. To test this hypothesis, an initial MANOVA analysis was performed and revealed a statistically significant difference between ethnicity and perspectives towards mental illness (see Table 3).

Table 3

Differences in Perspectives towards Mental Illness Based on Time Spent in Canada

Variable	Value	*f*	*Df*	*p*	η_p^2
Time in Canada	.876	2.41	16	.001*	.03

* $p < .05$. ** $p < .001$.

Table 4

Differences in Components of Perspectives towards Mental Illness Based on Time Spent in Canada

Item	*f*	*df*	*p*	η_p^2
Authoritarianism	6.21	4	< .001**	.08
Benevolence	2.34	4	.055	.03
Social Restrictiveness	5.52	4	< .001**	.07
CMHI	6.04	4	< .001**	.08

* $p < .05$. ** $p < .001$. *Note*: CMHI = Community Mental Health Ideology

Follow-up ANOVA tests revealed significant differences in three of the four components of attitudes towards mental illness, namely Authoritarianism, Social Restrictiveness, and Community Mental Health Ideology (see Table 4).

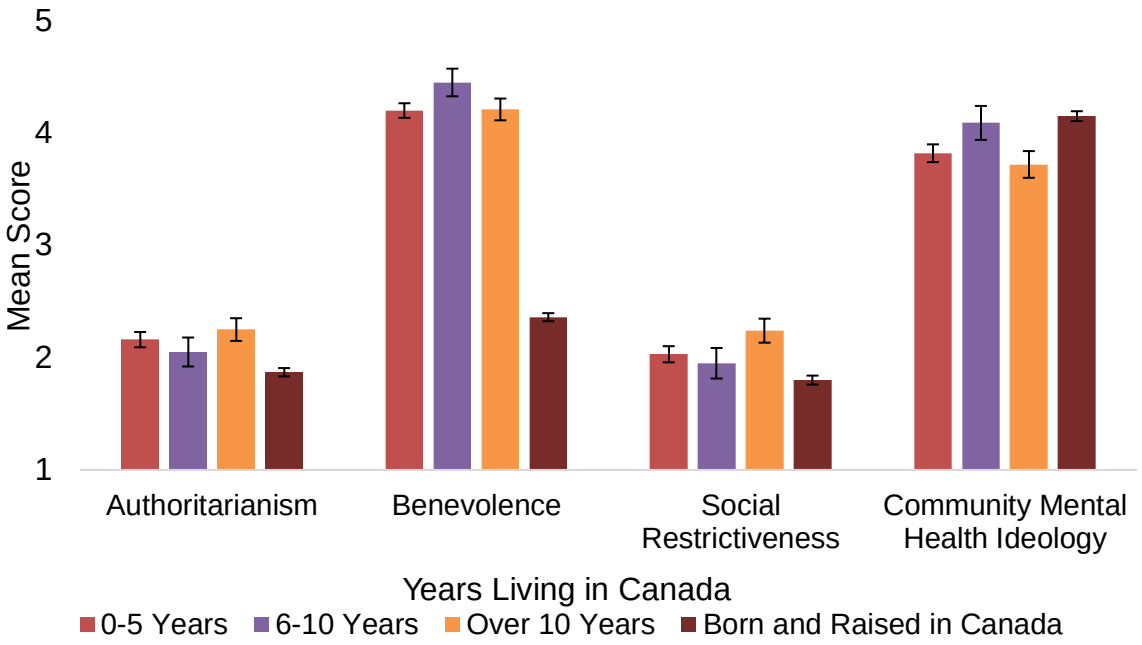
The pairwise comparisons for the main effect of time in Canada using a Bonferroni adjustment are below (see Figure 1). View footnote for a detailed analysis[1].

[1] For authoritarianism, differences emerged between groups 1 (0-5 years in Canada, M = 2.16) and 4 (born and raised in Canada, M = 1.87), $p = .003$, and between groups 3 (over 10 years in Canada, M = 2.25) and 4 (born and raised in Canada, M = 1.87), $p = .005$. Additionally, for social restrictiveness, differences emerged between groups 1(0-5 years in Canada, M = 2.03) and 4

This analysis partly supported hypothesis 1 in that CMHI was higher and authoritarianism and social restrictiveness were lower for individuals who had spent more time in Canada; however, no significant difference was found for benevolence.

Figure 1

Mean Differences in Perspectives towards Mental Illness Based on Years Living in Canada



Relationship Between Knowledge, Behaviors, and Perspectives towards Mental Illness

It was hypothesized that (2) greater knowledge about mental illness or experience with mental health services will be associated with more positive attitudes towards mental illness (higher benevolence and CMHI), while having little or no knowledge or experience with mental health services will be associated with more negative attitudes towards mental illness (higher authoritarianism and social restrictiveness).

Multiple linear regressions were conducted to assess whether knowledge about mental illness and intended future behavior predicted lower authoritarianism and social

(born and raised in Canada, M = 1.80), p = .049, and between groups 3 (over 10 years in Canada, M = 2.24) and 4 (born and raised in Canada, M = 1.80), p = .001. Overall, the authoritarianism and social restrictiveness score was lower for individuals born and raised in Canada compared to short-term and long-term immigrants. Lastly, for CMHI, differences emerged between groups 1(0-5 years in Canada, M = 3.82) and 4 (born and raised in Canada, M = 4.15), p = .004, and between groups 3 (over 10 years in Canada, M = 3.72) and 4 (born and raised in Canada, M = 4.15), p = .007. In this case, individuals born and raised in Canada scored higher compared to short-term and long-term immigrants. No significant differences emerged between groups 2 (6-10 years in Canada) and 3 (Over 10 years in Canada).

restrictiveness and higher benevolence and CMHI while controlling for social desirability. The results were inconclusive due to scaling issues related to reverse items in the knowledge and behaviors scale but were in the anticipated direction. As a result, follow-up tests were not performed.

Table 5

Differences in Perspectives towards Mental Illness Based on Self-Reported Knowledge Level

Variable	Value	*f*	*df*	*p*	η_p^2
Knowledge	.825	4.67	12	< .001**	.06
SDE	.959	3.01	4	.019*	.04
IM	.987	0.89	4	.468	.01

* $p < .05$. ** $p < .001$. *Note*: SDE = Self-Deceptive Enhancement (social desirability). IM = Impression Management (social desirability).

Table 6

Differences in Components of Perspectives towards Mental Illness Based on Knowledge Level

Item	*F*	*df*	*P*	η_p^2
Authoritarianism	11.79	3	< .001**	.11
Benevolence	10.02	3	< .001**	.10
Social Restrictiveness	12.16	3	< .001**	.11
CMHI	12.94	3	< .001**	.12

* $p < .05$. ** $p < .001$. *Note*: CMHI = Community Mental Health Ideology

Due to these unexpected results, it was determined to explore the relationship between self-reported knowledge level about mental illness and attitudes towards mental illness, with the expectation that higher knowledge levels be associated with more positive perspectives towards mental illness after controlling for social desirability (Self-Deceptive Enhancement and Impression Management). To test this hypothesis, an initial MANCOVA analysis was used and revealed a statistically significant difference between self-reported knowledge level and perspectives towards mental illness after controlling for social desirability (see Table 5).

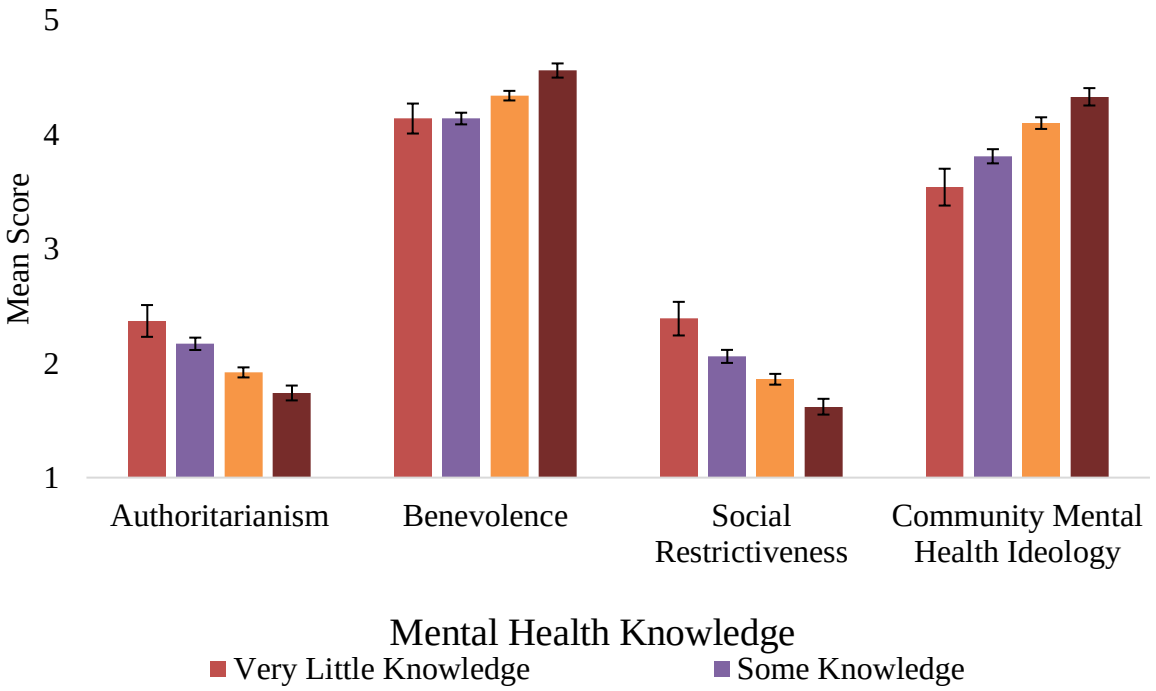
Follow-up ANOVA tests revealed significant differences in all four components of attitudes towards mental illness, namely Authoritarianism, Benevolence, Social Restrictiveness, and Community Mental Health Ideology (see Table 6).

The pairwise comparisons for the main effect of knowledge using a Bonferroni adjustment are below (see Figure 2). View footnote for a detailed analysis[2].

[2] For authoritarianism, differences emerged between groups 1 (very little knowledge, M = 2.37) and 3 (good knowledge, M = 1.92), $p = .013$, and between groups 1 (very little knowledge, M = 2.37) and 4 (very good knowledge, M = 1.74), $p < .001$, where greater knowledge is associated with lower a lower authoritarianism score. For benevolence, differences emerged between groups 1 (very little knowledge, M = 4.13) and 4 (very good knowledge, M = 4.56), $p = .023$; between groups

Figure 2

Mean Differences in Perspectives towards Mental Illness Based on Knowledge Level



Personal Factors Related to Perspectives towards Mental Illness

It was hypothesized that (3) personal factors beyond culture would be related to perspectives towards mental illness. The results are explored below.

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2 (some knowledge, M = 4.14) and 3 (good knowledge, M = 4.34), $p < .001$; between groups 2 (some knowledge, M = 4.14) and 4 (very good knowledge, M = 4.56), $p < .001$, and between groups 3 (good knowledge, M = 4.34) and 4 (very good knowledge, M = 4.64), $p < .001$ where greater knowledge is associated with a higher benevolence score. For social restrictiveness, differences emerged between groups 1 (very little knowledge, M = 2.39) and 3 (good knowledge, M = 1.85), $p = .004$; between groups 1 (very little knowledge, M = 2.39) and 4 (very good knowledge, M = 1.62), $p = < .001$; between groups 2 (some knowledge, M = 2.06) and 3 (good knowledge, M = 1.85), $p = .033$; between groups 2 (some knowledge, M = 2.06) and 4 (very good knowledge, M = 1.62), $p < .001$, and between groups 3 (good knowledge, M = 1.85) and 4 (very good knowledge, M = 1.62), $p < .030$. As with authoritarianism, greater knowledge is associated with a significantly lower social restrictiveness score. Lastly, for CMHI, differences emerged between groups 1 (very little knowledge, M = 3.54) and 3 (good knowledge, M = 4.10), $p = .007$; between groups 1 (very little knowledge, M = 3.54) and 4 (very good knowledge, M = 4.33), $p = < .001$; between groups 2 (some knowledge, M = 3.81) and 3 (good knowledge, M = 4.10), $p = .003$, and between groups 2 (some knowledge, M = 3.81) and 4 (very good knowledge, M = 4.33), $p < .001$. Similarly to benevolence, greater knowledge is associated with a significantly higher CMHI score.

Demographic Variables Associated with Perspectives towards Mental Illness

Gender. It was hypothesized that attitudes towards mental illness would vary based on the gender of participants. To test this hypothesis, a MANOVA analysis was performed which revealed that gender was not significantly related to perspectives towards mental illness, Wilks Lambda .959, $F(12, 756)$ .96, $p = .485$. As a result, follow-up tests were not performed.

Age. It was hypothesized that attitudes towards mental illness would vary based on the age of participants. Age was divided into the following groups: 14-24, 25-34, 35-44, 45-54, and over 55 years old. To test this hypothesis, an initial MANOVA analysis was performed and revealed a significant relationship between age and perspectives towards mental illness (see Table 7).

Table 7

Differences in Perspectives towards Mental Illness Based on Age

Variable	Value	*f*	*df*	*p*	η_p^2
Age	.847	3.04	16	< .001**	.04

* $p < .05$. ** $p < .001$.

Table 8

Differences in Components of Perspectives towards Mental Illness Based on Age

Item	*f*	*df*	*p*	η_p^2
Authoritarianism	5.57	4	< .001**	.07
Benevolence	3.44	4	.009*	.05
Social Restrictiveness	6.54	4	< .001**	.08
CMHI	3.57	4	.007*	.05

* $p < .05$. ** $p < .001$. *Note*: CMHI = Community Mental Health Ideology

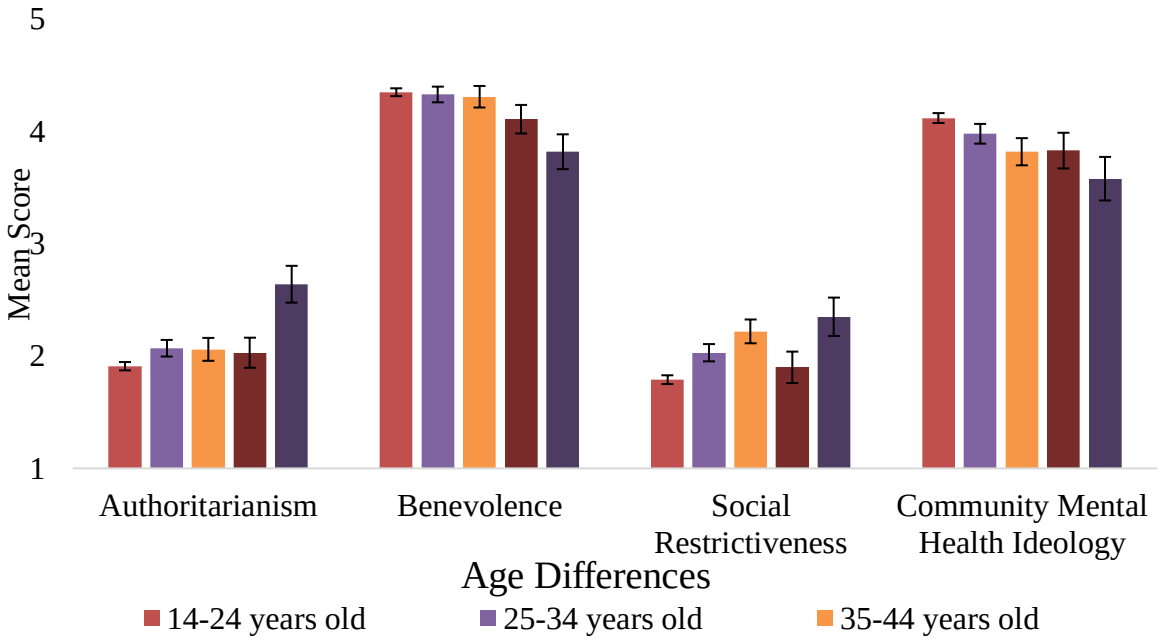
Follow-up ANOVA tests revealed significant differences in the four components of attitudes towards mental illness, namely Authoritarianism, Benevolence, Social Restrictiveness, and Community Mental Health Ideology (see Table 8).

The pairwise comparisons for the main effect of age using a Bonferroni adjustment are below (see Figure 3). View footnote for a detailed analysis[3].

[3] For authoritarianism, differences emerged between groups 1 (14-24, M = 1.91) and 5 (over 55, M = 2.64), $p < .001$; between groups 2 (25-34, M = 2.07) and 5 (over 55, M = 2.64), $p = .017$; between groups 3 (35-44, M = 2.06) and 5 (over 55, M = 2.03), $p = .029$; and between groups 4 (45-54, M = 1.89) and 5 (over 55, M = 2.64), $p = .041$. Individuals over 55 have higher authoritarianism compared to all other younger participant groups. For benevolence, differences emerged between groups 1 (14-24, M = 4.35) and 5 (over 55, M = 3.82), $p = .011$; and between groups 2 (25-34, M = 4.33) and 5 (over 55, M = 3.82), $p = .031$. Older individuals, over 55, show significantly less benevolence compared to young and middle-aged adults, 14-34 years old. For social restrictiveness, differences emerged between groups 1 (14-24, M = 1.79) and 3 (35-44, M = 2.22), $p = .002$; and between groups 1 (14-24, M = 1.79) and 5 (over 55, M = 2.35), $p = .016$. Middle-age and older age groups demonstrate more social restrictiveness compared to young adults 14-24 years old. For CMHI, differences were not significant with Bonferroni correction, thus an LSD correction was used instead. Differences emerged between groups 1 (14-24, M = 4.12) and 3 (35-

Figure 3

Mean Differences in Perspectives towards Mental Illness Based on Age



This analysis supports the age hypothesis by demonstrating an interaction between age and perspectives towards mental illness.

Education Level. It was hypothesized that attitudes towards mental illness would vary based on the education level achieved. To test this hypothesis, an initial MANOVA analysis was used and revealed a statistically significant difference between education level and perspectives towards mental illness (see Table 9).

Follow-up ANOVA tests revealed significant differences in two of the four components of attitudes towards mental illness, namely Social Restrictiveness and Community Mental Health Ideology, although Authoritarianism trended towards significance at p = .051 (see Table 10).

The pairwise comparisons for the main effect of education level using an LSD adjustment are below (see Figure 4). Individuals who had less than a high school diploma demonstrated significantly lower CMHI compared to most higher education levels, with vocational programs demonstrating the highest CMHI. Furthermore, the trend appears to demonstrate that higher education is associated with more positive attitudes towards mental illness and lower negative attitudes although the pattern is not a clear line from lower to higher education. It is important to distinguish between types of higher education, and vocational programs appear particularly interesting to explore. View footnote for a detailed

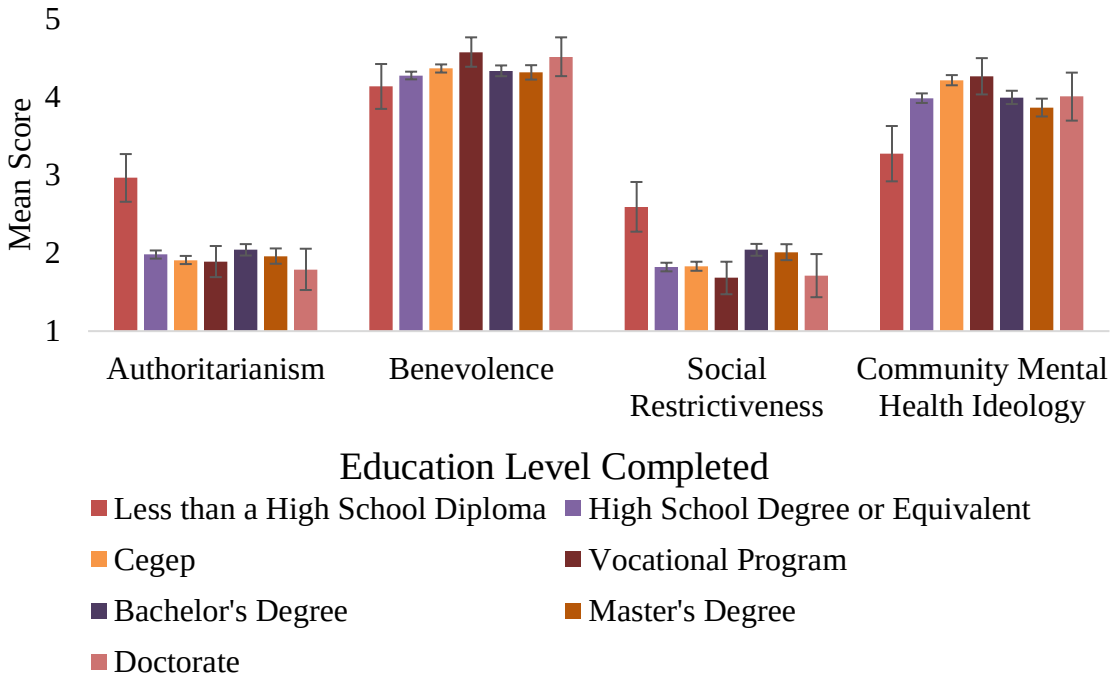
44, M = 3.82), p = .019; and between groups 1 (14-24, M = 4.12) and 5 (over 55, M = 3.50), p = .007. Young adults, 14-24 years old, have the highest CMHI score compared to middle-age and older adults.

analysis[4].

This analysis supports the education hypothesis by demonstrating a relationship between the level of education achieved and perspectives towards mental illness.

Figure 4

Mean Differences in Perspectives towards Mental Illness Based on Education Level



[4] For social restrictiveness, differences emerged between groups 1 (Less than high school diploma, M = 2.59) and 2 (High school degree, M = 1.82), p = .018; between groups 1 (Less than high school diploma, M = 2.59) and 3 (Cegep, M = 1.83), p = .019; between groups 1 (Less than high school diploma, M = 2.59) and 4 (Vocational Program, M = 1.68), p = .018; and between groups 1 (Less than high school diploma, M = 2.59) and 7 (Doctorate, M = 1.71), p = .039. A difference also emerged between group 2 (High school degree, M = 1.82) and group 5 (Bachelor's Degree, M = 2.04), p = .022; between group 3 (Cegep, M = 1.83) and group 5 (Bachelor's Degree, M = 2.04). Overall, those who do not yet have a high school diploma show the highest social restrictiveness compared to most higher education groups, with the vocational program students demonstrating the lowest social restrictiveness. In contrast, those with a high school or Cegep diploma demonstrated significantly less social restrictiveness compared to those with a bachelor's degree. For CMHI, differences emerged between groups 1 (Less than high school diploma, M = 3.27) and 2 (High school degree, M = 3.98), p = .047; between groups 1 (Less than high school diploma, M = 3.27) and 3 (Cegep, M = 4.21), p = .009; between groups 1 (Less than high school diploma, M = 3.27) and 4 (Vocational Program, M = 4.26), p = .020; and between groups 1 (Less than high school diploma, M = 3.27) and 5 (Bachelor's Degree, M = 3.99), p = .048. A difference also emerged between group 2 (High school degree, M = 3.98) and group 3 (Cegep, M = 4.21), p = .010; also, between group 3 (Cegep, M = 4.21) and group 5 (Bachelor's Degree, M = 3.99), p = .038; and between group 3 (Cegep, M = 4.21) and group 6 (Master's Degree, M = 3.86), p = .008.

Table 9

Differences in Perspectives towards Mental Illness Based on Education Level

Variable	Value	*f*	*df*	*p*	η_p^2
Education Level	.824	1.75	32	.007*	.05

* $p < .05$. ** $p < .001$.

Table 10

Differences in Components of Perspectives towards Mental Illness Based on Education Level

Item	*f*	*df*	*P*	η_p^2
Authoritarianism	1.97	8	.051	.05
Benevolence	1.19	8	.307	.03
Social Restrictiveness	2.43	8	.015*	.06
CMHI	7.37	8	.015*	.06

* $p < .05$. ** $p < .001$. *Note*: CMHI = Community Mental Health Ideology

Environmental Variables Associated with Perspectives towards Mental Illness

Marital Status. It was hypothesized that attitudes towards mental illness would vary based on the marital status of participants. To test this hypothesis, an initial MANOVA analysis was performed and revealed a significant relationship between marital status and perspectives towards mental illness (see Table 11).

Table 11

Differences in Perspectives towards Mental Illness Based on Marital Status

Variable	Value	*f*	*df*	*p*	η_p^2
Marital Status	.838	3.18	16	< .001**	.04

* $p < .05$. ** $p < .001$.

Table 12

Differences in Components of Perspectives towards Mental Illness Based on Marital Status

Item	*f*	*df*	*p*	η_p^2
Authoritarianism	3.23	4	.013*	.04
Benevolence	5.00	4	.001*	.07
Social Restrictiveness	3.77	4	.005*	.05
CMHI	4.17	4	.003*	.06

* $p < .05$. ** $p < .001$. *Note*: CMHI = Community Mental Health Ideology

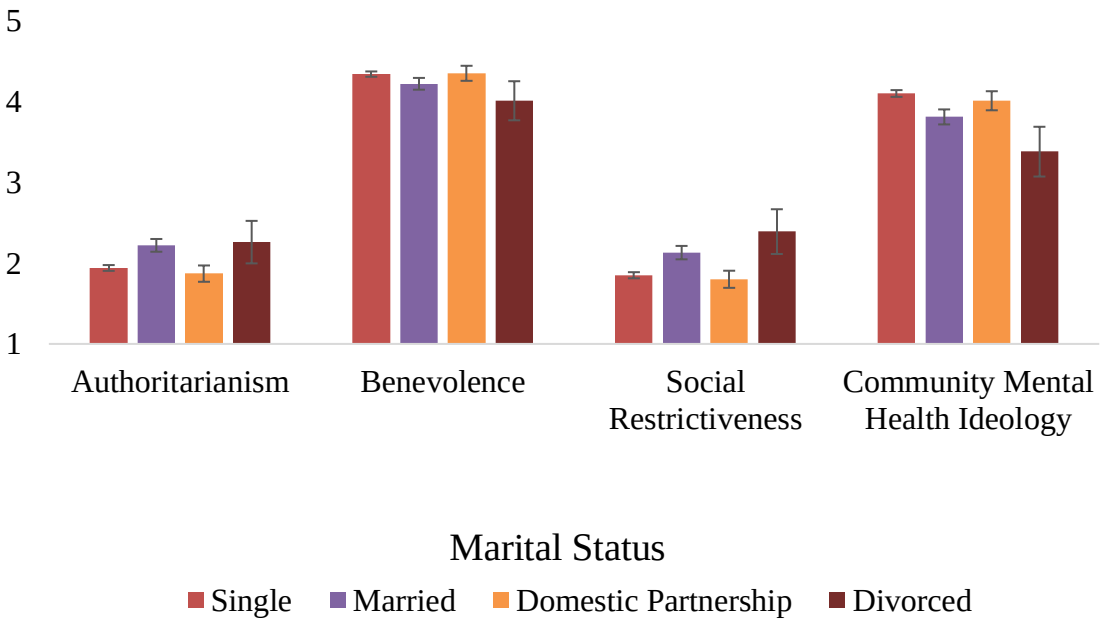
Follow-up ANOVA tests revealed significant differences in the four components of attitudes towards mental illness, namely Authoritarianism, Benevolence, Social Restrictiveness, and Community Mental Health Ideology (see Table 12).

The pairwise comparisons for the main effect of marital status using an LSD adjustment are below (see Figure 5). View footnote for detailed analysis.[5]

This analysis supports the marital status hypothesis by demonstrating a relationship between marital status and perspectives towards mental illness. These results may also speak to the age difference as the younger generations are more likely to be single or in domestic partnerships than married or divorced, as demonstrated by a paired samples t-test between marital status and age – t(292) 3.96, p < .001.

Figure 5

Mean Differences in Perspectives towards Mental Illness Based on Marital Status



[5] For authoritarianism, differences emerged between groups 1 (Single, M = 1.94) and 2 (Married, M = 2.22), *p* = .002; and between groups 1 (Single, M = 1.94) and 3 (Domestic Partnership, M = 1.87), *p* = .007. Married individuals scored significantly higher on authoritarianism compared to singles on individuals in domestic partnerships, both of which have very similar lower scores. For benevolence, no valuable differences emerged as the only difference which was identified was with the Prefer not to say group which cannot be interpreted adequately. For social restrictiveness, differences emerged between groups 1 (Single, M = 1.85) and 2 (Married, M = 2.13), *p* = .003; between groups 2 (Married, M = 2.13) and 3 (Domestic Partnership, M = 1.80), *p* = .014; and between groups 3 (Domestic Partnership, M = 1.80) and 4 (Divorced, M = 2.39), *p* = .046. Again, married individuals scored significantly higher on social restrictiveness than singles or individuals in domestic partnerships. Interestingly, however, divorced individuals demonstrated more social restrictiveness than their married counterparts. For CMHI, differences emerged between groups 1 (Single, M = 4.10) and 2 (Married, M = 3.81), *p* = .005; and between groups 1 (Single, M = 4.10) and 4 (Divorced, M = 3.38), *p* = .020. Married individuals showed a significantly lower community mental health ideology compared to singles. However, they showed greater CMHI compared to their divorced counterparts.

Religious Affiliation. It was hypothesized that attitudes towards mental illness would vary based on the religious affiliation of participants. To test this hypothesis, an initial MANOVA analysis was performed and revealed a significant relationship between religious affiliation and perspectives towards mental illness (see Table 13). Due to the low number of participants in certain religious groups, the following were removed from the analysis: Muslim (n = 10), Buddhist/Hinduist (n = 6), and other (n = 17). The groups that were included in the final analysis Catholic (n = 50), Christian (n = 73), atheist (n = 32), agnostic (n = 29), and none (n = 70).

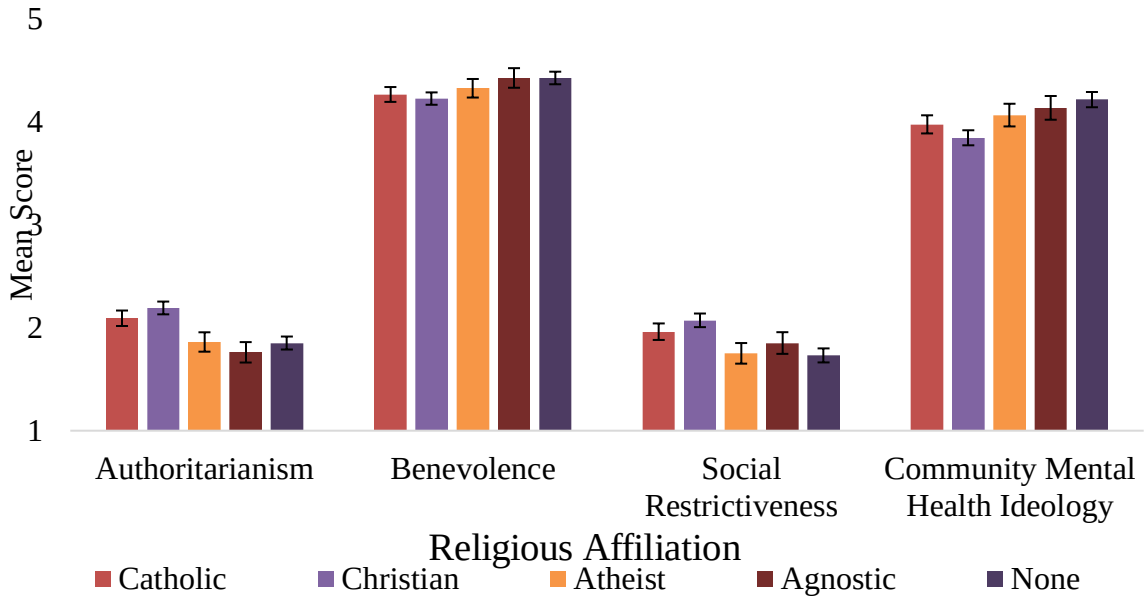
Follow-up ANOVA tests revealed significant differences in three of the four components of attitudes towards mental illness, namely Authoritarianism, Social Restrictiveness, and Community Mental Health Ideology (see Table 14).

The pairwise comparisons for the main effect of religious affiliation using a Bonferroni adjustment are below (see Figure 6). View footnote for detailed analysis[6].

This analysis supports the religious affiliation hypothesis by demonstrating a relationship between specific religious groups and perspectives towards mental illness.

Figure 6

Mean Differences in Perspectives towards Mental Illness Based on Religious Affiliation



[6] For authoritarianism, differences emerged between groups 2 (Christian, M = 2.19) and 3 (Atheist, M = 1.86), p = .031; between groups 2 (Christian, M = 2.19) and 4 (Agnostic, M = 1.76), p = .002; and between groups 2 (Christian, M = 2.19) and 5 (None, M = 1.85), p = .002. Christians scored higher on authoritarianism compared to atheists, agnostics, and those who identify with no religion, all of which showed very similar lower scores. For social restrictiveness, differences emerged between groups 2 (Christian, M = 2.07) and 5 (None, M = 1.73), p = .004. Christians scored higher on social restrictiveness compared to those who identify with no religion. For CMHI, differences emerged between groups 2 (Christian, M = 3.84) and 5 (None, M = 4.21), p = .005. Christians scored significantly lower on community mental health ideology compared to those who identify with no religion.

Table 13

Differences in Perspectives towards Mental Illness Based on Religious Affiliation

Variable	Value	*f*	*df*	*p*	η_p^2
Religious Affiliation	.880	2.01	16	.011*	.03

* $p < .05$. ** $p < .001$.

Table 14

Differences in Components of Perspectives towards Mental Illness Based on Religious Affiliation

Item	*f*	*df*	*p*	η_p^2
Authoritarianism	6.15	4	< .001**	.09
Benevolence	1.83	4	.124	.03
Social Restrictiveness	3.99	4	.004*	.06
CMHI	3.49	4	.009*	.05

* $p < .05$. ** $p < .001$. *Note*: CMHI = Community Mental Health Ideology

Personality Factors Associated with Negative Perspectives towards Mental Illness

Two multiple linear regressions were conducted to assess whether the big five personality components significantly predicted negative perspectives towards mental illness, namely authoritarianism and social restrictiveness (see Table 15). Using the enter method it was found that agreeableness and neuroticism predicted a significant amount of the variance in one's level of authoritarianism, $F(1, 287)$ 8.08, $p < .001$, $R^2 = .13$ as well as a significant amount of the variance in one's level of social restrictiveness, $F(5, 281)$ 4.19, $p = .001$, $R^2 = .07$. In both cases, higher agreeableness and neuroticism was associated with lower authoritarianism and social restrictiveness, supporting the first part of the hypothesis.

Table 15

Big Five Personality Factors as Predictors of Authoritarianism and Social Restrictiveness

	Authoritarianism			*Social Restrictiveness*		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Extraversion	.00	.04	.00	.00	.04	.00
Agreeableness	-.15	.06	-.17*	-.18	.06	.19*
Conscientiousness	.01	.05	.01	.07	.06	.08
Neuroticism	-.21	.04	-.36**	-.14	.04	-.23**
Openness	-.08	.05	-.09	-.08	.06	-.08
R^2		.13			.07	
F		8.08			4.19	

* $p < .05$. ** $p < .001$.

Personality Factors Associated with Positive Perspectives towards Mental Illness

Two multiple linear regressions were conducted to assess whether the big five personality components significantly predicted positive perspectives towards mental illness, namely benevolence and community mental health ideology (CMHI) (see Table 16). Using the enter method it was found that agreeableness and neuroticism predicted a significant amount of variance in one's level of benevolence, $F(5, 281)$ 9.17, $p < .001$, $R^2 = .14$ as well as a significant amount of variance in one's level of CMHI, $F(5, 283)$ 6.74, $p < .001$, $R^2 = .11$. In both cases, higher agreeableness and neuroticism was associated with higher benevolence and CMHI, supporting the second part of the hypothesis.

Follow-up ANOVA tests revealed significant differences in two of the four components of attitudes towards mental illness, namely Social Restrictiveness and Community Mental Health Ideology, although Authoritarianism trended towards significance at p = .051 (see Table 8).

The pairwise comparisons for the main effect of education level using an LSD adjustment are below (see Figure 4). Individuals who had less than a high school diploma demonstrated significantly lower CMHI compared to most higher education levels, with vocational programs demonstrating the highest CMHI. Furthermore, the trend appears to demonstrate that higher education is associated with more positive attitudes towards mental illness and lower negative attitudes although the pattern is not a clear line from lower to higher education. It is important to distinguish between types of higher education, and vocational programs appear particularly interesting to explore. View footnote for a detailed analysis.

This analysis supports the education hypothesis by demonstrating a relationship between the level of education achieved and perspectives towards mental illness.

Table 16

Big Five Personality Factors as Predictors of Benevolence and CMHI

	Benevolence			*CMHI*		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Extraversion	0.01	0.04	0.02	0.04	0.04	0.06
Agreeableness	0.18	0.05	0.23*	0.17	0.06	0.17*
Conscientious-ness	0.05	0.05	0.06	0.04	0.06	0.04
Neuroticism	0.18	0.03	0.32**	0.23	0.04	0.33**
Openness	0.12	0.05	0.14	0.06	0.06	0.06
R^2		.14			.07	
F		9.17			4.19	

* $p < .05$. ** $p < .001$. *Note*: CMHI = Community Mental Health Ideology

Discussion

The Quebec population sample recruited in the current study demonstrated variations in attitudes towards mental illness based on various factors. Individuals who had resided in Canada for only a short while tended to demonstrate more negative perspectives towards mental illness. Although it was not possible in the current study to split the data based on specific countries due to the heterogeneity in ethnicities, it appeared that individuals who identified more with the Canadian culture without having been born in Canada demonstrated perspectives that were more similar to born and raised Canadians, which may support the acculturating research arguing that the longer you live in a culture, the more acculturated you become to it (Cheung et al., 2011). Nevertheless, a difference emerged between long-term immigrants and born and raised Canadians for authoritarianism, social restrictiveness, and community mental health ideology supporting the research by Chen et al. (2009) where Chinese Canadians who had resided in Canada for a long time were still less likely to seek treatment for a mental illness compared to their Canadian counterparts which can be inferred to be due to the belief system of individuals.

The Quebec sample also demonstrated that greater knowledge was associated with a greater intent to assist those suffering from a mental illness, related to more positive attitudes towards mental illness supporting previous research by Taylor and Dear (1981) in Canada and Letovancová et al. (2017) in Slovakia where a personal experience or greater awareness of the realities of mental illness were associated with a decrease in negative perspectives towards mental illness and in increase in positive perspectives. However, knowledge, as measured by the Mental Illness Knowledge Scale (MAKS) did not provide conclusive results in the current study and would need to be assessed again to identify the type of relationship. Nonetheless, the research performed by Vila-Badia et al. (2016) in Spain had only looked at a decrease in negative perspectives with greater personal knowledge about mental illness and personal involvement with those suffering from it, thus it could be that the increase in positive perspectives is not always as directly measurable. Seeking to assess the hypothesis further, a simple self-report measure of knowledge level was used and demonstrated support for the full hypothesis, higher knowledge was related to lower authoritarianism and social restrictiveness, and higher benevolence and community mental health ideology. Thus, the lack of effect in the initial analysis could speak more to the scale used (MAKS) rather than the relationship between knowledge and perspectives. These results suggest that being knowledgeable about mental illness is related to more positive behaviors and attitudes towards those suffering from mental illness and may provide insight towards field interventions.

Personal factors beyond culture were explored in the Quebec population to assess how they would replicate or contrast previous studies. Gender did not reveal any differences in the current study, with women and men showing very similar scores on the four CAMI subscales, contrasting previous research performed in Canada (Taylor & Dear, 1981), England (Bhavsar et al., 2019), and many other countries where women usually showed more positive perspectives towards mental illness compared to men. However, the current

study supported the results found in Ethiopia and Malawi where no differences were found (Crabb et al., 2012; Girma et al., 2013). Although it can only be speculated, perhaps the lack of difference could be explained by the fact that the sample predominantly consisted of young adults, a majority of which were women. Educational level, age, marital status, and religious affiliation were found to be significantly associated with perspectives towards mental illness. In similar fashion to the previous Canadian study by Taylor and Dear (1981), higher education was associated with more positive perspectives towards mental illness. Additionally, older individuals scored higher on authoritarianism and social restrictiveness compared to young adults, while being less benevolent and community mental health oriented, demonstrating more negative attitudes, also supported by previous research in Canada (Taylor and Dear, 1981), Pakistan (Khan et al., 2016) and Slovakia (Letovancová et al., 2017). However, it contrasted the finding that older age was associated with lower stigma towards mental illness as other researchers had found in Ethiopia and England (Bhavsar et al., 2019; Girma et al., 2013).

Married individuals demonstrated more negative perspectives towards mental illness compared to singles or individuals in domestic partnerships. However, divorced individuals showed even more negative attitudes towards mental illness than those who were married. As for positive perspectives, only community mental health ideology showed a significant relationship and singles and those in domestic partnerships ranked highest. Married individuals demonstrating more negative attitudes towards mental illness compared to singles supported the research by Taylor and Dear (1981). Due to the age of the study, domestic partnerships had not been included, and more recent studies haven't explored marital status, thus it would be interesting to continue exploring the meaning of these differences. From the current study, it can be inferred that married and divorced individuals are likely older compared to singles and individuals in domestic partnerships, thus their older age could also be related to their perspectives towards mental illness.

Religious individuals generally revealed more negative attitudes towards mental illness compared to atheists, agnostics, or those who identify to no religion specifically for authoritarianism; however, the most consistent difference emerged between Christians and those who identified to no religion which is consistent with previous research by Taylor & Dear (1981) demonstrating that religious individuals showed higher authoritarianism and social restrictiveness and lower benevolence and community mental health ideology (CMHI). The lack of strong support for this variable may be explained by the difference in importance placed on religion based one's culture (Koenig & Larson, 2001). Due to the highly varied sample, differences may have been more difficult to observe. Lastly, agreeableness and neuroticism, two components of the Big Five Personality Inventory, were associated with higher benevolence and community mental health ideology and lower authoritarianism and social restrictiveness while the other three components of personality did not show a significant relationship. Although a new concept to associate with perspectives towards mental illness, the relationship between agreeableness, neuroticism and stigma supported the results in Yuan et al.'s (2018) study. The current study supports the idea that personality factors are related to individuals' perspectives of mental illness and those who suffer from a mental illness. These findings contribute to the scientific literature

suggesting various factors related to attitudes towards mental illness and may help inform future research and interventions related to mental illness by providing more nuances.

Conclusion

The current study provided a survey of the general situation regarding stigmatizing attitudes towards mental illness in a small sample of the Quebec population. It was valuable to identify time spent in Canada yielded significant differences in perspectives towards mental illness as did knowledge and personal factors. The study combined many aspects that had not been studied together in the past, specifically looking at nuances between various cultural groups as well as incorporating varied factors such as religious affiliation, personality, and knowledge of mental illness. These combined elements have provided a richer explanation of the complex realities associated with stigma towards mental illness. Although much research regarding mental illness stigma is still needed in Quebec, hopefully the current study sets the direction for future research by providing an overview of factors that would be worth exploring further and with additional corroboration, could help inform anti-stigma interventions.

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