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Research Article

Exploring Mental Health Literacy in Canada: A Mixed-Method Cross-Sectional Study

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Abstract

Introduction: Mental health literacy (i.e., mental health-related knowledge, attitudes, and behaviour; MHL) may be a key to reducing the burden of mental illness on the health system and to improving the overall population's mental health through facilitating upstream mental health promotion. **Objectives:** The purpose of this mixed-method study is to explore the correlates of MHL in Atlantic Canada and assess the ability of residents to correctly diagnose a disorder, identify potential causes, and propose suitable treatments based on the medical model or a social prescribing model. **Methods:** A sample of Atlantic Canadians (N = 254) participated in this cross-sectional study, which included vignettes and measures of overall MHL, level of contact with people living with mental illness, and preferred level of social distance from people with mental illness. **Results:** We found that (a) social connections were more commonly prescribed for generalized anxiety relative to the medical model treatment recommendations, (b) panic disorder was least likely to be correctly identified, (c) general anxiety was disproportionately thought to be caused by external factors, (d) only social distance predicts MHL beyond demographics and level of contact, and (e) household (not individual) conservative orientation negatively predicts MHL. **Conclusion:** Efforts to improve MHL and thus reduce the burden of mental illness on Atlantic Canadian health systems could be informed by increasing public knowledge of the causes and treatments of generalized anxiety disorder, increasing residents' ability to recognize disorders beyond depression (e.g., panic disorder), and reducing stigma by fostering comfort for those living near individuals with mental illness.

Keywords: mental health literacy, evidence-based treatments, vignette, Atlantic Canada

Introduction

The prevalence of mental illness is a major public health crisis, with rates as high as one in every five Canadians meeting the diagnostic criteria for a mental illness within any given year (Canadian Mental Health Association, 2021). Approximately 67% of individuals experiencing mental illness live in silence and fail to seek help (Henderson et al., 2013). The burden of mental illness can be alleviated if properly treated; however, many individuals do not access the resources or supports that could help alleviate their current symptoms. One plausible explanation for why people do not seek treatment is that they lack comprehension of how mental illnesses manifest in behaviour. For example, Thompson et al. (2004) identified that failure to recognize symptoms was the leading reason for why individuals delayed or failed to access treatments. Despite the high prevalence of mental illness within communities, there seems to be a disconnect in mental health education. In particular, within the general population there is a gap in understanding what mental illness is, how it presents, and how it needs to be treated. One perspective on treatment is that mental illness needs to be treated with a medical model approach, focused on "fixing" people who are experiencing distress. A more recent perspective is that mental health can be promoted by reducing barriers for people to be active community participants, such as through prescribing social recreational programs. Research on social prescribing effectiveness is still emerging, and it is not well known how laypersons perceive the utility of social-based treatments for mental illness. The purpose of this mixed-method study is to explore the correlates of mental health literacy in Atlantic Canada and assess the ability of residents to correctly diagnose a disorder, identify potential causes, and propose suitable treatments.

Background

Mental Health Literacy

Mental health literacy (MHL) was introduced as "knowledge and beliefs about mental disorders which aid their recognition, management, or prevention" (Jorm et al., 1997, p. 182). The premise of MHL is that the general public's ability to gain access to, understand, and use information to promote their health will lead to positive outcomes as a means of facilitating early intervention, via an upstream approach (Jorm et al., 1997). When teachers, parents, and peers recognize the early indications of mental health distress and problems, know about the best types of help available, and understand how to access these supports, they are "mental health literate" and can facilitate appropriate help-seeking. For example, teachers who have completed training in MHL are better equipped to support students in their classrooms (Gilham et al., 2023). A recent systematic review of MHL programs has demonstrated the effectiveness of school-based efforts to improve adolescents' knowledge, foster positive attitudes, increase helping behaviours, and cultivate confidence in helping (Olyani et al., 2021). Moreover, strengthening students' ability to obtain and maintain positive mental health can promote their well-being (Bjørnsen et al., 2019), which can be supported by teachers within classroom settings (Kutcher et al., 2015). A consequence of poor public MHL is that the burden of mental health prevention and promotion largely falls on professionals, which increases their workload and patient wait times and ultimately poorly affects the mental health care system (Kelly et al., 2007).

Jorm (2000) identified six components that constitute MHL: (a) the ability to identify various disorders and different variations of psychological distress, (b) comprehension and beliefs regarding risk factors and etiology of mental illness, (c) comprehension of coping mechanisms and self-help behaviours in response to mental illness, (d) understanding of available resources and treatments, (e) personal beliefs that inform the identification of mental illness and treatment-seeking, and (f) understanding of where to access information about mental illness. An individual's level of MHL is contingent on how well they score on each of these components. An individual with an adequate

grasp on each of these components is considered to have high MHL, while those without are considered to have a low level of MHL.

Attitudes Toward Mental Illness

Stigma is another barrier to treatment-seeking for mental illness (e.g., Corrigan et al., 2014). It is associated with early withdrawal from treatment and failure to adhere to treatment plans (Farrer et al., 2008). Stigma can lead to personal challenges including a lack of social support system, negative evaluations of therapeutic practices, and fear of negative social repercussions or judgments (Ben-Zeev et al., 2010; Corrigan et al., 2009; Gulliver et al., 2010). In addition, stigma can contribute to one's financial burden (Corrigan et al., 2014) and erode the therapeutic relationship between physician and client (Knaak et al., 2017). Both the perceived judgment of others and internalized shame pertaining to mental illness have been deemed to be a deterrent that hinders individuals with mental illness from accessing resources or supports (Brown et al., 2010). Ben-Zeev et al. (2010) posited that many individuals avoid accessing supports because they do not want to be recognized as someone with a mental illness or as someone receiving treatment for mental illness. Moreover, individuals may have to alter their self-schema to accommodate this new piece of their identity. For individuals who hold stigmatizing beliefs around mental illness, a diagnosis would make them feel as though they now belong to a group of people they themselves have deemed an outgroup (Ben-Zeev et al., 2010).

Knowledge of Mental Illness and Treatment

Individuals with low MHL often have difficulty recognizing mental illness: they fail to identify personal distress as indicative of mental illness and have difficulty identifying it in others. Recognition of mental illness requires an individual to have a developed schema of what mental illness is and how it presents. Without this knowledge, individuals fail to recognize the symptoms of mental illness (Furnham & Swami, 2018). Although there are common patterns of behaviour that are characteristic of specific mental illnesses, it is challenging to tease apart what types of behaviours are normative, what behaviours should be deemed maladaptive, and what patterns of maladaptive behaviours constitute mental illness. For example, when shown vignettes depicting individuals with mental illness, only a minority of people can typically identify what mental illness is being portrayed (Jorm et al., 1997). Moreover, low MHL has been suggested to be a barrier to treatment-seeking behaviour (Gulliver et al., 2010; Ross et al., 2020). Many people think of services and treatment for mental illness as being necessarily based on the medical model, and preconceived notions of the efficacy of treatment interventions greatly influence the likelihood of an individual pursuing professional help (Lauber et al., 2001). Personal beliefs regarding the treatment of mental illness are informed by past life experiences and further shaped by our social networks, in the sense that individuals often conform to the norms and attitudes endorsed by their peers (Wong, 2016). These beliefs also influence the likelihood of successful completion of recommended treatments and adherence to treatment plans (Lauber et al., 2001).

In addition to treatment plans utilizing the medical model, efforts to alleviate mental distress can operate within the community. Social prescribing (SP) is a primary care- and community-based intervention that aims to improve well-being through social connections. This model is a more holistic approach to promoting health and preventing illness that combines the social and medical models of health and well-being. It provides a formal pathway for health providers to address the diverse determinants of mental health, while still using a "prescription" approach (Mulligan et al., 2020). Prescriptions may include referring patients to local, non-clinical services or programs that are chosen according to the client's interests and goals. This unique scope empowers individuals to improve their health and well-being by developing new skills, participating in meaningful activities, and becoming more connected to their communities.

Social prescription is an alternative to pharmaceutical treatments of anti-depressive or anti-anxiety medications, which are taken by approximately 9.3% of Canadian adults (St-Amour et al., 2021). Currently, research on SP in Atlantic Canada is just beginning to form, with ongoing efforts to identify how "ready" communities are to implement this model (e.g., primary care providers' perspectives, rural older adults' knowledge of social health). In addition to mobilizing community supports, there are individual factors that contribute to well-being. Hill and MacGillivray (2024) identified individual- and community-level factors that are most important to loneliness and sense of community using the 2019 Nova Scotia Quality of Life data set. The top predictors of loneliness were the following: level of satisfaction with quality of the natural environment, confidence in institutions, perceived benefit from policy, and social support (number of friends that can be relied on). The top drivers of sense of community were satisfaction with quality of the natural environment, life satisfaction, being able to count on neighbours and friends, and confidence in institutions. These results suggest that opportunities to strengthen mental health and well-being can occur at an individual and community level.

Canadian adults tend to vary in how they believe they would seek help (e.g., self-management) according to their age (Marcus et al., 2012). One region of note is Atlantic Canada: New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland and Labrador. Primary care physicians in the Atlantic provinces have voiced concerns regarding a shortage of adequate mental health resources for children and adolescents, particularly in rural areas (Zayed et al., 2016). In a study on youth perception and concerns about mental health in rural Nova Scotia, Mathias (2018) found that more educational opportunities need to be provided through schools to improve MHL. Programming that already exists in schools and in community has shown that MHL in Atlantic Canadian students may contribute to improving MHL in Atlantic Canada overall.

A recent review conducted by Hill et al. (2023) found that existing community mental health promotion programs in Nova Scotia were all psychoeducational (e.g., focused on raising awareness of resources and teaching life skills) and embedded within the provincial health authority (Nova Scotia Health) or the provincial mental health association (Canadian Mental Health Association—Nova Scotia). Similar to MHL, local programs sought to provide access to resources, build awareness of mental health, teach individuals how to support others, and develop life skills. These initiatives include raising awareness of mental health topics and resources through discussion of self-care and life skills that promote mental health via sustainable lifestyle choices (e.g., building financial literacy, developing social skills). Considering that local community programs tend to focus on increasing MHL, albeit lacking evaluation of post-program changes in MHL, this study can provide a snapshot of the state of MHL in Atlantic Canada and its demographic and psychological correlates to inform future programming.

Current Study

There are two main objectives of the current study. First, we explore the correlates of MHL in Atlantic Canada, by identifying how (a) preferred distance from and (b) comfort level with those living with mental illness predicts MHL above and beyond demographic characteristics (age, sex, and conservative orientation). Second, we assess the ability of Atlantic Canadians to correctly diagnose a disorder, identify potential causes, and know suitable treatments.

Methodology

Copies of all materials and measures used in this study can be found on our OSF page (https://osf.io/7vsj4/?view_only=7e42f043f2af4425ac38402e4813c599).

Participants

A sample of Atlantic Canadians (N = 254) participated in this study (N = 167 female; 69%), ranging from the age of 18 to 80 (M_{age} = 32, SD = 16.21). Of the 243 (95%) participants who reported their ethnicity, the majority identified as white (78%), followed by Asian (5%), Black (4%), and other ethnicities (i.e., ethnic identities that were individually less than 5% of the sample, but are collectively 8%). Eleven participants (5%) did not self-identify an ethnicity. Two-thirds of the sample were undergraduate students recruited through psychology courses in exchange for course credit (N = 168; 66%), and the remaining third (N = 86; 34%) were a community sample recruited using snowball sampling and social media advertisements.

Measures

Demographic Survey

A survey was created for the present study to elicit information pertinent to the demographic characteristics of participants. Participants were asked questions pertaining to their age, sex, and ethnicity. Also, participants indicated how politically conservative their household was during childhood and how politically conservative they consider themselves to be on a five-point Likert-type scale (1 = not at all, 5 = very much). Participants reported how knowledgeable they perceived themselves to be regarding mental illness on a five-point Likert-type scale (1 = not knowledgeable at all, 5 = very knowledgeable). Likewise, participants were asked how knowledgeable they perceived themselves to be around mental illness compared to other Atlantic Canadians.

Vignettes

The vignettes used for the present study were adapted from those used by Coles and Coleman (2010). Each vignette depicts an individual who meets the DSM-5 criteria for either social anxiety disorder, generalized anxiety disorder, panic disorder, or major depression. Participants were randomly assigned one of two versions of each vignette, with the only prevalent difference being the gendered pronouns used. The individual described in each vignette was given a unisex name that remained the same in each condition of the study. The data were analyzed as a whole, as it was not hypothesized that the gender of the individual depicted would influence the data based on previous studies that have yielded null findings (see Jorm et al., 1997). However, gender was included to control for any potential effect as a confounding variable.

Upon reviewing the vignettes, participants were asked to answer a series of open-ended questions to ascertain their perception of the individual's condition. The questions were as follows: "What would you say, if anything, is wrong with Alex?", "How do you think Alex would be best helped?", and "What would you consider the primary cause of Alex's problem?" Vignettes were coded in three ways: identification of disorder (correct or incorrect diagnosis), recommendation of medical model treatment (e.g., medication, therapy) or social prescription (e.g., community participation, recreation), and belief of internal or external cause of the disorder. A codebook was developed to enable content analysis (see Supplemental Material), with a code assigned to the three components of the vignette. Two blind and independent coders each reviewed the codebook and provided feedback prior to viewing the data. Once there was consensus, one coder conducted content analysis on all data, with the second coder analyzing a random selection of 50% of the data. Averaging across the four vignettes, the inter-rater reliability was good (diagnosis: $\kappa = 0.94$; cause: $\kappa = 0.85$; treatment: $\kappa = 0.91$). Details on the inter-rater reliability for each element of each vignette are presented in Table 1.

Mental Health Literacy Scale

The Mental Health Literacy Scale was created by O'Connor and Casey (2015) to objectively measure MHL in accordance with the six components from Jorm et al. (1997). This scale consists of

Table 1
Inter-Rater Reliability (Percentage Agreement Averaged Across Four Vignettes)

	Diagnosis	Cause	Treatment
General anxiety disorder	91%	87%	94%
Social anxiety disorder	96%	80%	89%
Panic disorder	93%	82%	91%
Depression	97%	88%	90%

35 Likert-type questions. The questions measure an individual's comprehension of psychiatric terminology and level of stigma toward individuals with mental illness. For the former, participants were asked questions such as "To what extent do you think it is likely that Dysthymia is a disorder?", and participants recorded how much they perceived each statement to be true (1 = very unlikely, 4 = very likely). For the latter, items pertained to perceptions of help-seeking behaviour, and included statements such as "If I had a mental illness, I would not seek help from a mental health professional." Respondents indicated how much they agreed with each statement on a Likert-type scale from 1 to 5 (1 = strongly disagree, 5 = strongly agree). The sum of the answers (after reverse scoring, as needed) constitutes an individual's MHL score.

Level-of-Contact Report

The Level-of-Contact Report (LCR) was created by Holmes et al. (1999) to measure an individual's level of familiarity with individuals who have a mental illness. The participants were given 12 scenarios that depict various levels of intimacy with an individual with mental illness, such as "I have worked with a person who had a mental illness at my place of employment" and "I have watched a documentary on the television about mental illness." Participants recorded which situations they have experienced by answering yes or no.

Holmes et al. (1999) ranked the scenarios according to their level of intimacy. (Here they were presented in a random order.) The rank score of the most intimate scenario the participant says they have experienced is the score they are given to indicate their level of familiarity. Therefore, the minimum score is zero, assigned for any individual who reports that they have not experienced any of the provided scenarios. The maximum score is 12, meaning that the participant indicated they have experienced the scenario deemed to represent the highest level of contact. Out of the 12 scenarios included, "I have a mental illness" was deemed to indicate the highest level of familiarity with mental illness, and thus it was given a rank score of 12. Conversely, the scenario "I have watched a movie or television show in which a character depicted a person with mental illness" ranked third lowest on the list, as it does not demonstrate close contact with mental illness.

Social Distance Scale

A modified version of the Social Distance Scale by Link et al. (1987) was used to measure the participants' stigma toward mental illness. This measure consists of seven Likert-type scale questions to measure willingness to engage socially with an individual who has a mental illness. When prompted with questions such as "How would you feel about introducing someone with mental illness to your friends?", participants indicate how willing they would be to engage in the proposed situation (1 = definitely unwilling, 4 = definitely willing). The answers provided were reverse scored and then analyzed as a sum, with the total score indicating how much social distance the participant desired from individuals who have a mental illness. The possible scores ranged from 7 to 28, with 7 indicating no social distance desired and 28 indicating a strong preference for social distance.

Procedure

The online survey was conducted on Qualtrics. The study was advertised as a study on public perceptions of mental illness. Participants who were registered students at the university hosting this study were offered 0.5 bonus point to any eligible psychology course in exchange for their participation. After providing consent (Saint Mary's University REB #20-048), participants were asked to review the four vignettes. After each vignette participants were asked a series of open-ended questions on their perception of what they read. The questions asked what, if anything, they perceived to be wrong with the individual portrayed in the vignette, what they felt was the cause of their problem, and how they could be helped. Participants then completed the remaining demographics survey and the scales outlined above.

The student and community sample did not differ on key variables such as overall MHL ($t(210)= -1.81$, $p = .07$, $d = 0.24$) or social distance ($t(217) = -0.99$, $p = .32$, $d = 0.13$) scores. As one might expect with young and educated people, level of contact ($t(243) = -2.16$, $p = .03$, $d = 0.26$) was higher in the student sample than in the general community sample. Thus, the two samples were combined into one, and sample source (i.e., student or community) was used as a covariate in the quantitative analyses.

Data Analysis Plan

To identify how preferred distance from and comfort level with those with mental illness predicts MHL above and beyond demographic characteristics (i.e., age, sex, and conservative orientation), we conducted a hierarchical multiple regression model predicting overall MHL (i.e., scale score). First, we entered sex, age, sample, and conservative orientation at both the personal and family level, followed by preferred distance and comfort level. Our focus is on the change in variance explained in MHL by these two variables after controlling for demographic characteristics. To assess Atlantic Canadians' ability to correctly diagnose a disorder, identify potential causes, and know suitable treatments, we calculated rates of correct diagnosis, perceptions of internal factors influencing mental health, and rates of medical model treatment recommendations.

Results

Quantitative Results

Bivariate correlations between all quantitative variables used in the regression models are presented in Figure 1. Our hierarchical multiple regression was built to predict MHL based on demographic variables (sex, age, sample, and conservative orientation) and psychological variables (preferred distance from mental illness and comfort level with mental illness; see Appendix). The demographic variables predicted very little variance (8%) in mental health literacy. The psychological variables predicted nearly one-quarter (24%) of the variance in mental health literacy, over and above the demographic variables. Collectively, demographic and psychological variables predicted over one-third (32%) of the variance in mental health literacy. Notably, the standardized coefficient for social distance preference is nearly 0.5, indicating that a one standard deviation increase in social distance preference is associated with a half standard deviation increase in MHL scores, when holding all other variables in the model constant.

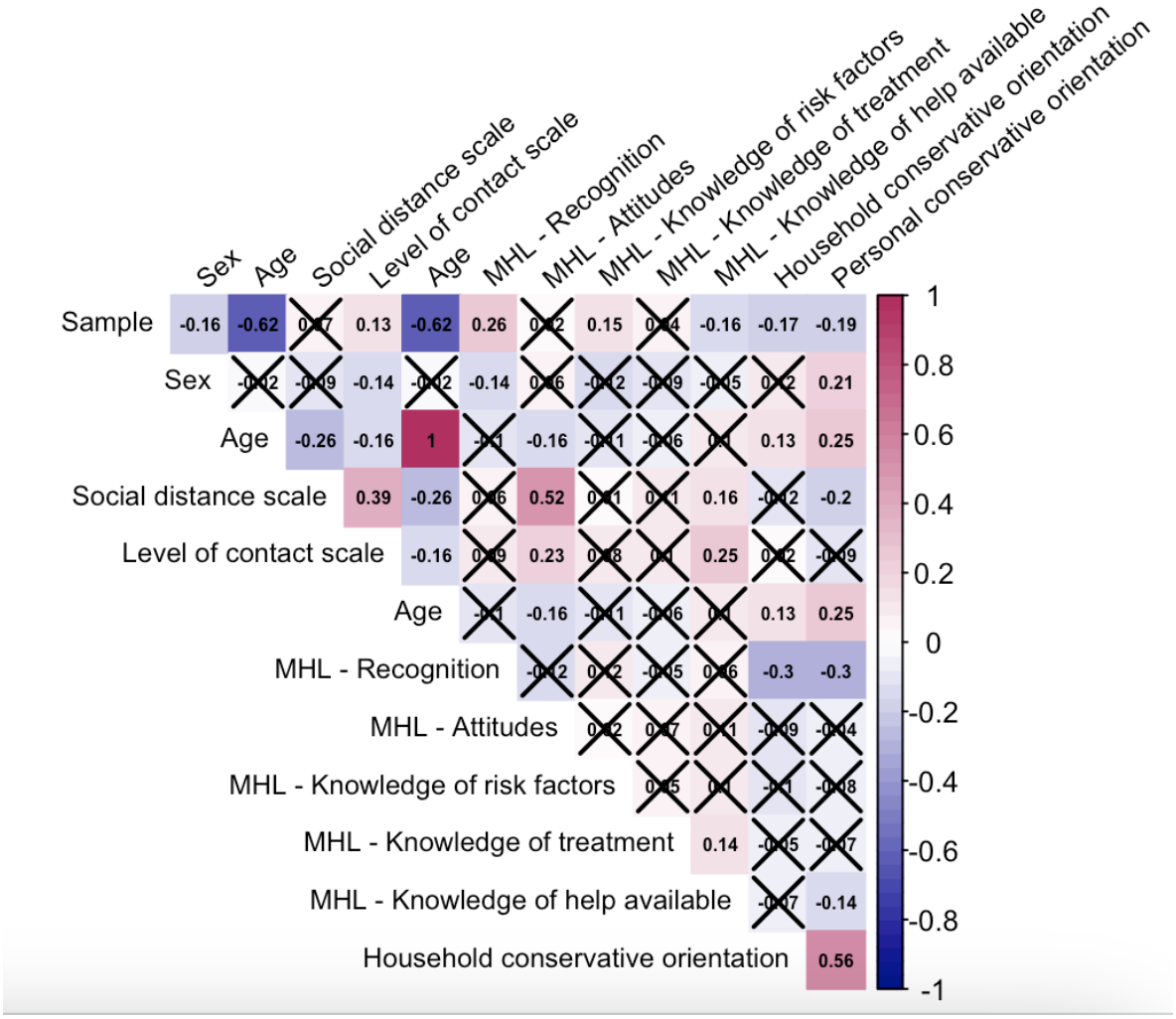
Qualitative Results

Vignette 1: Generalized Anxiety Disorder

A total of 77% of participants identified generalized anxiety disorder and generally believed internal factors were responsible for the disorder (78%). Compared to the other three disorders, generalized anxiety disorder was thought to be markedly more attributable to external factors than the other disorders (i.e., up to three times more frequently attributed to external factors). About one-

third of participants recommended medical model treatments (35%), and two-thirds recommended social support (65%).

Figure 1.
Correlation Matrix Showing Pearson's Correlations Between All Quantitative Variables Used in Regression Models



Note. Insignificant correlations are crossed out.

Vignette 2: Social Anxiety Disorder

Most participants (80%) identified social anxiety disorder and strongly believed internal factors were responsible for the disorder (93%). About one-quarter of participants recommended medical model treatments (24%), and three-quarters prescribed social support (76%).

Vignette 3: Panic Disorder

Many participants (69%) identified panic disorder and strongly believed internal factors were responsible for the disorder (91%). About one-fifth of participants recommended medical model treatments (20%), and four-fifths prescribed social support (80%).

Vignette 4: Depression

Most participants (91%) identified major depressive disorder and believed internal factors were responsible for the disorder (83%). Most participants recommended medical model treatments (84%) rather than socially prescribing (16%).

Discussion

The purpose of this mixed-method study was to assess the state and correlates of MHL in a sample of Atlantic Canadians. We report five key findings: (a) social prescribing was disproportionately recommended for generalized anxiety, (b) panic disorder was least likely to be correctly identified, (c) general anxiety was disproportionately thought to be caused by external factors, (d) only social distance predicts MHL beyond demographics and level of contact, and (e) household (not individual) conservative orientation negatively predicts MHL.

Social Connections Commonly Prescribed for Generalized Anxiety

Although Nova Scotia has the highest rate of mental health disorders in Canada per capita, and the prevalence is higher among disadvantaged Nova Scotians (Courey et al., 2017), research estimates that only half of those requiring support successfully accessed formal treatment in the prior year (Eisenberg et al., 2007). Past research on post-secondary students' mental health has shown that about half of those who require support preferred to reach out to a friend (Drew & Matthews, 2019). Identifying the types of informal support (e.g., social support in one's network) that successfully buffer against mental illness-related distress can inform social prescribing initiatives, which are on the rise in Canada. In Nova Scotia, social prescribing is generally based on recreation and is led by the Nova Scotia Therapeutic Recreation Association (NSTRA), where practitioners are trained in identifying and addressing barriers to participation and are knowledgeable about varying health conditions and illnesses and their impact on well-being (NSTRA, 2020).

Panic Disorder Least Likely to Be Correctly Identified

Although still high, panic disorder was least likely to be correctly identified. Approximately 1.5% of Canadian adults live with panic disorder (Roberge et al., 2011). Failure to accurately recognize the presence of a mental illness means that the prevalent symptoms will remain untreated and may even cause delayed treatment or the pursuit of inappropriate treatments, such as harmful self-medication (Jorm et al., 2006). Without a base level of knowledge, individuals fail to recognize the symptoms of mental illness (Furnham & Swami, 2018). Further, based on variability in how mental illness presents, the general population tends to have poor accuracy in recognizing and labelling mental illness (Jorm et al., 2006). Accurate recognition of mental illness requires an individual to have a developed schema of what mental illness is and how it presents, which is challenging given the subdued presentation of most mental illness symptomology. While many physical illnesses and conditions present symptoms in a rather overt manner, mental illness is usually only visible in relation to maladaptive patterns of behaviour required (Lauber et al., 2001). For example, some panic disorder symptoms are cognitive in nature, such as high anxiety sensitivity, which may not be visible to the general public (Kim et al., 2010). The subdued presentation of mental illness poses a major issue regarding the identification and diagnosis of mental disorders.

General Anxiety Thought to Be Caused by External Factors

In the present study, participants tended to believe depicted general anxiety was caused by primarily external factors, with many participants placing a causal influence on stress caused by school, work, etc. Other participants placed weight on society, family life, and lack of sleep. Attribution theory proposes that individuals strive to understand the behaviour of others by

attributing their behaviour to internal factors such as beliefs, motivations, or traits, or to environmental factors external from the individual (e.g., Myers et al., 2018). In the context of mental illness, evaluations of those with mental illness are more favourable if the cause was perceived to relate to external factors, such as experienced trauma, rather than weakness of character. For example, stigma has been reduced when individuals perceive socio-ecological factors could have a casual effect on the development of a specific disorder (Kermode et al., 2009). On the other hand, individuals attach more stigma to mental illness if they consider the individual to be accountable for their presenting illness; stigma is at its lowest when the mental illness is attributed to biological factors (Feldman & Crandell, 2007). This discrepancy suggests it is easier to cast judgments on an individual's personal shortcomings, rather than misfortune (e.g., genetic vulnerability or a lived trauma).

Importance of Social Distance in MHL

Social distance from those with mental illness was a key predictor of MHL, in that being comfortable near those with mental illness was linked to overall MHL. Studies show that common misconceptions of those with mental illness (e.g., danger or incompetence) can perpetuate negative perceptions of mental illness (Feldman & Crandall, 2007; Kermode et al., 2009). For example, believing those with mental illness are dangerous can cultivate fear, leading to the desire for greater social distance—and ultimately, to discrimination (Ben-Zeev et al., 2010). Because stigmatizing beliefs around mental illness are based on lay conceptions of what mental illness is and how mental illness impacts individuals, most education initiatives try to replace long-standing myths of mental illness with evidence. Corrigan and Penn (1999) noted that protests (e.g., public demonstrations), education, and increased contact with individuals with mental illness are three strategies that have been effective in combatting stigma toward mental illness. That is, addressing misconceptions of mental illness on a societal level can help facilitate a shift in understanding how mental illness is perceived, which in turn can prevent the development of stigma-promoting beliefs. This evidence may support a role in public health efforts to alter public perceptions as a foundational way to minimize stigma.

Implications

With one in every five Canadians meeting the diagnostic criteria for a mental illness within any given year and only one-third seeking help, mental illness poses a major public health crisis in Canada (Canadian Mental Health Association, 2021). Although the burden of mental illness may be alleviated if properly treated, most people who require help do not access resources or supports due to barriers such as stigma, poor symptom appraisal, and lack of knowledge of resources available. One way to mitigate these barriers and facilitate proper help-seeking is by fostering MHL in individuals, communities, and society. Thus, it is necessary to discover how mental illness is understood and perceived within the general population, which may lead to positive outcomes as a means of facilitating early intervention, via an upstream approach (Jorm et al., 1997). Research on the correlates of MHL in Atlantic Canadian communities may contribute to improving MHL in Atlantic Canada through programming. We provide evidence that efforts to improve MHL—and thus reduce the burden of mental illness on Atlantic Canadian health systems—could be informed by improving public knowledge of the various causes and treatments of general anxiety disorder, increasing residents' ability to recognize disorders beyond depression (e.g., panic disorder), and reducing stigma by fostering comfort being near those with mental illness. These efforts are beginning to sprout in Nova Scotian communities (for a review, see Hill et al., 2023) through programs that generally take a psychoeducational approach (e.g., focused on raising awareness of resources and teaching life skills). These Nova Scotian programs currently seek to provide access to resources, build awareness of mental health, teach individuals how to support others, and develop life skills. For

example, raising awareness of mental health topics and resources through discussion of self-care and life skills promotes mental health through sustainable lifestyle choices (e.g., building financial literacy, developing social skills). With the present findings in mind, one avenue to inform MHL programming in Atlantic Canada may be to focus less on demographic characteristics (e.g., age and sex of the participants) and more on their perceptions toward mental illness (i.e., social distance). For instance, the act of illustrating that engaging with those who experience mental illness is a safe experience may prevent public stigma and efforts to self-distance.

Limitations and Future Directions

A primary limitation to this study was the limited opportunity to recruit representative participants from the general population. Due to pandemic restrictions, sampling methods for the general population were limited to poster and online advertisements. To obtain the target sample size, we also recruited participants from the university participant pool. There are some factors that may have affected this discrepancy from the norm, including our small sample size or sex disproportion, although past research has shown no sex differences in MHL in Atlantic Canadian students (Thomas, 2019). Further study of MHL would benefit from a general, representative sample with more variation in educational attainment (as MHL is a type of literacy). A second limitation is the cross-sectional regression model used, which does not take into account other potential phenomena, such as indirect effects or causation. Therefore, further study of MHL and how to improve it could include a longitudinal design to assess effects of MHL programming on MHL over time. Finally, we asked participants open-ended questions about what treatment they would recommend for specific symptoms. A follow up survey asking about specific community resources and programs for those who provided social prescriptions would help illuminate specific opportunities for social prescribing. Our primary study strength is the mixed method design, which provides a richer picture of the state of MHL in Atlantic Canada than what purely quantitative methods could.

Conclusion

Efforts to improve MHL and thus reduce the burden of mental illness on Atlantic Canadian health systems could be informed by increasing public knowledge of the causes and treatments of generalized anxiety disorder, increasing residents' ability to recognize disorders beyond depression (e.g., panic disorder), and reducing stigma by fostering comfort for those living near individuals with mental illness.

Author Notes

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