Assessing Perceptions of Mental Health Literacy Among Undergraduate McMaster Students

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Abstract

The presence of stigma and lack of knowledge surrounding mental health is prevalent among university students but has not been researched in depth among the academic community. The present study examines perceptions of mental health literacy among undergraduate students at McMaster University to understand the impact of mental health literacy on attitudes towards seeking help for mental health problems and whether these attitudes differ by faculty. An anonymous, online survey was administered to understand these topics through questions about students' perceptions of mental health literacy and levels of mental health care provided by professors and on-campus wellness services. 70 undergraduate students completed the survey, and we analyzed the quantitative data against the theoretical frameworks of symbolic interactionism and social constructionism to assess how personal interactions and social contexts impact attitudes towards mental health. The results suggested discrepancies in perceptions of mental health literacy and available care between faculties, however, similar perceptions of stigma were reported by all respondents. It was also found that attitudes towards mental health care services on campus were influenced by levels of mental health literacy. This research provides a foundation for future studies on faculty-specific attitudes towards mental health and provides insight into productive changes that can be made by McMaster University to improve help-seeking attitudes among undergraduate students.

Introduction

Mental disorders and associated symptoms remain prevalent among the broader population of university students. Mental health literacy is defined as the knowledge and beliefs regarding mental disorders, allowing for the ability to recognize, manage, and prevent (Miles et al., 2020). Encompassed in this definition are skills in identifying symptoms of mental disorders, understanding causes or risk factors, general beliefs about mental health, and access to support services, such as the Student Wellness Centre at McMaster University (Jorm, 2015). There have been programs implemented through the Student Wellness Centre to reduce stigma and improve mental health literacy in the community, including strategies and help booklets (McMaster University, n.d.). As a result of this, a large focus of study was on the efficacy of these strategies in impacting perceptions of mental health literacy. This formed the basis of our research and developed an overarching goal of understanding perceptions of mental health

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literacy in an attempt to propose strategies for future research to be conducted within the McMaster student population.

Increased levels of mental health literacy within universities aid in early recognition and interventions for mental health issues before they are exacerbated. This is supported by the growing concern about mental health in students and evidence that shows that more than 30% of first year students reported experiences of at least one of the “mood, anxiety, or substance disorders” which were addressed in a study by the World Health Organization (Miles et al., 2020). With increased prevalence of mental health concerns in university students and the onset of mood or substance disorders in young adulthood, it is crucial to increase all factors of mental health literacy within schools.

While our topic of research is mental health literacy among McMaster students, the goal of improving it must take into consideration how certain components of social and educational contexts inform an individual’s perception of mental health literacy. Furthermore, this research study provided a unique opportunity to assess whether mental health literacy differs according to faculty and use this information to enact personalized interventions for students. Additionally, understanding the impact of stigma on students’ perceptions of mental health literacy aided in evaluating whether there should be programs set in place to reduce stigma among our target population. In addition to the complex effects that individuals and groups have on each other’s perceptions of reality, stigma holds a large space in the study of social psychology, which is why this topic was so important to research through a social psychological lens.

This research paper begins with a statement of the major problems that we researched and how they impacted the purpose of this study and our subsequent research questions. Our included literature review highlights current research in the field of mental health in university students. This provided an understanding of the gaps in the current discourse within academia and how we aimed to use our research to add to the discourse. The next section is an outline of two theoretical frameworks that were used to evaluate our findings: mild social constructionism and symbolic interactionism. The paper will then outline the methodology utilized to conduct the research before disclosing the findings in the results section. There will be a discussion of major themes pertaining to our findings and how they relate to the current literature on the topic in relation to our research questions, followed by a conclusion that involves the limitations and significant insights of the completed research.

Statement of Problem and Purpose of Research

Within our overarching research topic of perceptions of mental health literacy among students at McMaster University, we conducted research to learn more about specific problems that will be outlined below. One of the dominant problems that we studied surrounds the perceptions of mental health literacy among students between faculties. For example, there is relevant literature to prove that mental health literacy is lower in faculties outside of social sciences (Miles et al., 2020). In addition, up to 25% of students in engineering with mental wellness problems engage in help-seeking behaviours, compared with up to 35% of business students with mental wellness issues (Lipson et al., 2016). This problem was especially important to research because it is worth noting whether faculties with higher rates of mental disorders had equally high perceptions of mental health literacy. If they did not, this research is paramount to begin evaluating and incorporating interventions within these specific fields to help students potentially

recognize and prevent severe mental health issues before they reach a peak. The purpose of researching this topic was to understand where mental health literacy is less prevalent, which can aid in future developments within faculties to address this problem effectively.

Additionally, we aimed to address through our research the prevalence of stigma surrounding mental disorders and their related symptoms among university students. The reasoning for this research was due to the negative perceptions of mental disorders among students' motivation to address and treat mental health issues, leading us to believe that more information should and could be found to ameliorate this matter (Gulliver et al., 2010). Without adequate literature on stigmatization of mental disorders among university students, there are no opportunities to create programs or interventions that will aid in decreasing the stigma. We researched McMaster students' perceptions of stigma towards mental disorders to learn more about whether there is a need for further research to be conducted, as well as potential strategies to address this issue in the future.

While there is a wealth of data collected on perceptions of support services for mental health problems in university students, the other components of mental health literacy - knowledge and beliefs surrounding recognition and prevention of mental disorders - are otherwise unaddressed. Within the literature review, many articles note that increased mental health literacy knowledge would be helpful, but none address action to make this possible (Reavley et al., 2011). This is the main problem that we hoped to research, as it is imperative that we add to the academic discussion surrounding all components of university students' mental well-being. Building on this, we researched McMaster students' perceptions of mental health literacy in hopes of learning more about whether the perceptions of mental health literacy among McMaster students are positive or negative in nature, and whether this contributed to stigma against mental disorders on campus. We hope that our findings will lead to effective and impactful changes within the McMaster community in terms of mental health literacy.

Research Questions

Our main research question was "what are the perceptions of mental health literacy among McMaster students?" As such, our survey questions aimed to assess the level of knowledge students have about mental health literacy. We selected this particular research question because we wanted to understand how perceptions of mental health literacy impact the university's ability to meet the needs of its students.

In addition to our overarching research question, we developed questions pertaining to more specific interests of our study. Namely, we looked to understand the following questions: How does a student's faculty contribute to their perceptions of mental health literacy? Furthermore, how does the prevalence of stigma throughout McMaster University impact perceptions of mental health literacy, and what can be done to ameliorate this issue, if necessary?

Literature Review

Nine academic articles were collected and analyzed to identify common themes and chasms in the academic discourse surrounding the chosen research topic. This existing literature was gathered in an effort to convey bilateral agreements proposed on the topic of mental health literacy and student perceptions of access to mental healthcare. Mental health literacy is defined as the knowledge and beliefs regarding mental disorders,

which allows for the ability to recognize, manage, and prevent them (Reavley et al., 2011). There is substantial research in the area of mental health, however, it is evident that there are gaps in the area of student perceptions of the topic. Individuals in post-secondary education are at the peak onset for mental health problems and suffer more psychological distress than those who are not (Reavley et al., 2011, p. 45). Thus, mental health literacy and support initiatives on campuses need to be further evaluated to enhance student support during post-secondary education.

Existing literature in this area was compared, as well as an evaluation of strengths and weaknesses within the literature. Recurring and overarching patterns, including perceptions of mental health literacy, available support services, and stigma were investigated within this research topic so that we could acknowledge any literary gaps that we may seek to fill in our own primary research. It has already been noted that mental health literacy, stigma, and help-seeking behaviours all correlate because knowledge about mental health determines language chosen towards it, and how one will think about their own mental health and choose to manage it (Reavley et al., 2011, p. 45). Thus, we hope to contribute to this literature in our research by addressing these gaps.

Perceptions of Mental Health Literacy

The amalgamation of relevant research on the topic of mental health literacy shows three common themes, which include the necessity of increased knowledge in students, gender and ethnic discrepancies in mental health literacy, and differences in mental health literacy among university faculties and programs. Firstly, it is noted among the academic discourse that it is imperative to increase knowledge of mental health literacy among students in order to promote positive attitudes towards mental disorders and ways to improve mental health (Kamimura et al., 2018; Bulanda et al., 2014).

This recommendation was supported by a study done by Furnham et al. (2011), which assessed 400 university students' knowledge and recognition of specific mental disorder labels. Findings showed that there was a severe lack of knowledge about mental disorders, with only 8 out of 97 psychiatric labels being confirmed by 75% of participants as something they had heard of (Furnham et al., 2011). Moreover, when the participants were prompted to describe certain disorders and associated symptoms/signs, there were only 9 disorders for which over half of the participants were confident in doing so (Furnham et al., 2011).

As Kamimura et al. (2018) note, this knowledge will affect the perceptions of mental disorders, including susceptibility, severity, barriers and benefits to self-efficacy, and healthy behaviours. Additionally, Reavley et al. (2011) have explained that universities have a unique opportunity to enhance mental health literacy and can do so by conducting research on campuses. These initiatives will also encourage related education. As such, researchers in the United Kingdom have identified campaigns and various programs with the goal of improving understanding of mental health issues and increasing confidence in responding to the distress of others (Laidlaw et al., 2016).

Another theme that arose was the discrepancy in mental health literacy between gender and ethnicity. While this will be analyzed in further detail within the section on stigmatizing attitudes towards mental health, the perceptions of mental health literacy according to gender and ethnic categories are important to note. To begin, Miles et al. (2020) discussed that there are significant differences in mental health literacy among demographic variables such as gender, ethnicity, and age. This data has been

supported in a previous study that noted significantly lower levels of health knowledge in adolescent males, young people of colour and students in Vietnam compared to their American counterparts (Bulanda et al., 2014; Kamimura et al., 2018).

To the contrary, Miles et al. (2020) still identified that although females have higher mental health literacy and perceive greater need for treatments than their male counterparts for anxiety disorders and psychosis, there were no observable differences in perceived need for treatment of depression and related symptoms. Understanding gender and ethnic differences in mental health literacy was important to note in our research because while demographic variables were collected, we grouped participants according to faculty and affiliation with McMaster University to control for differences in demographic categories.

The final theme that was discussed in the reviewed literature surrounded the range of mental health literacy levels according to a student's university faculty. Lipson et al. (2016) provided evidence that there is a "higher likelihood of mental health problems" (p. 31) in the Humanities or Arts faculties and a lower likelihood within faculties such as Nursing, Business, and Public Health. The information about nursing is a key insight for our research because we were unable to conduct our research within the nursing faculty for ethical reasons, so the information was factored into our conclusions about discrepancies between faculty. The evidence provided by Lipson et al. (2016) was somewhat supported in another study as it was found that students who major in education or have not taken clinical psychology courses scored in the mid-range on mental health literacy tests (Miles et al., 2020). As such, the underlying reasoning for these differences in prevalence of and attitudes towards mental disorders will be discussed in further detail in the section on stigmatizing attitudes.

Reavley et al. (2011) stated that many of the existing assumptions on mental health and associated knowledge in university populations are disproportionately drawn from studies within science-related programs. This provided our research with a unique opportunity to contribute to the gap in knowledge surrounding other faculties' perceptions of mental health literacy and shaped our aim to get an accurate and equal representation of all faculties within the McMaster student population. Additionally, Reavley et al. (2011) included staff within the target population of their study. We avoided the addition of staff perceptions because we wanted our research to be completely fixed on students, so as not to skew our data collection. We used our data to provide new insights that are specific to university students, not the broader university communities at large. Finally, the K-6 questionnaire method used by Reavley et al. (2011) was beneficial for the personalized questions and beliefs, but due to ethical constraints and considerations of invading students' privacy, we were not able to utilize this method.

Support Services and Help-Seeking Behaviours

Two major themes exist in the literature on support services and help-seeking behaviours among university students: help-seeking preferences between students in different faculties and attitudes towards seeking support for mental health problems. A study by Lipson et al. (2016) found that just under 40% of undergraduate students reported receiving treatment for mental health problems in the previous year. For our study, understanding how and why students will seek help for mental health problems was imperative in analyzing the subsequent results. Scholarly studies have supported preferences towards which types of support is sought out by university students.

Further, studies such as Bulanda et al. (2014) and Armstrong et al. (2000) allude to differences in gender and ethnicity concerning attitudes towards seeking help. We anticipated finding similar disparities in our research because of this, barring differences in gender and ethnicity.

There are apparent disparities between help-seeking behaviours depending on the student's faculty. Lipson et al. (2016) stated that business and engineering students had the lowest likelihood of seeking treatment for mental health problems, while students within the faculties of social work, social sciences, and art & design were among the most likely to utilize treatments. A study by Laidlaw et al. (2016) also contributed to this perspective, noting that medical students reported perceptions of public stigma concerning seeking help for mental health struggles. Due to ethical constraints, medical students were excluded from the target populations so having this knowledge of how medical students are affected according to help-seeking behaviours will aid us in making broader conclusions about help-seeking behaviours among different faculties at McMaster University.

Seeking support and treatment for mental health problems has been a large topic of discussion in the academic community. Some notable evidence shows that although there is a higher susceptibility in young adults for developing a mental disorder, there is an equally "strong reluctance to seek professional help" (Gulliver et al., 2010, p. 1). This statement is supported by additional studies that identify that treatment services on university and college campuses are scarcely sought out with only 10% of students feeling comfortable seeking help from counsellors on campus (Reavley et al., 2011). Barriers to seeking professional help for mental health problems are discussed by Gulliver et al. (2010), with negative attitudes towards help-seeking, public stigma, and the belief that treatment will not be beneficial being among the most prominent reasons.

Instead of seeking professional help, researchers agree that there is a tendency to seek support from non-institutional forms of support, including friends and family (Gulliver et al., 2010; Reavley et al., 2011). Research by Bulanda et al. (2014) shows that in more recent years, youth programs for mental health promotion have drawn on the idea that individuals can assist their peers in managing mental health issues. Within this discussion, there were mentions of gender and ethnic differences concerning attitudes towards seeking help for mental health problems. Firstly, a study done by Armstrong et al. (2000) concluded that many young people from Muslim and Pakistani backgrounds did not feel comfortable discussing mental health issues outside of a familial context. In addition, it has been noted that girls are more willing to discuss their feelings. Armstrong et al. (2000) noted that more girls were willing to participate in the study on mental health. Consistent with this finding two decades later, Miles et al. (2020) alluded to the premise that socialization according to gender roles is a core factor in the discrepancies in gendered attitudes towards help-seeking behaviours. We chose to omit gender and ethnic differences in our research due to the anonymous nature of the survey and our desired focus on faculty.

Leahy et al. (2010) concluded that just under 50% of individuals who attend post-secondary schools experience psychological distress, insinuating that the pressure of post-secondary education can lead to higher amounts of distress. Evidently, there is a prominent need to strengthen the availability and accessibility of support services on campus. This finding contributed to the goals of our current research because, in understanding how McMaster students perceive institutions of support such as the Student Wellness Centre compared to perceptions of receiving support from peers, we

can begin to understand how to implement positive strategies to improve attitudes towards help-seeking behaviours in this specific community.

Relevant research on help-seeking behaviours among post-secondary students often encompasses students in both law school and medical school and is less frequently studied among students in other faculties (Lipson et al., 2016). Moreover, research on help-seeking patterns within the faculty of business is scarce and one study found that "rates of mental health service utilization were lowest among business students" (Lipson et al., 2016, p. 37) relative to other faculties. Thus, we conclude that few interventions have been administered to students in a variety of academic faculties, representing an "untapped possibility" (Lipson et al., 2016, p. 37) for engaging students in mental health knowledge surrounding both preventing and treating mental health concerns. As a result, our research focused on understanding the help-seeking behaviours in various faculties across the McMaster population.

Perceived Stigma Towards Mental Health Problems in University Students

The final academic discussion that will be reviewed surrounds the prevalence of stigma towards mental health problems, which in turn affects attitudes towards seeking formal and informal support. There are notable differences in stigmatizing attitudes towards mental health problems between faculties and genders (Lipson et al., 2016; Reavley et al., 2011). Additionally, there is discourse surrounding the notion that the prevalence of stigma towards mental health problems has negative consequences on actions taken to seek help for those problems (Bulanda et al., 2014).

The academic literature around the topic of stigma and how it affects perceptions of mental health between faculties is expansive. Lipson et al. (2016) identified that students within the faculty of visual arts were negatively affected by intense competition and a culture of antagonistic ambition which impacted attitudes towards discussing and seeking help for mental health problems. This finding was echoed by Laidlaw et al. (2016) who concluded that medical students reported a higher prevalence of public stigma relating to seeking help for mental health problems. Correspondingly, the stigma was linked to competitiveness and the tendency among medical students to view mental health problems as weak (Laidlaw et al., 2016). This finding was important for our current research because of the ethical constraints that prevented us from conducting research with medical and nursing students.

Furthermore, there is additional stigma towards seeking help from professional services such as counsellors on campus (Gulliver et al., 2010). A study conducted by Reavley et al. (2011) stated that stigma towards mental health issues is associated more with males and younger students, a finding that was supported by research done in 2014, which asserted that males had less knowledge about mental health and more stigma than females (Bulanda et al., 2014). In the study by Bulanda et al. (2014), it was found that females were more likely to report willingness to seek help from mental health services, with barriers for males seeking help including a desire to 'fit in' coupled with social pressure that stigmatizes and labels help-seeking behaviours as weakness.

The research done by Gulliver et al. (2010) also addressed stigma within the post-secondary student population, but their geographical location initiates a gap in our research as their review was primarily analyzing studies of rural populations and we looked at individuals coming from both rural and urban areas. Although they addressed stigma as a barrier to help-seeking behaviours, McMaster is a diverse school community

and has many local, national and international students which varied our data based on socio-economic factors and geographical environment.

Conclusion

There is limited existing research which requires participants within an age range of the university demographic, especially within North America. Previous research that focuses on student mental health has been identified to have an age gap that is too broad (6 – 13; 12 – 25 years of age), or too narrow (12 – 14 years of age) (Bulanda et al., 2014; Gulliver et al., 2010; Armstrong et al., 2000). We also found that within the limited research that does exist on the university population, there are common themes of limited sample sizing and limited diversity of students' faculties or have been conducted outside of North America (Laidlaw et al., 2016; Leahy et al., 2010). We believed this was a vital demographic due to the increased mental health rates and associative health concerns, as well as an increased need for more adequate wellness resources on university campuses and faculty-related inadequacies (Reavley et al., 2011; Lipson et al., 2016; Armstrong et al., 2000).

Due to the agreement among academic studies, there must be more knowledge spread about mental health literacy and its related aspects. Our current research was conducted in the hopes of gaining more insight into specific attitudes and perceptions of mental health literacy at McMaster. This was done in an attempt to begin the process of proposing appropriate interventions. Since the study exclusively assessed the perceptions of McMaster students, it is imperative to address the underlying shared meanings within the McMaster community that contribute to the perceptions of mental health literacy and stigma at large. Thus, our secondary research aids in addressing and understanding the concerns of perceptions of mental health literacy, barriers to help seeking behaviour, and stigma associated with mental health struggles among university students.

Theory

The fields of sociology and social psychology are complementary in nature. Sociology can be defined as the origins, development, and the functioning of social groups (Ellwood, 1924). Conversely, the study of social psychology encapsulates how individual factors affect the origins, development, and functioning of social groups (Ellwood, 1924). In other words, sociology is focused on how collective understanding affects individual functioning, and social psychology is focused on how individual functioning impacts the collective understanding. For this reason, it was imperative to use both a sociological framework and a social psychological framework to analyse the results of this study. Both the mild social constructionism and symbolic interactionism frameworks address how social interactions influence perceptions of reality, but symbolic interactionism is focused more on how social interactions impact an individual's reality while mild social constructionism is focused on how social interactions impact perceptions of one's social reality (Blumer, 1969; Berger & Luckmann, 1966; Sismondo, 1993). Since our research topic assessed both individual perceptions and perceptions of the sample population at large, we utilized different perspectives to understand how and why these perceptions might differ.

Mild Social Constructionism

Social constructionism is a sociological perspective coined by Peter Berger and Thomas Luckmann in 1966, which proposes that an individual's social reality is created through everyday interactions (Berger & Luckmann, 1966). Further, through these interactions, reality is reconstructed not only at an individual level, but on an institutional level; social processes form our beliefs, but our beliefs in turn form our social processes (Berger & Luckmann, 1966). Social constructionists are focused on the construction of knowledge (Andrews, 2012). This includes how knowledge emerges and how it becomes significant in a social context (Andrews, 2012). Social constructionists see all reality as subjective; the way we interact with the social world influences our perceptions of reality, meaning that individuals within a shared society will have similar perceptions of their social reality (Berger & Luckmann, 1966). However, we utilized mild (or contextual) social constructionism, which differs from the strict social constructionist theory as it maintains that while our social reality is subjective, there still exists a physical reality that is objective and real (Sismondo, 1993).

The concept of language is fundamental to the social process of constructing reality and shared meanings (Berger & Luckmann, 1966). In a society where the predominant language is English, telling someone that you feel sad conveys an understanding of the feeling that is associated with the word. If a person were to say that they felt sad to someone who did not understand English, the underlying feelings that are associated with the word would not be implied. In this sense, reality is based around societal context. Without a shared language, there would be no way of relating concepts, developing knowledge, or even understanding one's thoughts on an individual level. Everyday interactions are shaped by broader structures of culture and historical context, meaning that perceptions of reality are dynamic and constantly subject to change (Burr, 2015).

Mild social constructionism was vital in the analysis of our results due to the theoretical understanding that our social contexts play an integral role in the formation of one's perception of social reality (Burr, 2015; Sismondo, 1993). For example, someone who has never heard of or attended McMaster University would be perplexed at the abundance of maroon clothing seen on students around campus because they are not aware of the context surrounding the university's colours. Thus, our perceptions of reality are subjective because they are based on the context of our culture, time period, and society (Berger & Luckmann, 1966). This proposition was used to discuss how the social context of being a McMaster student informed respondents' perceptions of mental health literacy. Even if they know course-based websites and university staff to be objective aspects of society, a student who does not go to McMaster would not have knowledge of Avenue to Learn, a perception of whether faculty members address mental health in their lectures, or even which staff members work in each faculty. In line with the mild social constructionist perspective, an institution like the Student Wellness Centre is objectively real to anyone, but only McMaster students understand the social and contextual relevance that it has within their perception of McMaster support services.

Symbolic Interactionism

While mild social constructionism is a sociological perspective on shared meanings, a complementary social psychological perspective is the theory of symbolic interactionism. Symbolic interactionism is a theoretical framework forged by Herbert Blumer and is focused on the function that social interactions play in creating shared

meanings and symbols, which in turn help us to form an individual identity (Blumer, 1986). Symbols or meanings that are created and shared in interactions might include spoken words or letters on a page. For example, when one reads the word “cat,” they picture the fluffy four-legged feline. The three letters that make up the word do not have meaning unless one interacts with the animal that is denoted by the symbol; thus, having a bad interaction with a cat may lead to a person seeing the word and associating it with fear. This example perpetuates the theoretical framework that meaning is subjective and relies wholly on the impact that interactions with symbols have on an individual (Blumer, 1986).

The previous example highlights the three fundamental premises, defined by Erving Goffman (1959) that make up the foundation of this theory. The first states that people will act towards an object or situation based on the meaning that they have created, coupled with the second proposition that one will create those meanings through interactions with others (Goffman & Bergström, 1959). The two premises work to inform the final idea that one will maintain or modify a symbol’s meaning according to repeated interactions with the symbol (Goffman & Bergström, 1959). Referring back to the example of the word “cat,” one might have a bad initial experience with a cat and form a negative meaning around the word. If a subsequent interaction with a cat produces a more enjoyable experience, one may recreate the meaning and re-evaluate the word “cat” to have a neutral or positive connotation in the future.

Symbolic interactionism aided in the analysis of our results on the notion that human beings are social in nature and derive their identity, personality, and understandings through constant social interactions (Blumer, 1986; Goffman & Bergström, 1959). A child cannot learn to form coherent words unless they hear a parent or significant figure modelling a shared language; a teenager might modify their sense of humour based on what their peers consider to be funny. Therefore, the ways that we approach certain situations in our lives are based solely on the interactions and interpretations that come from performing them in a social context (Goffman & Bergström, 1959). We utilized this notion to understand how shared meanings among the McMaster student population create perceptions and understandings of mental health literacy. One might expect that if a student has a negative interaction with the Student Wellness Centre, they may have a perception that it is not a worthwhile resource to receive support for mental health problems. On the other hand, if a student has a positive interaction with a peer when asking for support with their mental health, they may have the perception that McMaster students do not hold a stigma towards peers with mental health problems.

Methodology

When we conducted this study, we used quantitative research as the primary method for quantitative data collection. We aimed to obtain an answer to our main research question that asked about the overall perceptions of mental health literacy at McMaster, while also investigating whether these perceptions differ between faculty. Our goal was to develop a better understanding of perceptions of mental health literacy, stigma, and support within the McMaster student population. Our research integrated students from most faculties and varying levels of academic years, from years one to five. Participants were asked to complete an online, anonymous survey conducted through LimeSurvey; a software approved the McMaster Research Ethics Board (MREB). Before publishing the survey, our research was approved by the McMaster Research Ethics Board (MREB #: 0327).

Ethical Considerations

Ethical research is of the utmost importance when conducting any study, and our top priority before conducting research was eliminating any possible risks to participating in the study. The survey was open to all undergraduate students over the age of 18; however**,** nurses and medical students who are part of the McMaster undergraduate population were not able to partake in this survey. They were explicitly excluded for the circumstance of being in the medical and helping professions, which could result in them feeling obliged to take part in the survey, in addition to these faculty-specific inclusions requiring us to have multiple ethics boards to report to.

The present research posed no risks to participants that were greater than those experienced in everyday life. However, there were ethical considerations that were made throughout the process. There were psychological risks due to the topic of research, such as the possibility of making participants feel uncomfortable by evoking triggering feelings and experiences towards their own mental health experiences. This would not only violate our ethics protocols but might have led to reduced participation and a skewed data sample. By asking participants such personal questions, it could have led to a lack of responses to the more sensitive ones. Thus, we decided to shift our questions about personal experience to asking students about their perceptions of experiences to mitigate the risk of psychological discomfort in response to the survey. We also avoided psychological risks by allowing students to withdraw from the study or skip questions if they did not feel comfortable providing responses; the only mandatory question was to receive consent from participants. We provided contact information for wellness services on campus in the letter of information to ensure that respondents were aware of available support due to the sensitive nature of the subject matter. Finally, we placed a large emphasis on how the survey questions were worded to mitigate the risk of triggering or upsetting respondents.

A social risk was that participants' anonymity could be compromised since the online format of the survey meant that completing it in public spaces could pose a risk of confidentiality. To combat this, we ensured that the survey could be paused and resumed at the will of the participant in case they wanted to move to a more comfortable or secluded location to complete it.

The ethical risk that we faced was due to our own research group being undergraduate students at McMaster. This posed a risk because there was a likelihood that our peers, friends, or classmates may complete the research and feel uncomfortable disclosing their perceptions to people that they know. They also possessed the opportunity to manipulate their responses to support our hypotheses or prior assumptions. To mitigate this risk, we ensured that participants remained completely anonymous and no personally identifiable information was collected in the demographic questions. Participants were able to select 'Prefer not to answer' for any demographic questions that they felt may compromise their anonymity. We also made sure to enlist certain members of our group that had no conflicts of interest to run the recruitment process in the case of any group members being affiliated with recruitment targets. Without compromising the diversity and validity of respondents' faculty and group affiliations, we also aimed to target student-run groups that no member held executive positions in. Our final strategy to mitigate this risk was not recruiting from student-run groups that more than one member was associated with.

Research Process

Our research began in September 2021 when the research group was formed and culminated at the beginning of April 2022 with the submission of the final paper. The first step in beginning the research was producing a topic of interest between all group members. The group met once a week to brainstorm broad research questions and interests to inform the subsequent literature review. We first investigated how much information on mental health literacy, stigma, and supports was provided by the Student Wellness Centre at McMaster to inform the angle from which we approached the research. Seeing pamphlets and some resources about stigma and mental health supports prompted us to wonder whether students were aware of or even interested in utilizing them. Upon reviewing the sparse academic literature surrounding mental health literacy and help-seeking attitudes among university students, more specific research questions and goals were cultivated.

While there is a wealth of data about mental health literacy, stigma, and help-seeking behaviours, it seemed that much of this research was not centered around university students. The studies that did include research about mental health in universities were situated outside of Canada or not specific to single university populations, which provided us with a unique opportunity to understand both how mental health literacy manifests in Canada, and within the singular population of McMaster students. This also confirmed the importance and relevance of the research topic because of the presented opportunity to fill in some gaps in the academic discourse and lay a foundation for future research to be conducted.

After completing the literature review, we created tentative research questions to provide to our supervisor, Dr. Sarah Clancy, for approval. Originally, we had the idea of conducting qualitative, exploratory research through in-person interviews, but due to the sensitive nature of the questions and the present COVID-19 health risks, a quantitative and anonymous survey was the more ethically sound approach to take. By incorporating a quantitative approach, we were able to maximize our understanding of students' perceptions and focus on the validity of the research. We chose questions that assessed perceptions of mental health environments created in the classroom by staff and faculty, and by the Student Wellness Centre. We also created questions that allowed us to investigate the perceptions of student mental health literacy through knowledge of the Diagnostic Statistical Manual, Fifth Edition (DSM-5), and perceptions of social stigma and the impact on peers on reducing it. Once the thesis and ethics proposals were submitted in October 2021, we received ethics approval by the MREB on November 12, 2021. This solidified our research questions and provided a foundation to begin the recruitment process.

Our target for participation was to have at least 75 respondents so there was more data to inform our analysis. After recruitment began, we received 70 complete responses. To avoid conflicts of interest and ethical risks, recruitment was done by group members that did not have any relations to the groups selected for recruitment.

The participants were recruited through McMaster clubs and groups that were pre-established within the McMaster Undergraduate community. Clubs were chosen based on components of diversification of race, gender, ethnicity, the year of study and faculty. First, the script was administered through via email to club administrators of student-run clubs by researchers within the group who are not affiliated with the following clubs: McMaster MedLife, McMaster Acapella Club (MMAC), Cope: A student mental health initiative, McMaster Chinese Students Association, McMaster Indian Association,

McMaster International and Exchange Club, McMaster Mindfulness Club, Big Spoon 'Lil Spoon, Black Students Association, FirstGen McMaster, Athletics and Beyond (A&B), Hispanic and Portuguese Club, McMaster Culture Connect (MCC), McMaster Association for Sports Concussions (MASC), McMaster Sports Business Association, Hillel Ontario McMaster, McMaster Aiding Women's Shelter, Pre-Veterinary Club, McMaster Institute of Transportation Engineers (Student Chapter), and Food Allergy Club.

Group administrators that we hoped would dispense the research information were sent the recruitment script. The script included the title of the study, approximate length of time, what we hoped to learn upon completing this research, examples of questions to be asked within the survey, our letter of information, a link to the survey, and all researchers' contact information. Following confirmation of participation from the student-run group administrators, researchers emailed a direct post recruitment script that communicated more information about the study to the individual members, as it was imperative that the reason for a survey be explained in full to potential participants. The link to the survey was provided as an attachment to the script.

Some obstacles that researchers overcame were long response times from administrators, directors' inclination to post the recruitment scripts, groups not having the authority to share the study topic not being with their members, as well as obtaining permission to post our individual participation recruitment scripts to the groups. Due to these obstacles, an extra proposal was made to include more student-run groups in the recruitment process, which was approved. These groups are included in the recruitment list provided above. Additionally, concerns arose when the data being received did not provide a diverse ratio of faculties. However, this was overcome by continuous outreach to various groups, which allowed for more participation, leading to a more diverse and valid data sample, as well as the addition of four new student-run clubs.

We were able to gather a total of 70 complete survey responses and 155 incomplete survey responses. We were not able to use any of the incomplete responses as they did not have any data. The frequency of faculties included in the sample are as follows: 10 respondents in Business, 12 respondents in Engineering, 9 respondents in Health Sciences, 10 respondents in Humanities, 11 respondents in Sciences, 18 respondents in Social Sciences. We composed and conducted the survey on LimeSurvey, where responses were recorded and coded prior to data analysis. We asked 13 topic-specific questions and 5 additional demographic questions, resulting in 18 questions that took an estimated 15 minutes to complete. We gathered information on accessibility and comfort in using student support services on campus, as well as students' perceptions of mental literacy within the population.

Most questions that students answered utilized a Likert scale ranging from strongly agree to strongly disagree to encapsulate thorough perceptions, and two 'Yes' or 'No' to measure binary knowledge. Multi-selection and open-ended questions were used to gather demographic data. In addition, the option 'No Answer' (NA) was available for all questions as an additional response that may best suit them in relation to the questions being provided. The students had until February 18, 2022, at 8:00pm to complete the anonymous survey before it expired. Following this, the survey was taken down and analysis began on February 21, 2022.

Data Analysis

The analysis and synthesis of results was conducted using Microsoft Excel and Jamovi software. Jamovi software provided a way to perform statistical and descriptive analyses of the data, and Microsoft Excel was used to create graphs to visualize and interpret the data further. We exported the responses from LimeSurvey into a CSV (Comma Separated Value) file in order to import them into Jamovi. The only demographic question that was of interest to the research included in the data analysis was participants' faculty, which is why participant demographics were not included in the subsequent results section.

To synthesize the data, we numerically coded responses as ordinal integers before conducting descriptive analyses, independent sample t-tests, ANOVA one-way testing, and correlation tests. We then analyzed these results and relationships through incorporating visual graphs of responses to our research questions, as shown in the results section. Pie charts were imperative in analyzing the data because they provided a simple way to view what the most popular answers were for each question in average percentages, and it allowed those who were looking through the results to see a clear trend and commonalities between data samples. Bar graphs showed us exact frequencies of responses for each option in Likert-scale and Yes/No questions. This guided us in understanding and comparing the proportion of students that chose specific responses for the questions, which was especially helpful when analyzing faculty-specific information and responses contingent on knowledge of the DSM-5. This analysis provided us and readers with efficient ways to interpret the data and give us additional time for analysis as opposed to interpreting countless records of numerical data. Once the data was analyzed and themes were identified, the data was destroyed in April 2022 after the submission of the final paper.

We utilized thematic analyses as we gathered broad patterns of answers to our research questions for the target population of McMaster students from varying faculties, levels of academic study, and shared perspectives. This type of analysis helped in making quantitative inferences and critical conclusions from the general themes of each response. Furthermore, we used theoretical frameworks to provide a discursive analysis in studying the social context of our findings. Understanding the social context and assigned meanings of McMaster-specific institutions, such as contextual terms like Student Wellness Centre, assisted us in the discussion of the results. It also increased our ability to identify relationships and correlations that existed in our collected data.

Summary

The process of preparing our research, conducting the survey, and analyzing our data was integral in upholding the ethical standards of research. Each step in the research design was commenced with caution to ensure that the wellbeing and informed consent of participants was prioritized before inviting students to complete the survey. The data collection period ended in mid-February 2022, once we received 70 responses, and data analysis occurred until the final poster presentation in March 2022. The results and discussion of our data was separated into three key themes in order to streamline the interpretation and understanding of the presented research: recognizing and responding to mental health experiences, professor involvement with mental wellness, and attitudes towards on-campus support services. These themes played a pivotal role in creating provisional answers to the research questions, which were submitted in the final paper on April 1, 2022.

Results

Introduction

The graphs and tables below depict responses to survey questions relating to our overarching research goal, which was to understand the levels of mental health literacy, support, and stigma among the undergraduate population at McMaster. We were also interested in whether a student's faculty influenced their perceptions of mental health literacy, stigma, and attitudes towards seeking help for mental health problems. As a result, many of the graphs shown below demonstrate relationships between participants' faculties and their respective responses, as well as the relationship between students' levels of perceived mental health literacy (measured by knowledge of DSM-5) and their subsequent responses. The results show primary data collected from (n=70) undergraduate students over the age of 18, in the faculties of Social Sciences (25.71%), Sciences (15.71%), Humanities (14.28%), Business (14.28%), Engineering (17.14%), and Health Sciences (12.85%). As previously mentioned, demographic questions such as ethnicity and gender identity were excluded from the results as they did not hold relevance for our research questions and could compromise the anonymity of the participants.

Figures 1 and 2 represent opinions on how effective mental wellness care is from the Student Wellness Centre among students who had some knowledge and no knowledge of the DSM-5. Most students without knowledge of the DSM-5 either had neutral or negative perceptions of care from the Student Wellness Centre, with a higher portion both strongly disagreeing and strongly agreeing than respondents with knowledge of the DSM-5. Most students who had knowledge of the DSM-5 either felt neutral, disagreed, or strongly disagreed that the Student Wellness Centre provided effective care for mental wellness with a small portion agreeing.

Figure 1

Perceptions of Effective Mental Wellness Care from the Student Wellness Centre Among Students with No Knowledge of the DSM-5

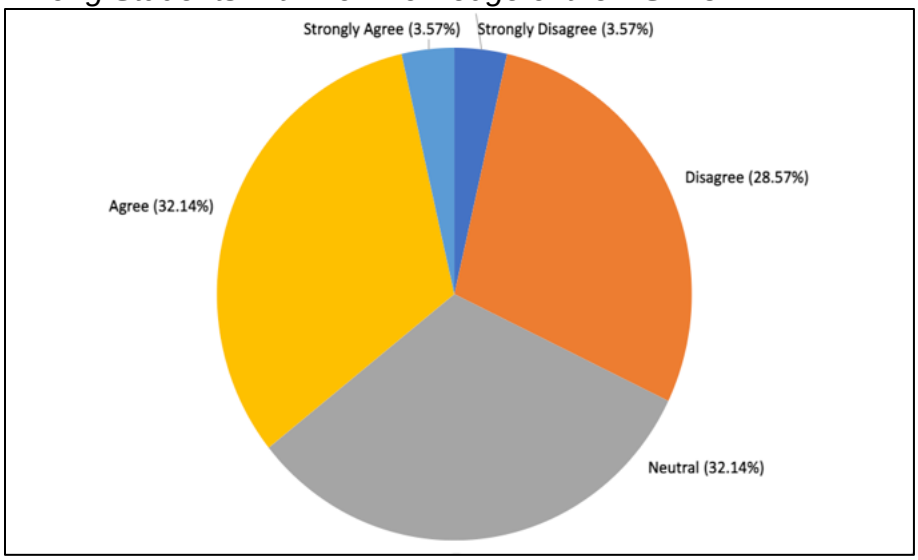


Figure 2

Perceptions of Effective Mental Wellness Care from the Student Wellness Centre Among Student with Knowledge of the DSM-5

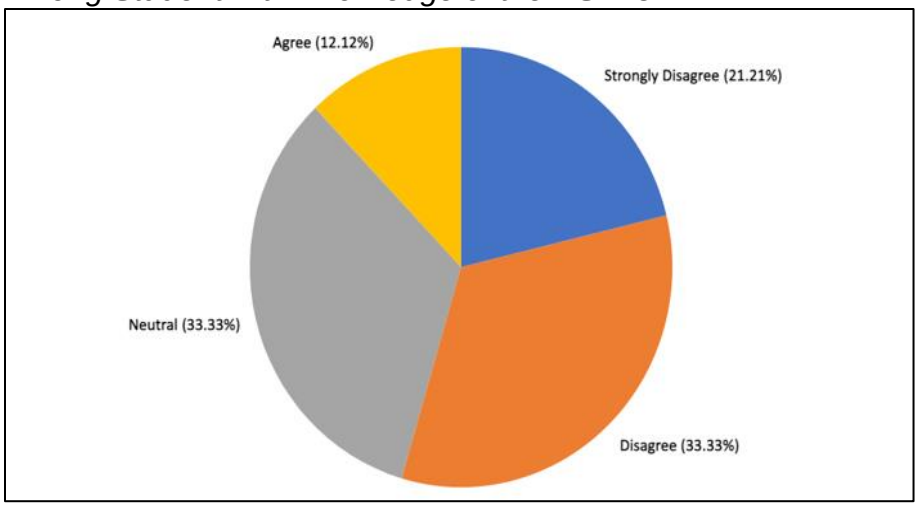
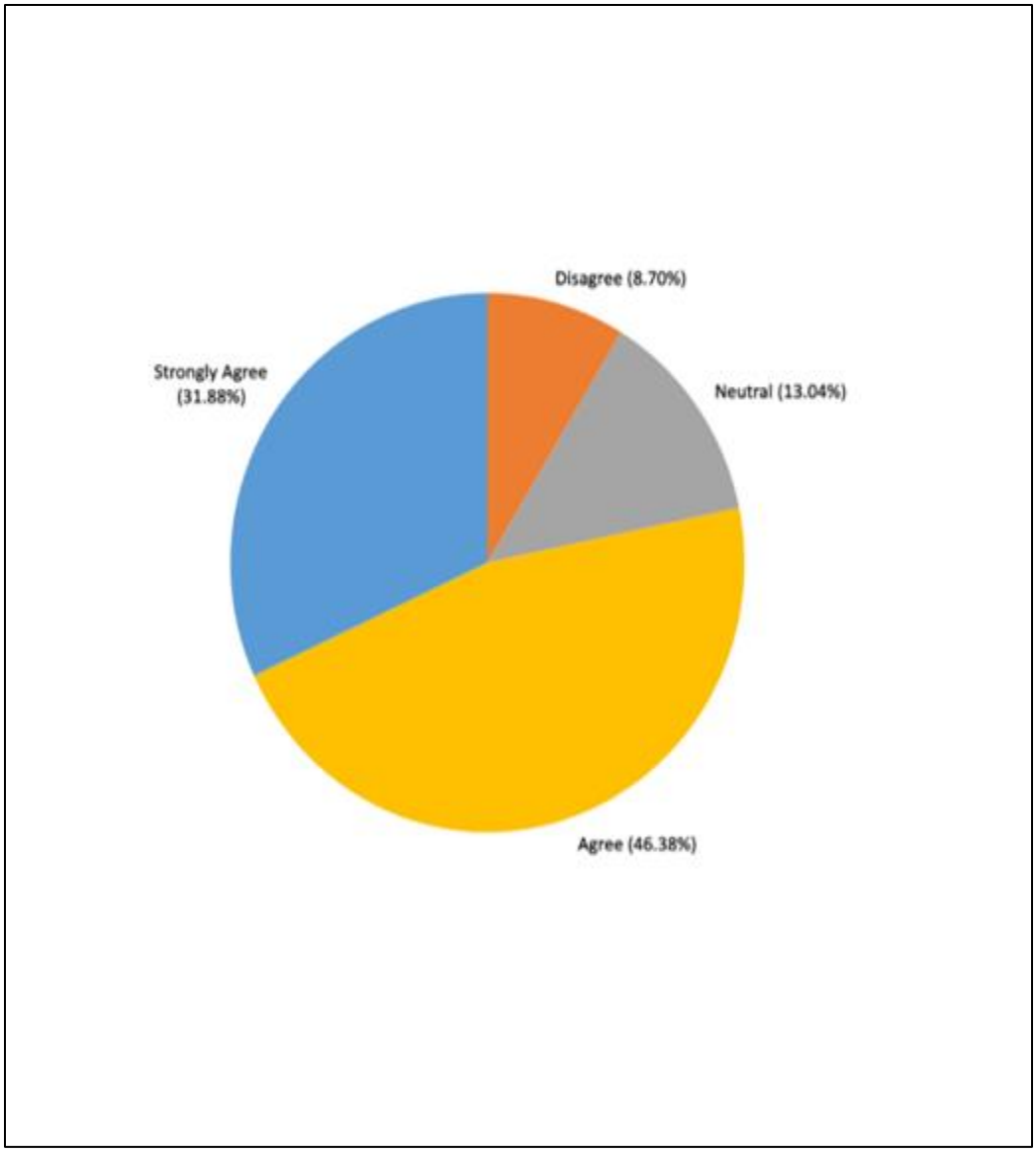


Figure 3 shows the frequency of responses to the survey question asking students whether they agree that there is a presence of stigma surrounding mental health at McMaster University. The results showed that the majority of McMaster undergraduate students either agreed or strongly agreed that there was a stigma around mental health, with small proportions showing some neutrality and disagreement. No respondents strongly disagreed with the statement provided.

Figure 3

Student Perceptions of the Presence of Stigma Surrounding Mental Health



The pie chart in Figure 4 displays all students’ surveyed perceptions of whether their peers reduced stigma surrounding mental health. This data showed that most students agreed or strongly agreed that peers reduced stigma surrounding mental health. Some individuals were neutral and fewer individuals disagreed. Important to note, no participant strongly disagreed with this statement.

Figure 4

Student Perceptions of Whether Their Peers Reduce Stigma Surrounding Mental Health

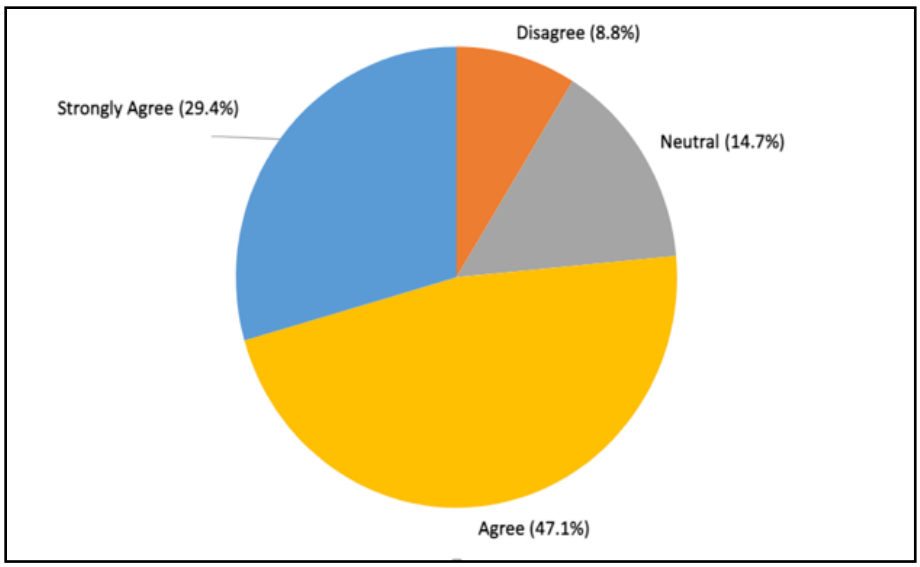
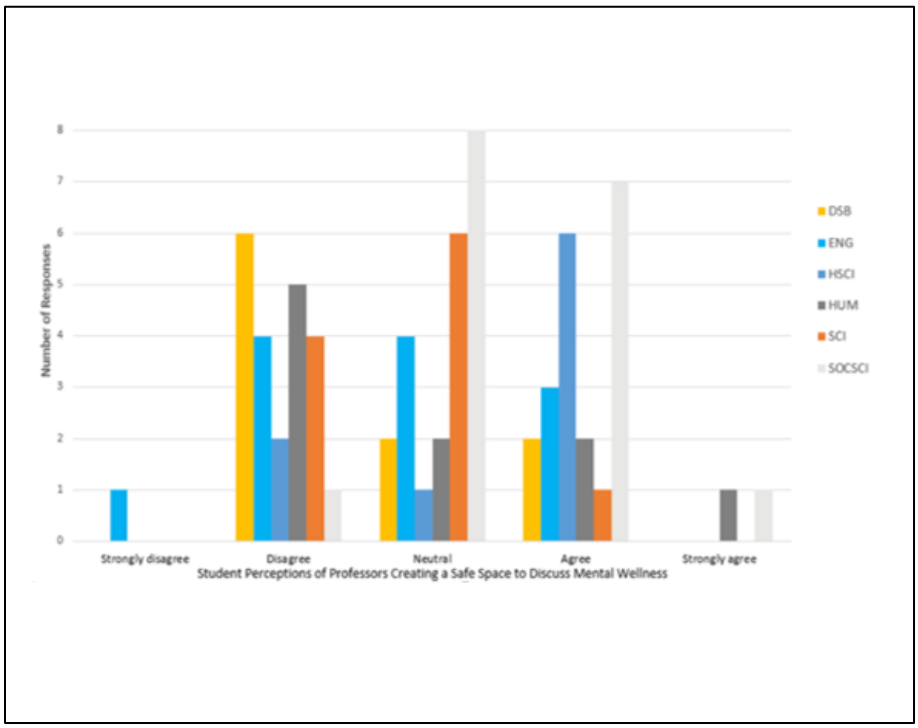


Figure 5 displays McMaster students' perceptions of their professors creating a safe space to discuss mental wellness. The graph is organized by faculty, with highest rates of agreement between Social Sciences and Health Sciences participants and highest rates of disagreement among Business and Engineering respondents.

Figure 5

Frequencies of Faculty-Specific Perceptions of Professors Creating a Safe Space to Discuss Mental Wellness



Figures 6a and 6b represent faculty-specific responses to whether the categorical classification system of the DSM-5 was effective based on respondents' knowledge of the DSM-5 (6a shows respondents with DSM-5 knowledge; 6b shows respondents

without DSM-5 knowledge). In Figure 6a, most agreement came from Health Sciences, Science and Social Sciences respondents, and disagreement came from Social Sciences and Business respondents. In Figure 6b, agreement was reported by Humanities, Engineering, and Business respondents and major disagreement was also reported by Humanities respondents. Note: no Health Sciences respondents did not have knowledge of the DSM-5.

Figure 6a

Faculty-Specific Perceptions of the Efficacy of the DSM-5 Classification System (Among Respondents with Knowledge of the DSM-5)

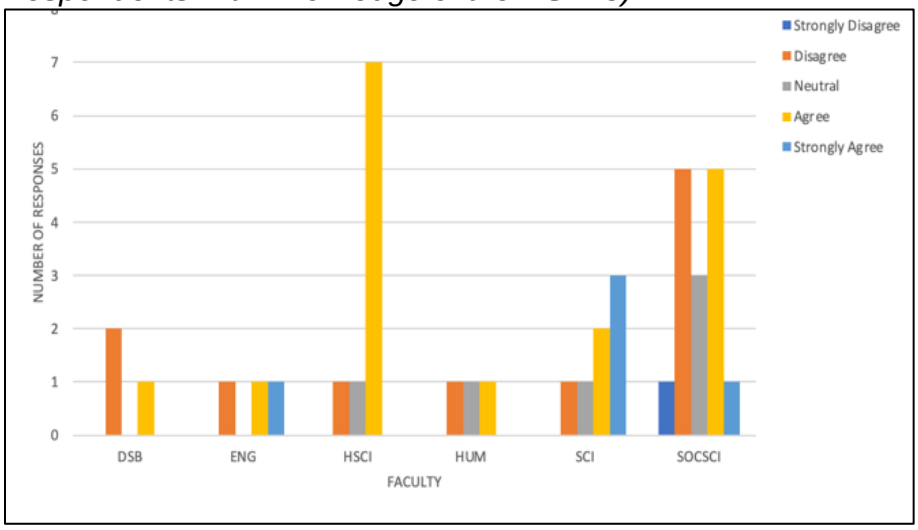


Figure 6b

Faculty-Specific Perceptions of the Efficacy of the DSM-5 Classification System (Among Respondents with No Knowledge of the DSM-5)

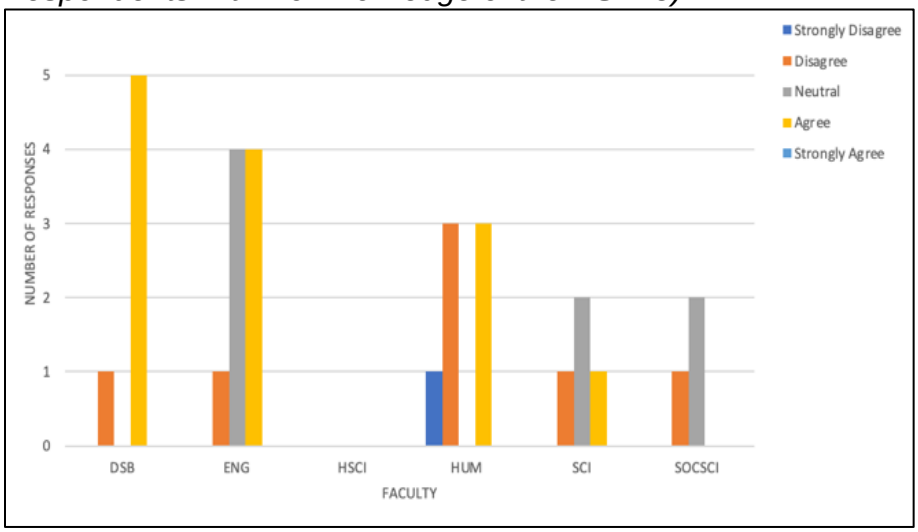


Figure 7 evaluates the relationship between stigma surrounding mental health and DSM-5 knowledge to assess validity of the variance. Since the p-value was greater than 0.05, we failed to reject the null hypothesis. Therefore, no statistical significance exists

in the comparison of respondents' perceptions of stigma against mental health and whether they know the DSM-5.

Figure 7

T-Test Stigma Against Mental Health

Independent Samples T-Test

		Statistic	df	p
Stigma against mental health	Student's t	1.77	67.0	0.082

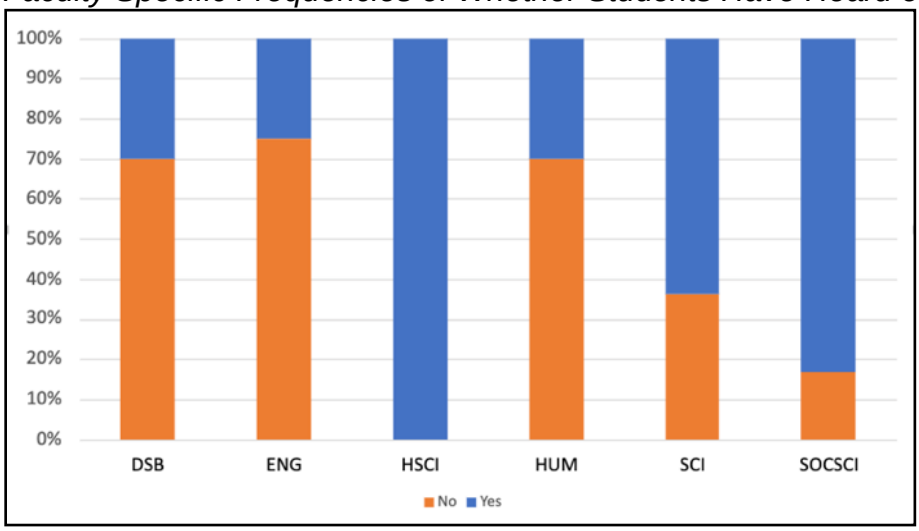
Group Descriptives

	Group	N	Mean	Median	SD	SE
Stigma against mental health	YES	40	4.17	4.00	0.813	0.129
	NO	29	3.79	4.00	0.978	0.182

The graph in Figure 8 presents knowledge of DSM-5 between the various faculties. The only faculty whose respondents all had knowledge of the DSM-5 is Health Sciences. All other faculties displayed an alarmingly high percentage in lack of knowledge except Science and Social Science, with Engineering, Business and Humanities being around 70-78% "No".

Figure 8

Faculty Specific Frequencies of Whether Students Have Heard of the DSM-5



The faculty-specific dataset in Figure 9 indicated whether professors discuss mental wellness in class on some level. More respondents in Social Sciences, Sciences, Humanities, and Health Sciences did have in-class discussions than those who did not, whereas more respondents in Business and Engineering did not have in-class discussions than those who did.

Figure 9

Frequency of Faculty Specific Perceptions of Whether Professors Discuss Mental Health in Class

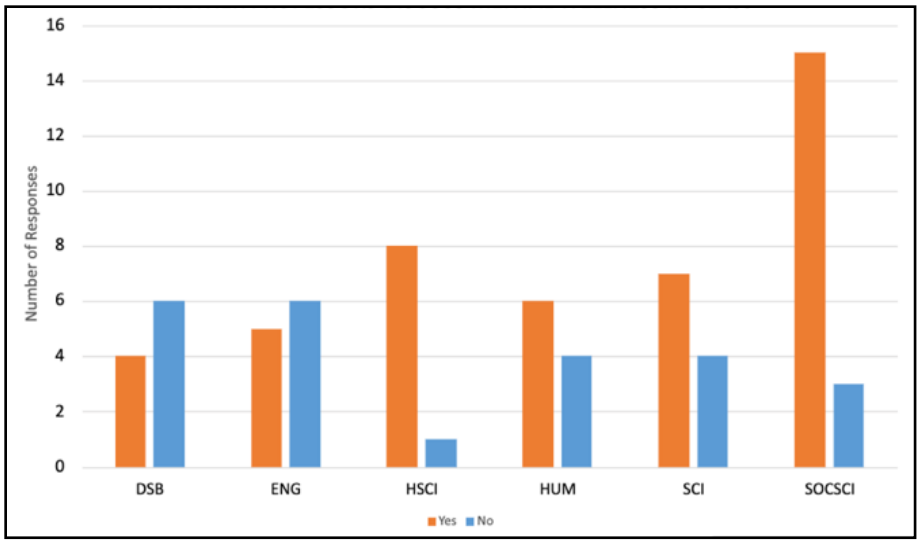


Figure 10 showed the relationship between the dependent variables, which were perceptions of the three questions about mental health literacy shown above, grouped by whether they had knowledge of the DSM-5. The first and third groups failed to reject the null hypothesis (*p > 0.05)* which indicated no statistical significance. The second group rejected null hypothesis (*p < 0.05)* and showed a significant statistical relationship between knowledge of the DSM-5 and attitudes towards the Student Wellness Centre.

Figure 10

T-Test Knows DSM-5

Independent Samples T-Test

		Statistic	df	p
Diagnosis required for experience to be taken seriously	Student's t	1.269	68.0	0.209
SWC provides effective mental wellness care	Student's t	-2.719	59.0	0.009
The classification system of the DSM-5 is effective	Student's t	0.847	67.0	0.400

Group Descriptives

	Group	N	Mean	Median	SD	SE
Diagnosis required for experience to be taken seriously	YES	40	3.13	3.00	1.399	0.221
	NO	30	2.70	2.00	1.368	0.250
SWC provides effective mental wellness care	YES	33	2.36	2.00	0.962	0.168
	NO	28	3.04	3.00	0.962	0.182
The classification system of the DSM-5 is effective	YES	40	3.35	4.00	1.099	0.174
	NO	29	3.14	3.00	0.915	0.170

Figure 11 shows a statistical significance (*p < 0.05)* between faculty and the student's perception of professors opening a safe space to talk about mental wellness. Perceptions of stigma against mental health, mental healthcare from the SWC, and

efficacy of the DSM-5 classification system as they related to faculty provided no statistical significance *(p > 0.05),* thus failing to reject the null hypothesis.

Figure 11

One-Way ANOVA- Faculty

One-Way ANOVA (Welch's)

	F	df1	df2	p
Stigma against mental health	0.627	5	27.2	0.681
SWC provides effective mental wellness care	0.632	5	23.9	0.677
Professors open a safe space to talk about mental wellness	2.648	5	26.9	0.045
The classification system of the DSM-5 is effective	1.376	5	27.1	0.264

Group Descriptives

	Faculty	N	Mean	SD	SE
Stigma against mental health	DSB	10	4.20	0.919	0.291
	ENG	12	3.50	1.168	0.337
	HSCI	9	4.00	0.866	0.289
	HUM	9	4.11	0.601	0.200
	SCI	11	4.18	0.751	0.226
	SOCSCI	18	4.11	0.900	0.212
SWC provides effective mental wellness care	DSB	9	2.67	0.866	0.289
	ENG	12	2.75	1.138	0.329
	HSCI	8	2.13	0.991	0.350
	HUM	10	3.00	1.247	0.394
	SCI	9	2.56	1.130	0.377
	SOCSCI	13	2.77	0.725	0.201
Professors open a safe space to talk about mental wellness	DSB	10	2.60	0.843	0.267
	ENG	12	2.75	0.965	0.279
	HSCI	9	3.44	0.882	0.294
	HUM	10	2.90	1.101	0.348
	SCI	11	2.73	0.647	0.195
	SOCSCI	17	3.47	0.717	0.174
The classification system of the DSM-5 is effective	DSB	9	3.33	1.000	0.333
	ENG	12	3.42	0.900	0.260
	HSCI	9	3.67	0.707	0.236
	HUM	10	2.80	1.135	0.359
	SCI	11	3.64	1.120	0.338
	SOCSCI	18	2.94	1.056	0.249

Figures 12a and 12b show the relationship between faculty-specific perceptions of whether peers reduced stigma, grouped by respondents' knowledge of the DSM-5 (12a showed respondents with knowledge of the DSM-5; 12b showed respondents with no knowledge of the DSM-5). Figure 12b showed major agreement in respondents in Business, Humanities, and Engineering; however, there was an equal amount of disagreement among Engineering respondents and some disagreement in Business respondents. Note: no Health Science respondents did not know the DSM-5. Figure 12a showed a majority of agreement across faculties, except for some neutrality and disagreement within Health Sciences and Science.

Figure 12a

Faculty-Specific Perceptions of Whether Peers Reduce Mental Health-Related Stigma (Among Participants with Knowledge of the DSM-5)

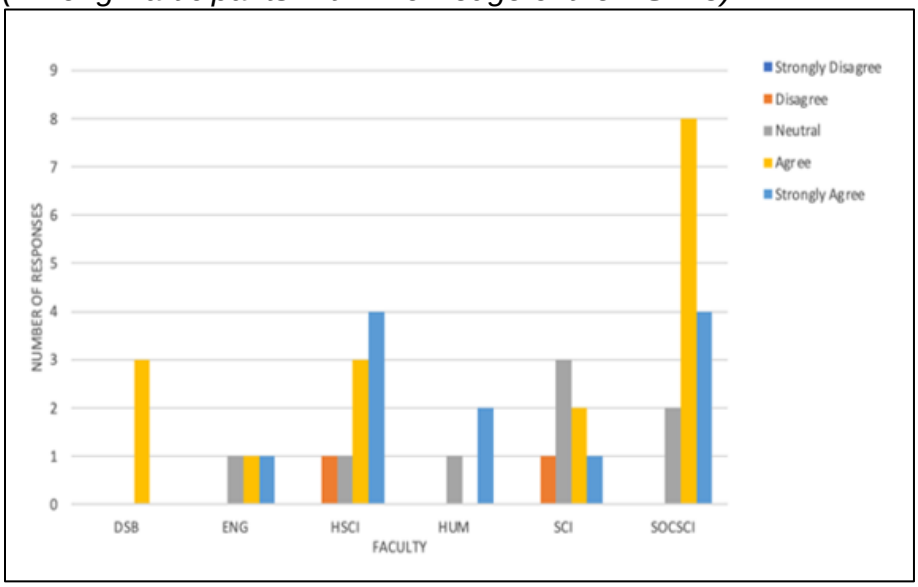
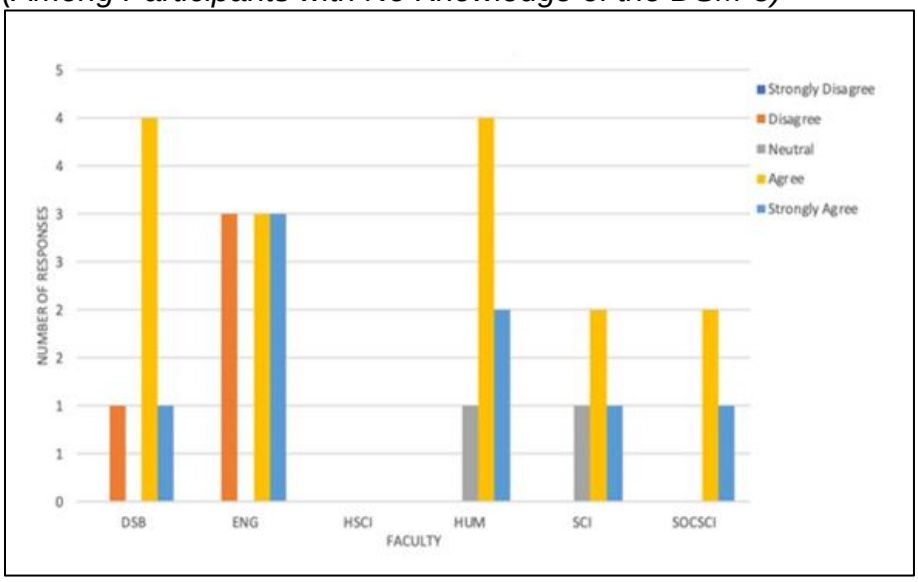


Figure 12b

Faculty-Specific Perceptions of Whether Peers Reduce Mental Health-Related Stigma (Among Participants with No Knowledge of the DSM-5)



The correlation matrix in Figure 13 measured the correlation between knowledge of the DSM-5 and perceptions of the effectiveness of the categorical classification system that the DSM-5 employs. Due to the p-value being above 0.05, there was no statistical significance of this correlation.

Figure 13

Correlation Between Knowledge of DSM-5 and Perceptions of te DSM-5 Classification System

Correlation Matrix

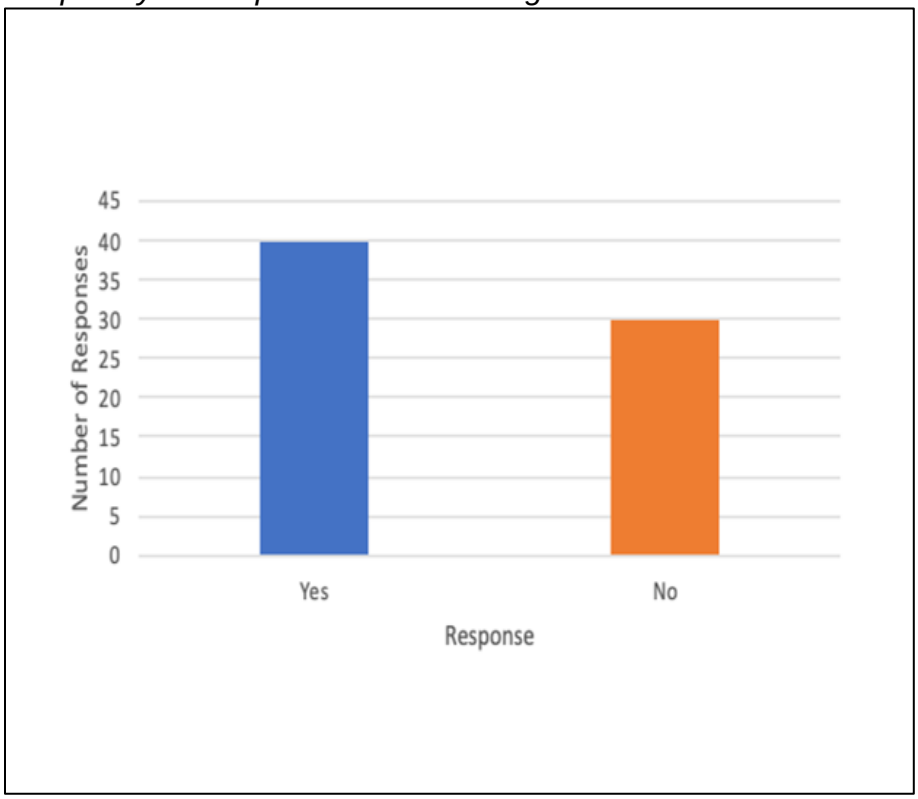
		The classification system of the DSM-5 is effective	Knows DSM
The classification system of the DSM-5 is effective	Pearson's r	–	
	p-value	–	
Knows DSM	Pearson's r	−0.103	–
	p-value	0.400	–

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

Figure 14 shows knowledge of the DSM-5 across respondents irrespective of faculty. 40 respondents had some knowledge of the DSM-5, while 30 did not.

Figure 14

Frequency of Respondents' Knowledge of the DSM-5



The graph in Figure 15 shows responses to whether respondents believed that a diagnostic label is required to validate and take seriously a mental health experience. The perceptions were split relatively evenly, with 45.7% of respondents either agreeing or strongly agreeing, but a higher proportion (54.3%) of respondents were neutral, disagreed, or strongly disagreed.

Figure 15

Responses to Whether a Diagnosis is Required for a Mental Health Experience to be Taken Seriously

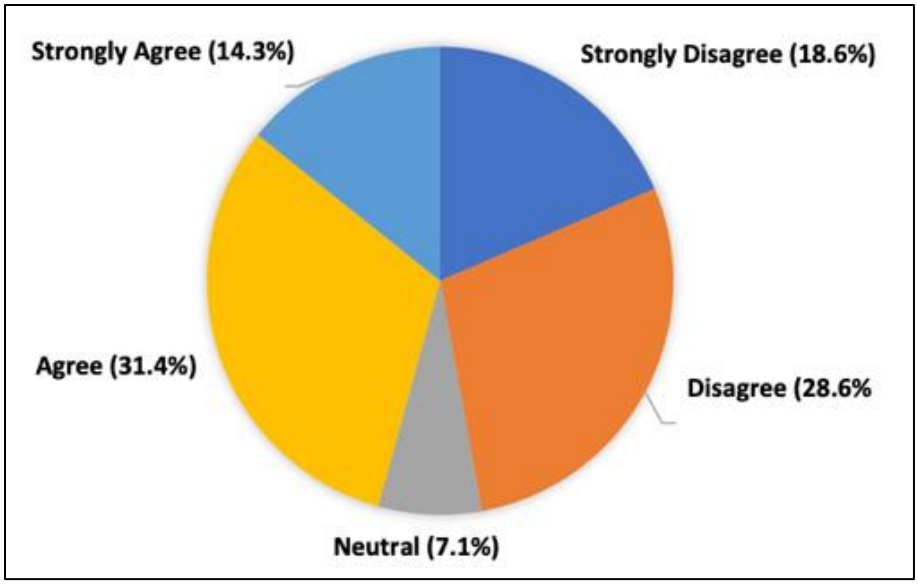
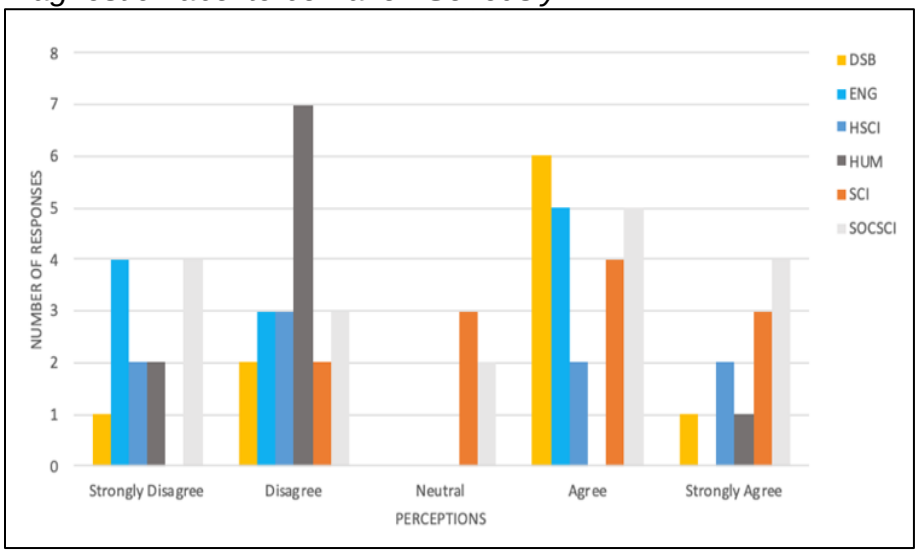


Figure 16 disseminates the perceptions from Figure 15 between faculty. The highest amounts of disagreement that a diagnostic label is required to validate and take seriously a mental health experience was found in Humanities, while the highest amounts of agreement were found in Engineering, Social Sciences, and Business. However, the same number of respondents in Social Sciences strongly agreed and strongly disagreed with the question.

Figure 16

Faculty-Specific Responses to Whether Mental Health Experiences Require a Diagnostic Label to be Taken Seriously



The graph in Figure 17 depicts the perceptions outlined in Figure 15 according to whether respondents had knowledge of the DSM-5. Responses did not have significant differences, except respondents with knowledge of the DSM-5 who had stronger

agreement and respondents with no knowledge of the DSM-5 who had stronger disagreement.

Figure 17

Perceptions of Whether a Diagnostic Label is Required for Mental Health Experiences to be Taken Seriously According to DSM-5 Knowledge

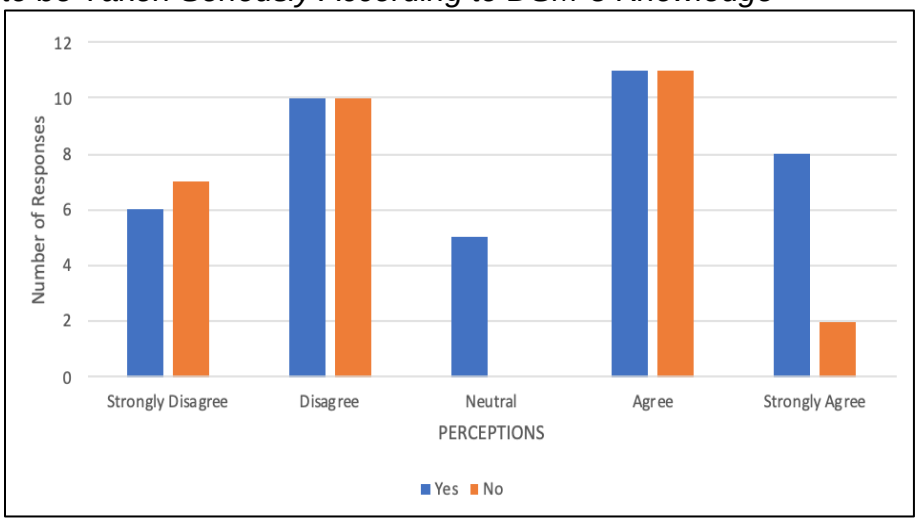
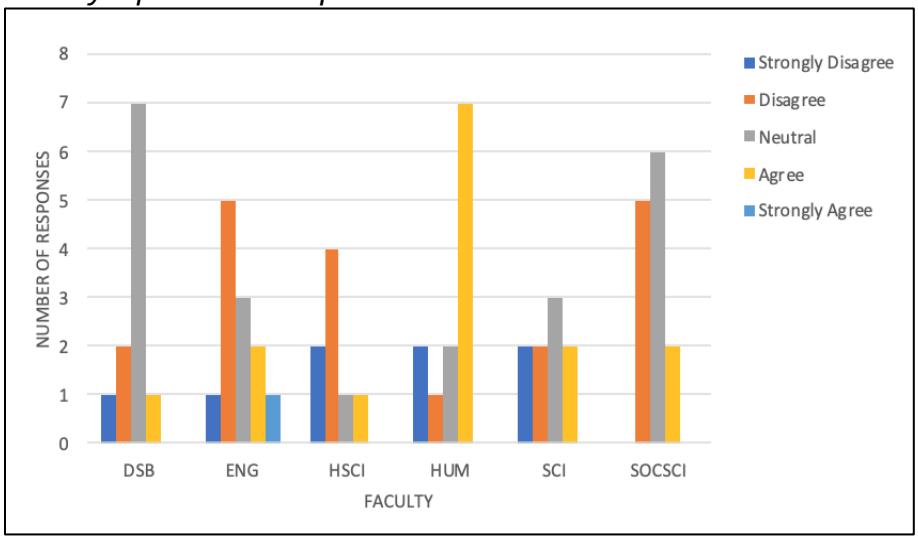


Figure 18 disseminates perceptions of care from the SWC between faculties. Higher neutrality was noted between Business and Social Science, and highest disagreement was seen in Health Sciences, Engineering, and Social Sciences. Humanities had the highest rates of agreement.

Figure 18

Faculty-Specific Perceptions of Effective Mental Wellness Care from the SWC



This graph in Figure 19 disseminates perceptions of stigma surrounding mental health between faculties. The highest rates of agreement were found in Social Sciences, Humanities, and Health Science, while the most variance in perceptions was found in Engineering.

Figure 19

Faculty-Specific Perceptions of Stigma Surrounding Mental Health

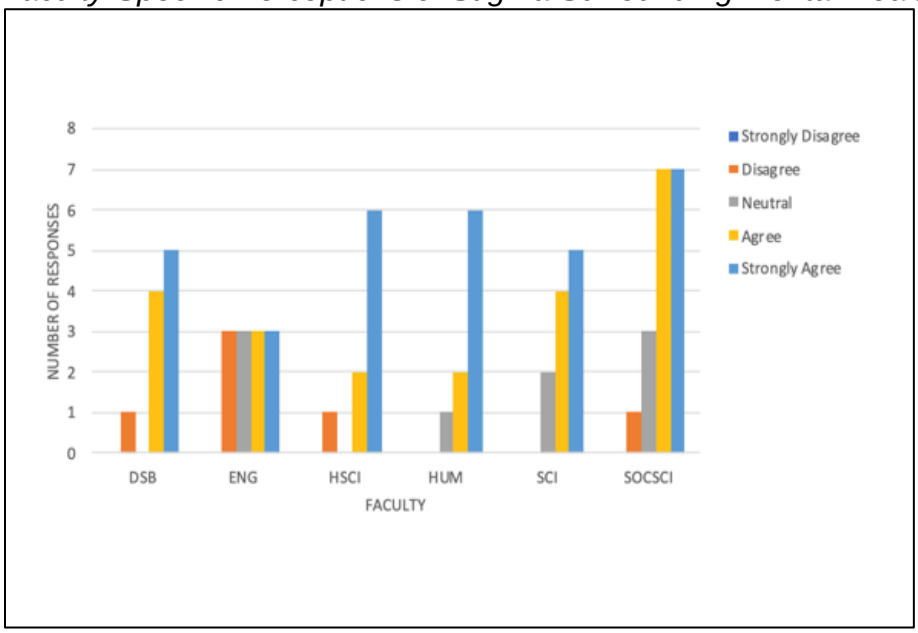


Figure 20 evaluated the correlation between knowledge of the DSM-5 and perceptions of effective mental wellness care from the SWC. DSM-5 knowledge was coded as YES (1) and NO (2). While the correlation co-efficient was low, the p-value was less than 0.05, indicating a significant correlation between the two variables.

Figure 20

Correlation Between DSM-5 Knowledge and Perceptions of Mental Healthcare from SWC

Correlation Matrix

		Knows DSM	SWC provides effective mental wellness care
Knows DSM	Pearson's r	—	
	p-value	—	
SWC provides effective mental wellness care	Pearson's r	0.334 **	—
	p-value	0.009	—

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

This correlation matrix in Figure 21 evaluated the correlation between perceived stigma against mental health and faculty. The p-value was above 0.05 and the correlation co-efficient was low, indicating no significant correlation between the two variables.

Figure 21

Correlation Between Perceptions of Stigma Surrounding Mental Health and Faculty

Correlation Matrix

		Stigma against mental health	Faculty
Stigma against mental health	Pearson's r	—	
	p-value	—	
Faculty	Pearson's r	0.110	—
	p-value	0.370	—

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

Figure 22 evaluated the statistical significance of the relationship between DSM-5 knowledge and perceptions of care from the SWC. The p-value was less than 0.05, which rejected the null hypothesis and supported a valid statistical significance for the relationship between the variables as well as the correlation (Figure 20).

Figure 22

T-Test Evaluating the Relationship Between DSM-5 Knowledge and Perceptions of Care from the SWC

Independent Samples T-Test

		Statistic	df	p
SWC provides effective mental wellness care	Student's t	−2.72	59.0	0.009

Group Descriptives

	Group	N	Mean	Median	SD	SE
SWC provides effective mental wellness care	Yes	33	2.36	2.00	0.962	0.168
	No	28	3.04	3.00	0.962	0.182

Discussion

Introduction

This section aims to discuss the findings of the data related to understanding the general perceptions of mental health literacy among undergraduate students at McMaster University in relation to existing literature and the previously mentioned research questions. Three themes that corresponded with significant findings and the current research questions are detailed according to both general and faculty-specific data.

The first theme will analyze responses that indicated the presence of stigma in the McMaster community and respondents' ability to recognize and respond to signs, symptoms, and experiences of mental distress. The major finding in this theme was that in general, respondents reported low levels of their ability to recognize and respond to signs of mental distress despite over half of participants reporting some knowledge of the Diagnostic Statistical Manual, Fifth Edition (DSM-5) and most participants citing stigma as a big problem. With respect to faculty-specific findings on this subject, the data was varied but partially corresponded with the reviewed literature.

The second theme discusses respondents' perceptions of how involved McMaster professors are in their mental wellness. Major themes to be discussed is the severe lack of professor acknowledgement of and involvement in mental wellness conversations, however the faculty-specific analysis has some skewed responses that partially align with the literature and will be discussed in detail within the section.

The final theme assesses significant findings on perceptions of and attitudes towards support services on campus, with specific emphasis on the relationship between levels of mental health literacy and perceptions of the Student Wellness Centre (SWC). These findings are supported by the reviewed literature, but each theme presents unique challenges and implications of broader significance that are addressed within the sections and within the conclusion of the discussion.

Themes of Recognizing and Responding to Mental Health Experiences

Respondents were asked questions that prompted them to provide perceptions of their ability to recognize, assess, and respond to mental health experiences. These questions included whether they were aware of the DSM-5 (Diagnostic Statistical Manual, Fifth Edition), whether they believed that mental health experiences should only be taken seriously when accompanied by a diagnostic label, and perceptions of stigma throughout the McMaster community. These responses will be evaluated and analyzed according to both generalized findings across respondents, and findings specific to faculty groupings.

To begin, 40 out of 70 respondents had some knowledge of the DSM-5, while the remaining 30 did not have knowledge of the DSM-5 whatsoever. Having knowledge of the DSM-5 indicated higher levels of mental health literacy because of the information about mental disorders, associated symptoms or signs, and treatment options provided within the manual. When looking at the results at a general level, it is worrying that close to half of the respondents did not have that knowledge because it insinuates that a basic understanding of different groupings of mental disorders is unknown to a large population of students.

This was supported by multiple studies outlined in the literature review, which stated that most university students had a mid-range score on mental health literacy testing and had not taken any type of clinical psychology course within their education (Miles et al., 2020; Lipson et al., 2016). More specifically, a study done by Furnham et al. (2011) found that only 75% of 400 university students could confirm that they had heard of 8 out of a possible 97 diagnostic labels, and over half of respondents said that they were able to confidently describe only 9 of the possible 97 disorders. Relating this back to the current research findings, notwithstanding the small sample size, it can be concluded that McMaster undergraduate students reflect the fact that broader scales of university students are unable to identify or recognize symptoms of specific mental disorders.

Findings on faculty-specific perceptions of DSM-5 knowledge supported much of the literature already done on the topic apart from the faculty of Humanities at McMaster University. Firstly, it was established in the literature that much of the knowledge and understanding of mental health within university student populations are disproportionately distributed towards science-related programs (Reavley et al., 2011). Our findings showed that the highest rates of DSM-5 knowledge were reported by respondents within the faculties of Health Sciences and Social Sciences. Interestingly, the only faculty in which all respondents reported knowledge of the DSM-5 was in Health

Sciences. This was surprising as there was a hypothesis made prior to data collection that Social Science respondents would have the highest rates of DSM-5 knowledge. However, this data must be understood in relation to the proportion of respondents belonging to each faculty – the number of respondents in Health Sciences was far fewer than respondents in Social Sciences, which could be why there was more variance in knowledge within this faculty.

It was less surprising then, that the lowest rates of DSM-5 knowledge were found in respondents belonging to the faculties of Business and Engineering as this was discussed in the literature (Reavley et al., 2011). The most shocking, and arguably most important finding related to this question was the fact that respondents belonging to the faculty of Humanities had the same rates of not knowing the DSM-5 as respondents in Business. This was not expected due to the nature of the Humanities faculty at large but could be reasonable considering that the highest likelihood of mental health problems was found in university students belonging to Business and Humanities (Lipson et al., 2016). Perhaps a narrow conclusion can be drawn that lower perceptions of mental health literacy, which in this section of the discussion refers to the knowledge surrounding the recognition of mental disorders, are associated with higher mental health problems, since students are not able to recognize the signs of mental distress before it is too late.

The research done by Furnham et al. (2011), along with our reported results, indicates that there is a sore lack of mental health literacy among university students – and, in the scope of this research, among McMaster undergraduate students. More specifically, these findings show that many McMaster students are unable to recognize symptoms of mental health experiences according to pre-existing diagnostic labels, which answers our research question in regard to the perceptions of mental health literacy among undergraduate McMaster students. This leads to the next general finding, which pertains to the respondents' perceptions of whether mental health experiences require diagnostic labels to be taken seriously.

Firstly, the majority of respondents that reported neutrality or disagreement when asked whether mental health experiences required diagnostic labels to be taken seriously had no knowledge of the DSM-5. Most of this disagreement came from respondents belonging to the faculties of Humanities and Engineering, which is in part supported by previous research. As noted, prior research found that Humanities students had a higher likelihood of having mental distress than other faculties (Lipson et al., 2016). When comparing this to the current research finding, this may indicate that the higher levels of mental health problems within this faculty means that the diagnostic label associated with these symptoms are less important than the symptoms themselves.

This contradicts the previous discourse which asserted that having less knowledge of the DSM-5 indicated lower mental health literacy. This contradiction is somewhat reasonable by proposing that while mental health literacy is characterized by the ability to recognize signs and symptoms of mental disorders, it could also be the ability to recognize signs and symptoms of mental health issues in general. As stated in the literature review, the rates of mental health problems in university students are constantly increasing, and with a sparse number of available psychiatrists on campus to make diagnoses, it is more likely that students would be taking the experiences of distress more seriously than the possibility of an associated diagnosis (Reavley et al., 2011 p. 45; Kadison, 2006).

Pivoting from perceptions of mental health literacy, the final part of this section of the discussion will analyze perceptions of stigma across respondents. To start, there were no significant differences found in perceptions of stigma surrounding mental health experiences between faculties. This was interesting, but not unfounded since literature only noted higher stigma within medical students and students in visual arts due to the amount of competition within each respective faculty (Lipson et al., 2016; Laidlaw et al., 2016). The current research excluded medical students from the sample population for ethical reasons and did not provide an option to specify programs, so there was no possibility to conduct specific research within the visual arts program.

While close to 80% of respondents agreed or strongly agreed that there was stigma present on campus, only 76.5% agreed or strongly agreed that peers reduced this stigma. Further, 14.7% of respondents were neutral in their perceptions and disagreement was reported infrequently by respondents belonging to the faculties of Science, Business, and Engineering. This feeds into the theoretical framework of symbolic interactionism because the perception of stigma not being reduced within these faculties are based on specific interactions that these respondents had with their peers. These faculty-specific interactions with peers would likely influence their overall perceptions of whether peers reduce stigma surrounding mental health. These findings are strongly indicative of the presence of stigma existing independently of faculty, thus becoming considered as a campus-wide problem.

In line with the tenets of symbolic interactionism, it can also be proposed that those who have not had interactions with the DSM-5 would assign different meanings to what qualifies as a negative mental health experience. This relates to the relationship between DSM-5 knowledge and perceptions of whether mental health experiences require a diagnostic label to be taken seriously. Conversely, students who did have interactions with the DSM-5 had fewer flexible perceptions as to which mental health experiences should be taken seriously, which can be inferred to mean that interactions with the DSM-5 colours perceptions of mental health experiences. This leaves the current research with more questions to be evaluated in further studies. Is the relationship between significance assigned to mental health experiences, with or without a label, and knowledge of the DSM-5 related to the categorical classification system of the DSM-5? Do the rigid criteria of what qualifies as a mental disorder in the DSM-5 influence the rigidity of perceptions of mental health experience validity? The findings showed no correlation between knowledge of the DSM-5 and perceptions of the efficacy of the categorical classification system, but these are questions to be considered and explored in further research.

Themes of Professor Involvement with Mental Wellness

The second theme that was established surrounded respondents' perceptions of involvement by their professors in mental wellness; this encompassed both the presence of mental wellness information, included on in-class or course syllabi, as well as course webpages on Avenue to Learn, and the type of environment that professors provided to address mental wellness and the importance of self-care. Respondents were asked to report their perceptions of these topics using binary yes or no answers, and Likert-scale answers ranging from strongly disagree to strongly agree. The responses showed a general lack of professor involvement in mental wellness topics, but findings also varied between faculties.

On a general scope, over 60% of respondents said that their professors discuss mental wellness in class, and over 70% of respondents said that there was some type of mental wellness information on the course syllabus or webpage on Avenue to Learn. However, a higher volume of responses by students reported neutrality, disagreement, or strong disagreement to the statement that professors open a safe space to address mental wellness or stress the importance of self-care. This finding is supported by a study done by Peake and Mullings (2016), which stated that faculty members are normally unaware and unempathetic towards addressing and accommodating students' mental health experiences since mental health policies in Canadian universities are overshadowed by the increasing pressure to provide adequate outflow of productive work. While there are new programs and policies being put in place to educate professors on accommodating for and responding to reduced productivity in students experiencing mental distress, the overwhelming lack of funding and research done on the topic renders professors and other faculty members useless or burnt out on the subject due to their own levels of stress (Peake & Mullings, 2016).

In further support of the current findings, many professors lack their own levels of mental health literacy, resulting in them being unable to recognize and address specific signs of mental distress in students (Brockelman & Scheyett, 2015). However, it was noted that many professors are willing to discuss accommodations and opportunities for clinical assistance with individual students experiencing mental distress (Brockelman & Scheyett, 2015). This reflects the current findings stating that professors do discuss mental wellness and include mental wellness support information in class and on course materials, but defies the finding that professors open a safe space to address mental wellness, so it is imperative that more research is done to assess whether professors themselves have the mental health literacy to recognize and help prevent mental distress in their students.

Focusing on these findings as they relate to respondents in specific faculties, results showed that respondents belonging to the faculties of Social Sciences, Science, Humanities, and Health Science agreed that professors address mental wellness in some capacity in a class setting. The contrast, however, was found in Business and Engineering respondents who disagreed on professors addressing mental wellness in class or even including related information on course syllabi or Avenue to Learn. This was supported by Lipson et al. (2011), who stated that mental health awareness was quite low within these faculties, possibly due to the stressful and competitive nature of these faculties overshadowing common signs of mental distress. However, findings on whether faculty-specific professors opened safe spaces to address mental wellness or stress the importance of self-care was much less reflective of any literature reviewed in previous sections.

When assessing perceptions of professors creating a safe space to address mental wellness, the only faculty with a majority positive perception was Health Sciences (66.7%). However, more worrying findings exposed Social Science respondents (52.9%), Humanities respondents (70%), and Engineering respondents (75%) to have a neutral or negative perception pertaining to this topic. Furthermore, a staggering 80% of respondents in Business and close to 91% of respondents in Science had neutral or negative perceptions. This is one of the most concerning findings within the current research because only respondents in one undergraduate faculty at McMaster agreed that their professors opened a safe space. Respondents in Social Science and Science were reported in literature to take more courses in clinical psychology, and nowhere in

the literature was it found that students within these faculties had less comfort in seeking guidance or accommodations from professors for mental distress (Reavley et al., 2011).

Furthermore, respondents within Social Sciences outnumbered respondents from other faculties, indicating vested interest in contributing to studies in mental health, and reported higher overall perceptions of mental health literacy at McMaster. This prompts the current research to wonder where the disconnect is between professors including mental wellness information on course syllabi or webpages but then not cultivating warm environments to address mental wellness. There is no research available to support or dispute these findings, which is even more perplexing and insinuates that there is an extreme need for more research to be done on these discrepancies. However, research by Lipson et al. (2011) partially supports the current findings about Business and Engineering faculties, but not the faculty of Humanities. More research must be done on the faculty of Humanities to assess whether the nature of the program courses and student environment contributes to mental health literacy and professor involvement in mental wellness.

Findings on perceptions of professors stressing the importance of self-care echo the discussion above, yet some results differ and are worthy of acknowledgement. All respondents in the faculty of Business had neutral or negative perceptions of this, accompanied by half of Social Science respondents, 80% of Science respondents, 70% of Humanities respondents, close to 78% of Health Science students, and close to 67% of Engineering respondents. What evoked interest with these findings was the stark contrast within the Health Science faculty of perceptions of professors opening a safe space to address mental wellness and perceptions of professors stressing the importance of self-care. This leaves the question of why Health Science respondents had such polarized opinions on similar topics, which has not been reported in previous literature thus far.

As with the previous section of the discussion, much of the findings from these survey questions can be contextualized within the two theoretical frameworks laid out in a previous section of this paper. Beginning with symbolic interactionism, the general findings reflect perceptions of students based on their individual interactions with these situations, indicating that the agreement or disagreement that is associated with the perceptions of all professors at McMaster are influenced by the interactions with respondents' own course selections as opposed to the entire body of faculty teaching available courses. The same goes for the faculty-specific findings, but on a narrower scale. While general findings can encompass a wealth of different course offerings at McMaster, the narrower faculty-specific perceptions pertain more to interactions that respondents have had with their respective faculty's courses and available electives.

Focusing on the previous explanations of mild social constructionism, respondents were able to understand that the 'course website' meant Avenue to Learn. This is a unique social structure which is not found at other universities, which means that students from universities outside of McMaster might have confusion when asked about a course webpage. As course webpages and websites are McMaster-specific, the societal context in which respondents were able to understand and respond accordingly to these questions reflect a broader understanding of how the university's social institutions are created and upheld through shared meanings between all students and faculty.

A large issue that has been posed for the current research findings being discussed was outlined in the literature review – there is a very big gap in the literature on these

topics which results in barriers to making definitive conclusions or connections. Of any and all implications that this research provides, among the most pressing is the need for more research to be done on this topic as there is a clear issue for students when it comes to perceptions of professor involvement in mental wellness on all counts. Drawing conclusions from the current research work to enhance understanding about perceptions of mental health literacy in accordance with our second research question concerned with how faculty may influence these perceptions. It has been demonstrated in these results that major differences in aspects of mental health literacy can be found between different faculties and within these faculties as well.

Themes of Attitudes Towards On-Campus Support Services

The last theme recognizes respondents' attitudes towards on-campus support services, which pertains to understanding perceptions of adequate and effective wellness support at McMaster. Respondents were asked to report their perceptions using a Likert-scale which ranged from strongly disagree to strongly agree. These responses zaided in showing the lack of quality and effective care for mental health, specifically at the Student Wellness Centre (SWC). Moreover, faculty-specific findings of mental health literacy, discussed above, demonstrate that respondents with higher mental health literacy have significantly different perceptions of effective care than those who do not, which will be discussed in subsequent paragraphs.

According to the overall report, 77% of respondents were neutral, disagreed, or strongly disagreed that the SWC provides effective care for mental wellness concerns. The results align with the claim by Reavley et al. (2011) who indicates that only 10% of university students feel comfortable seeking help from counsellors on campus. Thus, our research identifying whether treatment services on campuses are perceived to be effective help to highlight opinions of the effectiveness of treatment as not being entirely beneficial, which is an analysis supported by Gulliver et al. (2010). Contrary to Bulanda et al. (2014) and Armstrong et al. (2000), who noted much discussion on the differences in gender and ethnicity concerning attitudes towards help seeking behaviour, we did not focus on this distinction in our research. Our survey did not provide questions directly relating to this disparity; therefore, we cannot confidently support this claim. With that said, a direction of future research should incorporate these distinctions, since no definitive conclusion can be drawn until more research is available.

Shockingly, while the relationship between perceptions of effective care from the SWC and DSM-5 knowledge pertains to our research questions, the significance and intensity of the relationship emerges independently and points to an underlying problem with the specific levels of care provided at McMaster, or even with mental healthcare in universities on a broader scale. Further, this specific relationship must be researched in future studies, as it seems to be both an important and extremely thought-provoking finding. Analyzing the levels of mental wellness care from the SWC from respondents who have knowledge of the DSM-5 shows that 87.9% of respondents were neutral, disagreed, or strongly disagreed that the SWC provided effective support. Moreover, students who agreed (15.7%) that the classification system of the DSM-5 was effective disagreed that the SWC provides effective mental wellness support.

Conversely, students who disagreed that the classification system of the DSM-5 was effective agreed that the SWC provides effective mental wellness support. The classification model of the DSM-5 is categorical, meaning that individuals either meet the criteria for a diagnosis or do not based on a specific and rigid set of symptoms as a

reference point. With this being said, it prompts us to question the type of care that the SWC provides, and whether students who lean more towards a dimensional approach to treating mental health issues find the SWC care effective because the care provided from the SWC is for general mental health problems as opposed to specific types of care for specific mental disorders.

However, this is not a conclusion that we can draw from the current research because we were unable to get qualitative, experiential opinions from respondents for ethical reasons. As a result, the only way to study and analyze the relationship between perceptions of labelling and perceptions of care would be for more qualitative research to be done. We can aim to suggest improvements in mental health literacy and help seeking behaviours based on the current results which, on a broader scale, targets levels of mental wellness care provided by SWC. These improvements, however, can only be suggested once research is done to assess personal opinions and focus-group studies on the care provided. While the current research findings provide a foundation and starting point for asking these questions, they are not specific enough to make recommendations currently.

In relation to faculty and our findings, there was significant disagreement that the SWC provides effective mental wellness support, which was reported by respondents in Engineering, Health Science, and Social Science. In contrast, most agreement about SWC effective mental wellness support was found among Humanities respondents. Our research findings partially support Lipson et al. (2016) who noted business and engineering students to have the lowest likelihood of seeking treatment, as compared to students within social science, social work, and art & design who would be more likely to seek treatment. Our data suggests the SWC providing effective mental health support had the most disagreement with students from Engineering. In turn, a notable analysis not predicted was how Social Science and Health Science respondents were similar with Engineering respondents and had high rates of disagreement as well. We can conclude that while our research provides insight, most of the research on mental health literacy in relation to faculty is insufficient and requires further university-specific reach to be conducted.

As noted above, the theoretical framework of symbolic interactionism and mild social constructionism can be conceptualized in relation to these findings. Symbolic interactionism explains the respondent's perception and opinions by understanding that their interactions with the SWC, either personal or from peer disclosure, influence how they perceive the effectiveness of care. In addition, this same idea follows for students' attitude towards the DSM-5, which in turn reflects a relation to mental wellness care from the SWC. The current findings hold that interactions with the DSM-5 in some way does influence the meaning assigned to what effective care should look like, however how that meaning is assigned cannot be concluded at this time. It also prompts the question of whether respondents actually interacted with different classification systems to inform their opinion of the care, or whether the question influenced their opinions since the question did explain what the categorical model of classification was. We also must factor in the consideration that not all respondents have had interactions with the SWC for mental wellness care, which could influence how they answered the question. Meanings that are associated with symbols (SWC) are inherently personal, so open-ended questions to understand those personal meanings should be conducted.

In relation to mild social constructionism, respondents adhere to the understanding that the Student Wellness Centre (SWC) is a specific institution to McMaster University.

This facility is distinctive from outside universities, which means that only McMaster students would be able to answer the questions pertaining to the SWC, as those from differing areas would result in confusion to the effectiveness of this structure. All students at McMaster have a shared understanding to what the SWC is and provides due to the societal context in which they preside, meaning that this question could not be replicated in universities that are not McMaster as they are not included in the societal context of services and facilities upheld and broadcasted throughout the faculty and student population.

On a final note, which has been mentioned in multiple sections of this discussion, more research should be done specifically for McMaster University because of the apparent distaste for the present support services. We are also aware that there are many peer-run services that provide support for mental health, so further research should be done to assess the efficacy of these specific services since research by Bulanda et al. (2014) shows the increasing likelihood of students turning to peers and youth-run programs for mental health support. Through implications seen in this research, many barriers restrict us from making definitive conclusions and enhancing understanding among students in differing faculties and mental health literacy is imperative to further these results in a more conclusive direction.

Conclusion

To conclude, the problem that we sought to address through the current research was the lack of literature and knowledge surrounding mental health literacy among McMaster students, their perceptions of support on campus and through peers, and how stigma affects these perceptions, if applicable. To analyze this accordingly with our research questions, the discussion factored faculty-specific findings into the general findings for each theme. Three themes had unique findings and posed further questions and challenges that we hope will be studied and answered in subsequent research done on the topic. While we chose to broach this topic on the understanding that there was a gap in the research pertaining to it, the current research simultaneously starts the discussion and draws attention to how sparse the knowledge is on mental health literacy in undergraduate students. This research is required to enact positive change in a currently ignored facet of mental health literacy because as the discussion shows, the levels of mental health literacy in McMaster students is very low and is made worse by the inaction of faculty to intervene and address the increasing mental distress in university students. This discussion, and broader scope of research, was enacted in hopes of improving the problems with mental health literacy and help-seeking attitudes between faculties and in general terms.

Limitations

Quantitative Research

There were limitations present in our research and findings. Firstly, we collected our data through quantitative methods which created limitations as we were unable to elaborate or investigate specific reasons as to how or why respondents formed their perceptions. The lack of qualitative insight did not allow us to delve deeper into rationales for certain responses. This means we were unable to account for the reasons as to why these students feel the way they do. To validate our research, we chose to format our quantitative questioning to Likert-scale options to seek as many insights as we could into the perceptions of mental health for all participants.

Sample Size

Another limitation was the sample size. The total number of completed responses (n=70) was spread out throughout different faculties at McMaster University. Our findings cannot be generalized among the general population of the student body due to our sample representing such a small portion. Moreover, the number of respondents belonging to each faculty limited the data we collected and subjected it to greater variances in the data sample. Due to the number of respondents in each specific faculty being less than 20, generalizations were hard to draw upon. There could have been a significant difference in our results and subsequent conclusions had we had a larger sample size in total, and larger numbers of respondents for each faculty. Many assumptions for the normality (Shapiro-Wilk's) and homogeneity (Levene's) tests were violated because they are typically used for larger sample sizes, thus limiting the scope of inferences and conclusions that could be drawn from our data sample.

Sampling Method and Recruitment

Furthermore, our sampling and recruitment process also proposed challenges and limitations. Convenience sampling limited the recruitment process due to the lack of stratified sampling which skewed the true diversity in responses and the ability to replicate the data. Additionally, the lack of interaction and in-person interaction limited the recruitment process as it forced us to expend more time and energy on recruitment, which may have been easier with in-person and stratified sampling. More research using stratified and qualitative methods, and larger, more representative sample sizes needs to be conducted in order to deduce more in-depth reasoning behind the more personalized student wellness experiences of undergraduate students.

Participant Willingness

Limitations also existed in the results which could be from the respondents' willingness to participate in the study. The participants had the ability to withdraw from the survey at any time, therefore the results were skewed since we did not receive equal numbers of responses for each question. Our approach outweighed this limitation as we received 70 participants, which acted as a buffer for specific individuals who refused to complete all the questions provided. However, it did prompt us to wonder why 155 individuals felt unable or unwilling to complete the survey. We used many questions that required students to choose an answer from a scale, which allowed for a more focused understanding of their perceptions, with only a few simple 'Yes' or 'No' questions. We chose to use scales for most questions because even though not all participants completed the entire survey, there was specific data that was able to be analyzed after the results were collected.

Survey Questions

Finally, an important limitation to note is in the survey questions that were chosen and how they related to our research questions. Some data was skewed because of questions about the classification system of the DSM-5 being answered by respondents with no prior knowledge of the DSM-5. Our inattention when coding conditions for the survey should be held accountable for this potential gap in our research. In addition, we wanted to understand how stigma impacts perceptions of mental health literacy and

help-seeking behaviour, but did not create questions that were specific enough to understand this relationship to its full extent.

Significant Insights

Our research presents three significant insights. Firstly, McMaster students are aware of opportunities to seek guidance for mental wellness but are uncomfortable or unwilling doing so. As indicated in the results section (Figures 20 & 22), we found a statistically significant relationship between perceptions of effective mental wellness care from the SWC among students with knowledge of DSM-5. Students with more mental health knowledge claimed that the McMaster Student Wellness Centre provided inadequate care, which further indicates a need for better treatment and support services on campus.

The second insight is that our data is supported by previous studies that investigate university student mental health. Coincidingly with our research, previous studies also identified treatment services on university and college campuses to be scarcely sought out, with only 10% of students feeling comfortable seeking help from counsellors on campus, as well as faculty-specific data that also conclude discrepancies in faculty-specific perceptions of mental health literacy and support (Reavley et al., 2011; Lipson et al., 2016).

Lastly, suggestions can be made to improve faculty-specific mental health literacy and help seeking behaviors, as well as on a broader scale that includes mental wellness care provided by the Student Wellness Centre and associative resources. Our research indicates that perceptions of mental health literacy differed amongst faculty where participants in Business, Engineering and Humanities had little knowledge of the DSM, whereas participants in Sciences, Health Sciences and Social Sciences agreed to have more sufficient knowledge. Additionally, participants in the same programs also described their classroom experience and professors as providing limited exposure or discussion of mental health or mental health resources. This research further progresses previous research indicating more effective wellness support from these perceived faculties.

Moreover, this research can be used for further research to identify and elaborate on the inadequacies that exist within faculty-specific programming such as syllabus criteria, professor training, knowledge and general advocacy for wellness and mental health support. This would allow for all programs to receive more equitable and adequate classroom and professor support, increase help-seeking behaviors, and increase general mental health literacy, which would also work towards decreasing perceived mental health stigma. Our research indicates deficiencies that exist within the McMaster Student Wellness Centre and can be used to further investigate students' particular perceptions of the mental health services and resources being provided. This would aid in identifying ways to enforce more effective services which would encourage help seeking behavior on McMaster campus. Collectively, this will work to combat any perceived existing mental health stigma on campus. On a broader scale, it can also be used to further investigate mental health literacy, stigma, and perceptions on other University campuses to identify any common themes of mental health perceptions in this demographic.

Conclusion

Due to the agreement among academic studies, there must be more knowledge spread about mental health literacy and its related aspects. Our current research was conducted in the hopes of gaining more insight into specific attitudes and perceptions of mental health literacy in the McMaster Undergraduate population. This was done in an attempt to begin the process of proposing appropriate interventions to campus wellness services as well as faculty-specific solutions. Since the study was exclusively assessing the perceptions of McMaster students, it was imperative to address the underlying shared meanings within the McMaster community that contribute to the perceptions of mental health literacy and stigma at large. Thus, our secondary research aids to address and understand the concerns of perceptions of mental health literacy, barriers to help seeking behavior, and stigma associated with mental health struggles among university students.

The findings presented a deeper understanding of relationships between faculty and perceptions of support, mental health literacy as well as help seeking behavior with the McMaster Undergraduate population. Our results indicate discrepancies in Business, Engineering and Humanities as the faculties with lowest perceived support from professors and were the least literate in mental health in comparison to those in a Social Science faculty. To assess mental health literacy on campus, we also gathered relationships between DSM-5 knowledge and perceived levels of adequate support provided by the Student Wellness Centre.

Our results indicate that the greater DSM-5 knowledge students have, the less likely they are to think the Student Wellness Centre offers adequate support. This suggests that DSM-5 knowledge may not be indicative of help-seeking behaviour per say, but it is indicative of the perceived adequacy of support resources on McMaster campus. Furthermore, this can suggest that there is a perceived inadequacy within the Student Wellness Centre and its proposed services that deters students, with adequate knowledge to reach out for support, away from using its services. Although there was no correlation between the program of study and perceived stigma, most participants agreed upon general existing stigma surrounding mental health. Additionally, as the results indicated, most participants agreed that their peers helped to reduce stigma around mental health. This may indicate that participants feel a sense of comfort and support from peers when it comes to mental health, rather than feeling that peers further perpetuate the stigma.

Ultimately, the major takeaway from the current research is that it is of paramount importance that university faculty and services are provided with the education and funding to have effective understandings and abilities to address student mental health experiences.

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