Building an EMPOWERed Classroom: Examining the Impact of a Two-Session Virtual Workshop on Mental Health Literacy and Self-Efficacy to Recommend Mental Health Resources Among Postsecondary Course Instructors

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Abstract

Background: Postsecondary students are a population at elevated risk for mental health concerns due to the unique stressors they face regularly compounded by pandemic induced barriers to support. With an increase in both the prevalence of mental health difficulties and the demand for related services, postsecondary wellness centres are overwhelmed, suggesting that mental health on campus can no longer be the responsibility of one entity. By engaging other sectors of the institution, more students can be reached and supported. Given the likelihood that they are addressing health-related concerns indirectly and more frequently than ever, educators are in a unique position that may allow for early detection of mental health difficulties and support for their students. To date, research has demonstrated the importance of mental health literacy training for educators, but few studies have evaluated a program designed to improve it. By evaluating training designed to increase mental health literacy and self-efficacy to recommend resources among educators, it may be possible to assist more students with receiving mental health support and information. An education-focused approach has been identified as a successful avenue for supporting the wellbeing of primary and secondary students as well as those outside the field of education; however postsecondary instructors have yet to be the focus of such work. Workshops have been deemed valuable avenues for increasing mental health literacy and self-efficacy to recommend mental health resources; however, there is a consensus that "one-off" versions are not highly effective in the maintenance of improved mental health literacy and self-efficacy. Little has been done to evaluate a lengthier intervention delivered over more than one time-point. Moreover, the utility of an interactive online workshop has not been explored, which may prove valuable in today's pandemic recovery era from accessibility and efficiency standpoints.

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Purpose: The primary purpose of this study was to evaluate the impact of a two-session, education-based virtual workshop delivered by a senior counsellor from the host institution's Student Health and Wellness on mental health literacy and self-efficacy of post-secondary instructors to recommend mental health resources and assess their psychological wellbeing. A secondary purpose was to collect the same measures (i.e., mental health literacy, self-efficacy to recommend mental health resources, and psychological wellbeing) from course instructors employed at the host institution during the study period and compare these data to those obtained from workshop participants before and after study involvement. A tertiary purpose was to qualitatively explore the experience of the workshop.

Methods: This study used a sequential explanatory mixed method design with repeated measures. Postsecondary educators at the host institution were invited to take part in a professional development workshop entitled "Building an EMPOWERed Classroom: Enhancing student Mental health via Professors' Openness to Wellness Embedded Resources." This two-session workshop (the first session occurring in February and the second 10 weeks later in April) was offered through the host institution's Student Health and Wellness department. Quantitative data for mental health literacy, self-efficacy to recommend mental health resources, and psychological wellbeing were collected before and after each session. Data derived from the first workshop were used to inform the qualitative questions posed following the second and aimed to understand the experiential account of participants. Those instructors at the host institution who did not take part in the workshop were invited to complete the quantitative measures to serve as contextualizing data. Descriptive statistics, visual inspection, clinical effect sizes, and Pearson correlations were used to evaluate the quantitative data. Participant experiences were analyzed using a combination of deductive and inductive thematic analysis.

Results and Findings: Seven participants attended both workshop sessions and completed at least two of the four assessments. Mental health literacy dimensions and self-efficacy to recommend mental health resources increased following each session; however, following the second session scores were highest. These changes were corroborated by medium and large effect sizes and several positive correlations. Facets of psychological wellbeing were also deemed clinically significant following session two when compared to baseline. These improvements were qualitatively supported through the experiential accounts, which revealed participants enjoyed the two session-virtual format and found both the session content along with the resources provided to be relevant and applicable. Additionally, participants experienced benefits in the form of group camaraderie, improved empathy, and increased knowledge of mental health resources available. The timing of the intervention was identified by several participants as a challenge which impacted their ability to implement learned content and skills.

When compared to those of the institution, scores at baseline were similar between groups. Following intervention involvement, workshop participants had increased levels of mental health literacy, self-efficacy to recommend mental health resources, and both the *positive relationships* and *environmental mastery* subscales of psychological wellbeing compared to their institutional comparators suggesting that the intervention may have helped to impact these variables favourably.

Conclusion: These data suggest that a two-session, education-based virtual workshop may be an avenue to increase the mental health literacy and self-efficacy of postsecondary course instructors, while simultaneously helping to enhance dimensions of psychological wellbeing. Partnerships with student wellness centres should be considered for future research to facilitate

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extended reach of mental health education and support. Targeting instructors who have direct contact with students can also, in turn, support a whole campus approach to mental health.

Key Definitions

<u>Mental Health</u>: An integral and essential component of health; defined by the World Health Organization (2022a) as a state of wellbeing where an individual can cope with stresses, realize their abilities, learn and work well, and contribute to their community.

<u>Mental Health Difficulties:</u> Includes diagnosed psychiatric disorders along with subclinical symptoms of poor mental health such as behavioural and emotional problems associated with negative short- and long-term outcomes (Belfer, 2008; Breslau et al., 2008; Jokela et al., 2009).

<u>Mental Health Literacy</u>: Taking into account various definitions, mental health literacy is a multi-dimensional construct that encompasses knowledge and attitudes of mental health disorders, knowledge of mental health resources available, and help-seeking behaviours (Jorm et al., 1997; Jorm, 2012; Kutcher et al., 2015b)

Psychological Wellbeing: Satisfaction with one's life experiences and role in the world, a sense of achievement, belonginess, and low levels of distress or worry (Shek, 1997).

<u>Self-Efficacy</u>: An individual's self-perception of their competence at performing a given behaviour and also a necessary component for successful behaviour change (Bandura, 1977).

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Introduction

Mental health has been an increasing concern within Canada, with a reported one in every five Canadians experiencing related difficulties in their lifetime (Andrews et al., 2014; Persson et al., 2021; World Health Organization [WHO], 2022a). According to the WHO (2022a), mental health is a state of mental wellbeing that allows people to cope with stresses, realize their abilities, learn and work well, and contribute to their community. Mental health is not simply the absence of mental illness as earlier definitions suggested; rather, it is an integral part of general health (Galderisi et al., 2015). Mental health has also been referred to as a dynamic state of internal equilibrium allowing individuals to use their cognitive and social skills (Galderisi et al., 2015). These skills allow individuals to express and moderate their emotions, empathize with others, and be flexible with adverse events (Galderisi et al., 2015). The Public Health Agency of Canada (PHAC; 2014) has adopted a broader definition where mental health is the capacity to feel, think, and act in ways that enhance the ability to enjoy life and deal with challenges. Mental health is said to be a basic human right, and without mental health, there is no health (WHO, 2022a). Taken together, these definitions represent fundamental concepts that illustrate the importance of mental health and its relationship to overall wellbeing.

Positive mental health is associated with higher satisfaction with one's life, while poor mental health has been related to negative physical health outcomes (Canadian Institute for Health Information [CIHI], 2009; Herrman et al., 2005; Prince et al., 2007; Raphael et al., 2005). The co-occurrence of physical and mental conditions is common, with negative outcomes expected for both (CIHI, 2009; Raphael et al., 2005). For example, when paired with poor mental health, depression is a significant risk factor for cardiovascular disease (CVD; Kemp & Quintana, 2013; Van Der Kooy et al., 2007). One study identified that depression increased the risk of developing CVD by 1.5 times; when compared to cardiac patients without depression, those with the condition were 2 to 3 times more likely to experience future cardiac events (Rudisch & Nemeroff, 2003). Pan and colleagues (2011) found that 3.9% of stroke cases in the United States could be attributed to depression, while Russ et al. (2012) reported a relationship between anxiety and a number of comorbidities such as CVD and cancer, along with premature mortality. Similarly, in a sample of high-risk adolescents, mood and disruptive behaviour disorders were related to severe health problems; those with mood disorders experienced higher rates of infectious diseases, respiratory problems, and weight problems compared to those without such conditions (Aarons et al., 2008). Beyond associations with chronic disease, poor mental health is also a risk factor for the development of communicable and non-communicable diseases and as well as accidental and non-accidental injuries (Prince et al., 2007).

Indeed, mental health relates to behaviours that can influence overall health. For example, a negative relationship exists between mental health and risk-taking behaviours, including self-harm (WHO, 2022a). Mental health difficulties are also associated with increased alcohol consumption, nicotine and marijuana use, and illicit drug consumption (Böke et al., 2019). Moreover, feelings of depression are said to reduce the likelihood of participants engaging in healthy behaviours (Lovell et al., 2015). Specifically, Allgöwer and colleagues (2001) found that those with mild to higher depressive symptoms were more likely to be sedentary, have sleep hours outside of 7 to 9 hours a night, and not use a seat belt regularly. Lovell et al. (2015) also noted that poor mental health may negatively impact sleep quality and cause sleep disturbances. Alternatively, symptoms of a mental health condition are not always detrimental to high levels of mental wellbeing (Smith & Saari, 2013; WHO, 2022a). Other studies have found that positive mental health is associated with positive health behaviours such as dietary habits (e.g., routinely eating breakfast, improved diet, and increased fruit intake; Allgöwer et al., 2001) and physical activity engagement (e.g., increased participation and adherence; Allgöwer et al., 2001; McFadden et al., 2021; McGuine et al., 2021). The experience of mental health problems and mental wellbeing are connected but are distinct in that experiencing a mental health problem does not necessarily dictate a specific state of wellbeing (Keyes, 2002; Smith & Saari, 2013). With 20% of all Canadians affected by one or more mental illnesses annually, a number projected to increase by 31% over the next 30 years, it is critical to gain a better understanding of mental health challenges in order to prevent related illness and soften its consequences (Persson et al., 2021).

Mental Health as a Continuum

Mental health exists on a continuum, with experiences ranging from 'flourishing' to 'languishing' (WHO, 2022a). Using a continuum rather than a dichotomy is said to reduce stigma by avoiding diagnostic labels and instead suggests that everyone can be located on the continuum (Persson et al., 2021). Presented by Keyes (2002, 2005), the continuum suggests that not everyone with low wellbeing experiences psychopathology. The continuum has two axes, one vertical axis representing mental health ranging from high to low mental health, and one horizontal axis representing psychopathology, ranging from high to no symptoms of mental illness (see Figure 1). Keyes (2005) empirically confirmed that mental health and mental illness are not opposite ends of a single continuum, but rather are distinct and related axes. Therefore, the presence or absence of mental illness does not equal the presence or absence of positive

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mental health; mental health and mental illness are not two independent constructs. Someone who has a diagnosed mental illness can still experience positive mental health (WHO, 2022a). A diverse set of factors can be combined to either protect or undermine one's mental health, and in turn, shift their position on the continuum (WHO, 2022a). These risk and protective factors have been identified at different levels within society, such as local threats that heighten risks for individuals, families, and communities, as well as global threats, that put the whole population at risk and can slow worldwide progress towards improved wellbeing (WHO, 2022a). It is important that those in health care disciplines and positions of authority encourage help-seeking, healthy coping mechanisms, and provide supports in order to shift wellbeing towards flourishing on the continuum (Persson et al., 2021; WHO, 2022a): especially during times of turmoil and disruption.

Figure 1

Dual-Continua Model of Mental Health



Low Mental Health "Languishing"

Note. The Mental Health Dual-Continua Model. Adapted from "The Importance of Measuring Mental Wellbeing in the Context of Psychological Distress: Using a Theoretical Framework to Test the Dual-Continua Model of Mental Heath," by J. Mason Stephens, M. Iasiello, K. Ali, J. van Agteren, and D. B. Fassnacht, 2023, *Behavioural Sciences, 13*(5), p. 437 (https://doi.org/10.3390/bs13050436).

COVID-19 and Mental Health

The COVID-19 pandemic is a global risk factor that has exacerbated mental health difficulties worldwide and undermined the mental health of millions (WHO, 2022a). The pandemic caused a total lockdown in numerous countries resulting in radical lifestyle changes as people were asked to 'stay at home,' 'practice social distancing,' and work and learn from home (Onyema, 2020). Similarly, national and localized quarantines and physical distancing

regulations reduced social connections and left people feeling isolated, lonely, and helpless (WHO, 2022a). Many reported worrying about their physical health, the health of others, the economic impacts such as future job market opportunities, and the effect of the pandemic on the progression of their studies (Elmer et al., 2020). During the first year of the pandemic, anxiety and depressive disorders rose 25-27% in prevalence (Santomauro et al., 2021; WHO, 2022a). Mental health services were severely disrupted as a direct result of these pandemic restrictions and the treatment gap was widened considerably between those seeking care and those receiving it (WHO, 2022a). Moreover, school-based mental health and alcohol prevention and management programs were impacted most, with over half of the WHO member states (i.e., countries that have adopted the WHO's Constitution), reporting a disruption (WHO, 2022b). In addition, outpatient appointments were reduced or postponed, admissions to emergency departments were limited, and there was a drastic decrease in the availability of face-to-face health-oriented services (Baumgart et al., 2021). Similarly, group therapy, external activities, and family visits were suspended, and people in psychiatric hospitals were discharged early or relocated to private clinics (Clemente-Suárez et al., 2021). As a result of the ongoing lockdown measures, many mental health care providers shifted to an online e-mental health care model, but lacked experience and confidence, had impersonal patient interactions, and experienced poor communication through remote encounters (Baumgart et al., 2021; Siegel et al., 2021). Beyond the reduction to clinical supports, health supporting behaviours known to positively influence mental health were also impacted. For example, community and exercise centres with gyms and pools were closed which resulted in reduced physical activity for all age groups and subsequent negative impacts on mental health and wellbeing (Ammar et al., 2020; Maugeri et al., 2020). Furthermore, the ability to access social networks was impacted by public health protections

(e.g., social distancing, gathering limits). Social support has a protective effect on mental health in stressful situations where it can aid in alleviating the negative outcomes on wellbeing (Cohen & Wills, 1985; Khan et al., 2010). It is clear that the pandemic exacerbated the prevalence of mental health difficulties while simultaneously augmenting barriers to treatment and limiting opportunities for health supporting behaviours, suggesting that unique interventions are needed at this time (WHO, 2022a).

Canadians, along with those living in many other countries, faced unprecedented mental health challenges alongside the calamitous impacts of this global health crisis (Cascella et al., 2022). In 2020, during the midst of the COVID-19 pandemic, 54% of Canadians aged 15 or older reported having 'excellent' or 'very good' mental health, which had decreased from 68% in 2018 (Findlay & Arim, 2020). This reduction was more pronounced in younger adults aged 15 to 24, where 42% indicated 'excellent' or 'very good' mental health in 2020 compared to 62% in 2018 (Findlay & Arim, 2020). Prior to the pandemic, Children's Mental Health Ontario (2020) found that 28,000 children and youth were on waiting lists to be seen by a mental health professional: a number that has only increased since that time. Moreover, in 2020, 23% of hospitalizations for those aged 5-24 were due to mental health disorders: a 2% increase from 2019, meaning that nearly one in every four hospitalizations in this population was related to mental health (CIHI, 2022a). Among youth, factors such as lack of contact with peers and teachers, fear of death among family members, and decreased structure in daily routines contributed to an increase in anxiety, depression, and behavioural problems (Fegert et al., 2020). Furthermore, studies have found that youth and adolescents have reported being sadder (15%), worried (27%), and felt they were missing out on important life events (75%) than before the pandemic (Maximum City, 2021).

While the long-term mental health impacts of the COVID-19 pandemic are still unknown, it is clear that adverse mental health experiences have impacted certain populations, such as youth, disproportionately; the need for care has been exacerbated, thereby overwhelming an already struggling service sector within Canada (CIHI, 2022b). Innovative interventions that target youth in particular are warranted (Vaillancourt et al., 2021a). Given that this population spends a vast amount of time in classrooms, school-based initiatives may be a worthwhile avenue to explore (Vaillancourt et al., 2021a, 2021b).

Mental Health, the COVID-19 Pandemic, and School Disruptions

In addition to many social and health-related disruptions, educational disturbances occurred across the globe throughout the pandemic (Colvin et al., 2022). More than 100 countries experienced unprompted school closures which left over 90% of students from elementary to postsecondary level out of the classroom (Onyema, 2020; Vaillancourt et al., 2021b). Studies have shown that younger people have been more affected by the pandemic than older people (WHO, 2022b). Extended school closures have interrupted social connections, contributing to young people missing out on learning and experiences required for healthy development (WHO, 2022a). In addition, the many disruptions along with the transition to online course delivery negatively impacted learning, which resulted in lower test scores, slower improvements in skills, and loss of knowledge (Betkowski, 2020; Vaillancourt et al., 2021b). Along with these negative effects, school closures resulted in less support available for youth, including early detection of mental health difficulties by their classroom teachers (Vaillancourt et al., 2021a; Whitley et al., 2013). In addition, the postsecondary student social network, in particular, has been argued to help buffer stress; the loss of this resource due to online learning resulted in negative impacts to the mental health of this population (Stadtfeld et al., 2019).

Postsecondary Students and Mental Health

Postsecondary students have long been known as a population at elevated risk for poor mental health and related difficulties (Duffy et al., 2019; Prowse et al., 2021; Statistics Canada, 2020). When compared to youth not attending a postsecondary institution, those enrolled were 2.5 times more likely to experience symptoms of mental illness (Heck et al., 2014). Moreover, this transition into adulthood can be a vulnerable time, accompanied by the onset of mental health difficulties (Prowse et al., 2021). Indeed, according to Statistics Canada (2013), young people between the ages of 15 to 24 are most likely to experience mental illness. For example, there were higher rates of emergency department visits and hospitalizations due to mental health reasons for Canadians aged 15 to 17 and 18 to 24 during 2020 than any other age group (CIHI, 2022b).

The shift from secondary to postsecondary learning is a stressful time for undergraduate students (Goldschen et al., 2019; Radcliffe & Lester, 2003). This may be due, in part, to students having to become independent learners and navigate the new teaching and learning environment (Elton, 2008; Hallett, 2012). Similarly, this is also a period of conflicting change. For many young adults attending school, this is the first time living independently, thus allowing them the opportunity to forge their own path, solidify their beliefs, develop a self-identity separate from their home unit, and learn coping strategies outside their community of support (Chow & Healey, 2008; Esmaeelzadeh et al., 2018; Leong et al., 2021; Robinson et al., 2016). Adolescence is characterized as a time of increased independence, responsibilities, and the development of decision-making abilities (Bjørnsen et al., 2019). Thus, promoting health literacy and imparting health-promoting knowledge during this formative period can help to improve behaviours and wellbeing (Bröder et al., 2017).

Beyond transition-related concerns, postsecondary students are a unique cohort that is under an intense amount of strain from academic pressure, social stressors, financial burden, and insecurities regarding the future (Elmer et al., 2020; WHO, 2022a). According to an American College Health Association (2019) report, 63.6% of Canadian university students surveyed felt hopeless, 69.6% felt very lonely, 88.2% felt overwhelmed by all they had to do, 68.9% felt overwhelming anxiety, and 51.6% felt so depressed that it was difficult to function. To provide context, in the 2016 report, 61.4% of Ontario university students surveyed felt hopeless, 67.8% felt very lonely, 89.2% felt overwhelmed by all they had to do, 65.4% felt overwhelming anxiety, and 46.1% felt so depressed that it was difficult to function (American College Health Association, 2016). In the same report, 46.0% of students indicated they had experienced more than average stress and 14.8% indicated they had experienced tremendous stress. Recently, in a population of Canadian postsecondary students, Chang and colleagues (2022) found that 19.5% of their participants self-reported they had severe mental health problems such as anxiety and depressive symptoms. The pandemic has introduced significant stressors into the lives of this already at-risk population (Patterson et al., 2021). Furthermore, data suggest that young adults are likely to increase substance use in response to a global pandemic (Patterson et al., 2021). Given the risk for adverse behaviours and health outcomes, the need for wellness-promoting initiatives for this population is important.

Coping Strategies and Accessing Mental Health-Related Resources in Postsecondary Students

Depression, anxiety, and substance use are closely linked, and their prevalence has been increasing steadily across Canadian university campuses (Esmaeelzadeh et al., 2018). Relatedly, elevated levels of stress paired with limited healthy coping strategies impacts students' decisions to turn to such outlets (Böke et al., 2019). In 2017, Health Canada (2021) found that alcohol,

cannabis, and tobacco use were highest in individuals aged 20-24. Similarly, Chang et al. (2022) found a significant positive correlation between high-risk alcohol use and moderate to severe mental distress in Canadian postsecondary students. Taken together, this suggests that failure to develop healthy coping mechanisms in this population can result in behaviours that are further damaging to health. This is concerning given that the consumption of legal and illicit drugs, along with alcohol, is associated with adverse outcomes such as poor academic performance, unintentional injuries, and an increase in risk-taking behaviour (Esmaeelzadeh, 2018; WHO, 2022a). The majority of depression, anxiety, and substance use concerns emerge during young adulthood, which makes postsecondary students particularly prone to their co-occurrences, highlighting the importance of promoting healthy coping mechanisms and enhancing help-seeking behaviours in this population (Auerbach, 2017; Esmaeelzadeh et al., 2018).

Left untreated, mental illness can result in poor educational achievement, a decrease in social and personal functioning, and a reduced life expectancy (Linden et al., 2021; Moon et al., 2017; WHO, 2022a). Pritchard and Wilson (2003) found that lower test scores, an increase in the prevalence of intent to drop out, and poor coping skills were also a result of poor mental health within this population. Lee and colleagues (2009) similarly found a significant association between student retention and accessing postsecondary counselling services whereby those students who accessed the services were 3 times more likely to complete their degree than students who did not, regardless of academic performance. Conversations about awareness of postsecondary student mental health challenges have increased since the start of the pandemic, suggesting this may be an opportune time to develop related initiatives (Harris et al., 2022). However, it is important to note that these initiatives should not just be in response to the

pandemic's aftermath, but instead, incorporate long-term, sustainable solutions to enhance mental health and promote positive coping strategies (Harris et al., 2022).

Barriers to Help-Seeking Behaviours

Despite the detrimental impacts of untreated mental illness, many students do not seek help (Patterson et al., 2021). However, the percentage of students who reported receiving help from their postsecondary mental health services increased significantly from 2003 to 2019, which suggests growing recognition of the issue (Cadigan et al., 2018; Heck et al., 2014; Linden et al., 2021). Robinson et al. (2016) found that at a university in Western Canada, 74% of students were aware of mental health services, but only 8% had accessed them. Relatedly, a study by Giamos et al. (2017) sought to identify mental health needs of students and the gaps in mental health services within postsecondary institutions across five campuses in Ontario and Quebec. Participants noted that mental health services were adequate overall; however, across each campus respectively, long wait times were a barrier for students to access services in a timely matter. The same study also found that lack of knowledge of existing services was an additional barrier to care. Similarly, a study by Yorgason and colleagues (2008) revealed that 37% of students felt they were not given enough adequate information to enable them to contact mental health services on campus. Additionally, one-third had never heard of available services, while 38% had heard of services, but knew nothing about them. In sum, students' knowledge and use of campus mental health services are interrelated, meaning that students who have sufficient knowledge of services are more likely to access them (Yorgason et al., 2008).

A preference for self-reliance is another obstacle that prevents adolescents from reaching out for help. This is a period of increased autonomy and control, which often results in a competing balance between independence and support (Radez et al., 2022; Wilson & Deane, 2012). Self-stigma can exacerbate this struggle (Ishikawa et al., 2023). Stigma has long been identified as a barrier that negatively influences help-seeking behaviours (Cadigan et al., 2019). This includes both public, the attitudes and reaction of the general population towards people with mental illness, and self-stigma, the internalized shame, guilt, and poor-self image from accepting societal prejudice (Corrigan & Watson, 2002; Ishikawa et al., 2023). Recent studies have shown that although mental health-related stigma has decreased on campuses, it is still a prevalent barrier to seeking help among Canadian university students (Dunley & Papadopoulos, 2019; Giamos et al., 2017; Linden et al., 2021). Evidence suggests that improved understanding and knowledge of mental health may be ways to enhance help-seeking attitudes (Bu et al., 2019). In light of these barriers, identifying novel ways to increase this knowledge and reduce stigma in service of uptake is needed.

Considering that student retention, achievement, and satisfaction collectively influence goal attainment on individual and school-based levels and hold reputational consequences for institutions, postsecondary stakeholders have recognized the benefits of supporting student health and wellness (Prince, 2015; Robinson et al., 2016). The development of campus wide wellness-promoting initiatives using a systemic approach (Washburn et al., 2013) can reach a majority of the student population; however, it is important to understand what supports students require and what avenues and resources will encourage them to access available services (Harris et al., 2022). Often, the burden of this programming designed to improve stigma and increase knowledge around campus mental health resources falls disproportionately on postsecondary wellness centres (Harris et al., 2022; Kafka, 2021; Ng & Padjen, 2018). While this type of work aligns with their scope and mission, the demand for services often outweighs supportive capacity (Harris et al., 2022; Ng & Padjen, 2018).

Postsecondary Wellness Centres on Campus: The Case for a Whole Community Approach

Student focused wellness centres exist across postsecondary institutions, with most campuses boasting their own (Kafka, 2021; Soleimanpout et al., 2010). These centres play a vital part in promoting, supporting, advocating, maintaining, and campaigning for the wellbeing of students (Kafka, 2021; Soleimanpout et al., 2010). Adolescent health outcomes have improved due to these wellness centres; for example, a decline in depression, a reduced likelihood of suicidal intentions, and an increase in contraception use have been reported amongst service users (Soleimanpout et al., 2010). These wellness centres are most commonly accessed for medical services, family planning, and mental health supports including counselling (Soleimanpout et al., 2010). And these wellness centres are overwhelmed (Harris et al., 2022; Kafka, 2021; Ng & Padjen, 2018).

With an increase in both the prevalence of mental health difficulties among postsecondary students and the demand for related services, staff at these centres feel they are unable to meet student needs as resources have not changed in conjunction with rising trends (Linden et al., 2021; Xiao et al., 2017). During busy times for students when stress is elevated, such as exam periods, there is an influx among those seeking help, which can result in longer wait times when students require help the most (Giamos et al., 2017; Ng & Padjen, 2018). Similarly, limited business hours that conflict with class schedules can also contribute to wait times (Ng & Padjen, 2018). Postsecondary wellness centres often struggle with underfunding and understaffing leaving employees depleted and counsellors burnt out (Kaftka, 2021; Xiao et al., 2017). These shortcomings suggest that mental health on campus can no longer be the responsibility of one entity; instead, a systemic approach should be adopted (Harris et al., 2022; Kaftka, 2021; Kalkbrenner et al., 2019).

In 2015, the Okanagan Charter was an outcome of the 2015 International Conference on Health Promoting Universities and Colleges with two calls to action for higher education institutions (Okanagan Charter). The first call was to embed health and wellbeing into all aspects of campus culture, including administration, operations, and academic mandates; the second was to lead health promotion action locally and globally (Okanagan Charter, 2015). In 2019, the host institution signed the charter as a commitment to student, faculty, and staff health and wellbeing inside and outside the classroom as part of the University's 2018-2023 Strategic Plan (Lakehead University, 2019). Additionally, the institution committed to developing a campus-wide Wellness Strategy, launched in 2021, with the goal of supporting and encouraging a culture of health and wellbeing for those who work and study at the university (Lakehead University, 2019). By engaging all sectors of the postsecondary institution, more students can be reached and supported through a public health approach that includes wellness centres, the student body, faculty, staff, academic departments, and the larger community (Harris et al., 2022; Heck et al., 2014). Specifically, it has been suggested that mental health promotion initiatives should target faculty and staff who work directly with students given the likelihood that they are addressing health-related concerns indirectly and more frequently than ever (Harris et al., 2022).

Postsecondary Educators and Supporting Student Mental Health

Educators are the future builders of the country and provide critical knowledge to prepare students to live a healthy life (Patel, 2018). They are the frontline providers of knowledge transfer, and constantly enrich the learning community (Li & Yu, 2022). Indeed, compelling research has revealed that the influence teachers have is the number one school-based contributing factor to academic achievement among students (Viano et al., 2021). Li and Yu (2022) indicated that the professional role of teachers impacts successful educational processes and relates to enhanced student learning outcomes. Yet, teaching is among the most stressful professions (MacIntyre et al., 2019). Educator stress is a result of high workloads, time pressure, constant educational changes, and emotional load (MacIntyre et al., 2019). Additionally, teaching is an occupation with high risk of burnout that interferes with mental health (Grayson & Alvarez, 2008). The pandemic resulted in various changes to the professional roles and responsibilities of educators, highlighting how multiple priorities are being balanced, both old and new. Learning disruptions, technological barriers, uncertainties about the future, and fear for the safety of their students and for themselves are now struggles that educators are expected to balance within their existing job description (Li & Yu, 2022). Demands added to already full workloads. Moreover, in addition to the disruptions that occurred during the pandemic, educators are now expected to mitigate losses in their students' learning while still meeting the current course/year requirements (Betkowski, 2020; Li & Yu, 2022; Vaillancourt et al., 2021b). Pehlke (2021) determined through one-on-one wellness coaching conversations that many instructors are concerned about the levels of stress that they and their students are both experiencing. Despite these demands, most educators acknowledge the importance of their role in supporting student mental health and note they are willing to facilitate positive action in the classroom (Andrews et al., 2015; Johnson et al., 2022; Shelemy et al., 2019a). Given these competing demands, it is important to understand how educators view their professional responsibilities so that supportive interventions can be developed accordingly.

In a recent study conducted at a mid-sized Canadian university that explored professional roles and views on mental health support in the classroom, 99 course instructors described their role as: developing skills, teaching course content, facilitating learning, and providing support and guidance to students (Johnson et al., 2022). Mazzer and Rickwood (2015) similarly explored role breadth and found that 21 Australian secondary school teachers viewed addressing student mental health as part of their role. Furthermore, half of these participants reported that it was their professional responsibility to provide a positive, safe, and friendly environment while teaching curriculum. Beyond these core responsibilities, participants also acknowledged that a willingness to care for and communicate concerns with students about their mental health was often an informal part of their role; however, it was generally not part of their area of study or professional discipline (Mazzer & Rickwood, 2015). Taken together, these data suggest that educators are receptive to serving as conduits for mental health support in the classroom environment: a strategy which may offset some of the pressures felt by institutional wellness centres. However, the educators' knowledge and comfort level with this topic should be accounted for in program design and delivery.

Educators as Delivery Agents of Wellness Promoting Initiatives

Educators have a unique position that may allow for early detection of mental health difficulties in their students; this is why it is commonplace to observe them as delivery agents of wellness-promoting, classroom-based initiatives (Whitley et al., 2013). Educators are often the first to observe behaviours that could indicate mental health difficulties or worsening problems (Whitley et al., 2013). Early detection is imperative as delay in seeking help can have debilitating consequences such as poorer treatment outcomes, reduced academic achievement, and dropout (Altamura et al., 2008; Elmer et al., 2020). While educators have long served as delivery agents of wellness-promoting classroom-based initiatives (i.e., incorporating mental health literacy-based education into the curriculum) in both elementary and secondary schools, few studies have examined this concept in a postsecondary setting (Fazel et al., 2014; Kutcher et al., 2013, 2015a; Stewart et al., 2004; Wei et al., 2011). Kutcher and colleagues (2015a) explored how a resource

called The Mental Health and High School Curriculum Guide (The Guide) could impact Canadian secondary school students' attitudes and knowledge on mental health and illness. The usual classroom teacher implemented this six-module resource in their usual class via their health curriculum over 10 to 12 hours following a one-day training session. The modules included information on the stigma of mental illness, understanding mental health and wellness, understanding mental disorders and their treatments, experiences of mental illness, seeking help and finding support, and the importance of positive mental health. Kutcher et al. (2015a) collected knowledge related to mental health and mental illness from 114 participants, and attitudes related to mental health and mental illness from 112 participants. This was done via surveys administered by the classroom teacher immediately after, and 2 months following the guide's implementation. Compared to baseline, knowledge and attitudes relating to mental health and mental illness revealed significant improvements at the post-test that were also maintained at the 2-month follow-up assessment. The researchers concluded that embedding resources as part of usual curriculum may encourage youth to seek assistance for mental health related issues. Moreover, they noted benefits of this integrative approach which included cost-effectiveness and harnessing usual classroom teachers to deliver the materials. The researchers also suggested that this simple curriculum resource may improve teacher mental health simultaneously.

Similarly, in Australia, Perry et al. (2014) used a randomized controlled trial to evaluate the impact of the *HeadStrong* program: a universal, curriculum-based education program that was designed to improve mental health literacy (i.e., the ability to maintain and understand positive mental health and that related help is available; Kutcher et al., 2015a), personal stigma, psychological distress, and help-seeking in 380 secondary students in 22 classes across 10 schools. Health and physical education teachers were used to facilitate the program's administration in term one of the school year following a one-day training workshop (Perry et al., 2014). The program was delivered over 5 to 8 weeks, taking 10 hours of class time in total. Teachers were provided with free downloadable resources along with activities to implement in their classrooms, and guidance on how to deliver the activities. Teachers distributed questionnaires to students pre- and post-intervention and 6-months following. Significant enhancements to mental health literacy were observed post-intervention for those in the *HeadStrong* program group compared to the control; however, these changes weakened over time, suggesting that supplementary education (e.g., a workshop) may be required in order to sustain improvements.

The Perry et al. (2014) and Kutcher et al. (2015a) studies both involved a one-day training workshop designed to develop educators' understanding of the program content for which they were the delivery agents. The teachers had autonomy regarding which resources to implement and how to meet the curricula objectives. This is a particularly noteworthy approach as it does not rely on mental health experts to deliver the programming; instead, it allows teachers to use their professional skills and experience when providing materials in the classroom (Kutcher et al., 2015a; Perry et al., 2014). However, while these studies were successful in improving the mental health literacy of students (e.g., Kutcher et al., 2015a; Perry et al., 2014), the mental health literacy of the educators themselves was not assessed. This may be an important consideration regarding the success and sustainability of a program when the educators are the delivery agents. Having low mental health literacy themselves may result in educators being unprepared and less knowledgeable about a program's content, and in turn, may negatively impact the delivery of the program (e.g., provision of incorrect information; Ball et

al., 2005). Thus, it may be valuable to focus on assessing and equipping the educators themselves prior to their provision of mental health resources to students.

Educator-Student Wellbeing and the School Climate

Educator wellbeing is an important aspect to consider and evaluate when seeking to create a positive school climate and educational experience (Grey et al., 2019; Kutcher et al., 2013). The wellbeing of educators accounted for 8% of the variance in student performance in a study conducted by Briner and Dewberry (2007) who surveyed 246 elementary school teachers and 182 secondary school teachers in the United Kingdom. This suggests that when educators have increased wellbeing, students perform better academically. Similarly, a study by Glazzard and Rose (2019) discovered that over half of the 775 elementary school teachers surveyed in England had been diagnosed with a mental illness. The same study found that 77% of participants felt that poor mental health among educators was having a negative impact on the academic progress of students, and 81% noted that poor mental health of educators was negatively impacting the student-teacher relationship (Glazzard & Rose, 2019). According to Kidger et al. (2016), teachers are consistently at an increased risk of mental health problems, meaning that it is important to recognize and validate concerns educators have regarding their own mental health. Harding et al. (2019) found that poor educator mental health is positively correlated with poor student mental health and noted that educator wellbeing can also be influenced by the school climate (Grey et al., 2017).

Indeed, research has found that a positive school climate directly impacts the mental and physical health of students and teachers (Gray et al., 2019; Thapa et al., 2013). For example, positive academic achievement, increased self-esteem of students, and lower levels of drug use have been observed (LaRusso et al., 2008; MacNeil et al., 2009; Way et al., 2007). Furthermore,

a positive school climate has been shown to predict better psychological wellbeing in early adolescence (Russ et al., 2007). It also predicted positive mental health among teachers and students alike, suggesting that the environment can play an important role in supporting those who are immersed within it (Virtanen et al., 2009). Thapa et al. (2013) found that one of the most important factors for developing a positive school climate in both elementary and secondary schools was relationships: especially the teacher-student relationship. Relatedly, research has shown the utility of positive teacher-student relationships in reducing the likelihood and prevalence of behavioural problems in secondary classrooms (Gregory & Cornell, 2009). Additionally, perceived support from teachers was associated with improved self-esteem and increased grades, and negatively related to depressive symptoms among middle school-aged students (Jia et al., 2009). Skinner and Belmont (1993) found that the interactions students have with a teacher can directly affect their behaviour and engagement in the classroom, and positive interactions result in more engaged and better-behaved students. In a postsecondary setting, research on campus culture has revealed that students who feel cared about and valued at their institution experience higher levels of belongingness (Allen et al., 2008; Bowman, 2010). These students also report a stronger sense of a positive campus community, which results in increased institutional commitment, improved academic performance, higher feelings of satisfaction, and better mental health and wellbeing (Allen et al., 2008; Bowman, 2010; Cheng, 2004). Furthermore, when students feel cared about, they have enhanced social and academic comfort on campus (Hoffman et al., 2002). According to Henderson and colleagues (2018), peer acceptance and engaged professors serve as critical influences that promote a sense of belonginess for Canadian postsecondary campuses. By creating and maintaining positive relationships between students and faculty, a positive environment can be fostered, and

belongingness can be enhanced. This environment allows both students and faculty to feel supported and safe (Thapa et al., 2013). Professional development opportunities for educators may be one avenue to facilitate these important outcomes.

Educator Willingness to Support Student Mental Health

Various studies have examined the willingness of postsecondary educators to support the mental health needs of their students (Andrews et al., 2015; Johnson et al., 2022; Shelemy et al., 2019a). Recently, a study at a mid-sized Canadian university found that almost 93% of the 99 course instructors surveyed felt they should be aware of how to respond when faced with mental health difficulties among their students (Johnson et al., 2022). These findings align with previous research that examined the attitudes and willingness of secondary school teachers to support student mental health within the classroom. Researchers found that over 90% of the 75 participants surveyed understood the seriousness of student mental health issues and the impact they can have on academic success (Andrews et al., 2014). Furthermore, Andrews and colleagues (2014) found that 97.4% of participants strongly agreed or agreed that as educators, they should be aware of how to react when faced with mental health difficulties in their students. Similarly, in a population of postsecondary faculty, staff, and students, Albright and Schwartz (2017) found that more than 95% of faculty and staff (n=14,584), and 87% of students (n=51,294) felt it was part of the educator role to connect struggling students with mental health support services. However, less than 40% approached or referred any student exhibiting signs of psychological distress to mental health support services, suggesting that educators may not be aware of when or how to approach students that they perceive as struggling (Albright & Schwartz, 2017). One reason for this discrepancy may be related to a lack of clarity in their expected role when it comes to supporting student mental health (Mazzer & Rickwood, 2015;
Shelmey et al., 2019a; Whitley et al., 2013). Most educators feel the supportive role should be indirect rather than direct (Johnson et al., 2022; Kalkbrenner et al., 2019; Shelemy et al., 2019b); that is, referring struggling students to appropriate resources rather than trying to assist the student themselves (Kalkbrenner, 2019). This view is consistent with research conducted by Shelemy et al. (2019b) who found that secondary school teachers in the United Kingdom (n=49) did not want to take on the role of a therapist or social worker, and felt that training should not include therapeutic strategies to improve the mental health of students. Their findings suggested that mental health training should focus on supporting students' ability to access care rather than solving a students' problems (Shelemy et al., 2019b). By referring students to mental health resources, rather than becoming directly involved with screening or treatment, the risk of exacerbating a situation by saving the wrong thing is mitigated (Kalkbrenner, 2019). Educators are not trained mental health professionals, meaning, they are not certified or licensed to provide direct mental health support (Shelemy et al., 2019b). Becoming too involved leaves both the struggling student and the well-meaning instructor at risk for negative consequences. In addition, overstepping professional boundaries may negatively impact the faculty-student relationship, which is important to the development of a successful learning environment (Gray et al., 2019).

The value of the teacher-student relationship and a positive educational climate emphasizes the need for professional development and training that can provide educators with the knowledge of how to approach students they perceive as struggling, and appropriately provide support without damaging that relationship. To be successful in their role of indirectly supporting students, many studies have found that the mental health literacy of educators, along with confidence in their skills to recommend resources, are important constructs worthy of investigation (Jorm, 2012; Kutcher et al., 2015a, 2015b; Mansfield et al., 2021).

Mental Health Literacy and Related Programs

The term mental health literacy was coined by Jorm and colleagues in 1997 as the knowledge and beliefs of mental disorders, and helping to recognize, manage, and prevent them. More specifically, the concept includes the ability to recognize specific disorders, how to seek mental health information, knowledge of risk factors and causes, awareness of help available, and attitudes that promote both recognition and help-seeking behaviours. This definition has since been updated to distinguish components of mental health literacy including: a) knowledge of how to prevent mental disorders; b) recognizing when a disorder is developing; c) being aware of available services and treatments; d) knowledge of effective self-help strategies; and e) first aid skills to support others who are developing or struggling with a mental health difficulty (Jorm, 2012). Kutcher and colleagues (2015b) more recently defined mental health literacy as the ability to obtain and maintain positive mental health, understand mental disorders as well as their treatments, decrease stigma, and enhance help-seeking efficacy. Taken together, these definitions identify mental health literacy as a multi-dimensional construct that encompasses knowledge and attitudes of mental health disorders, knowledge of mental health resources available, and helpseeking behaviours (Jorm, 2012; Kutcher et al., 2015b).

Various studies have explored the success of mental health literacy programs delivered by classroom teachers on the mental health literacy of students (e.g., Kutcher et al., 2015a; Sharp et al., 2006; Stewart et al., 2004; Wei et al., 2001). For example, Ojio and colleagues (2015) developed a mental health literacy program to be delivered by secondary school teachers through two, 50-minute sessions in Japan. The researchers examined how knowledge of mental health and mental illness, help-seeking behaviours, and beliefs related to mental health and mental illness of 118 ninth grade students changed following two sessions. The first 50-minute session involved information provision on frequent misunderstandings regarding mental illness along with an explanation of mental illness such as prevalence, onset age, risk factors, and symptoms (Ojio et al., 2015). The goal of this session was to teach signs and symptoms of mental illness and provide the messaging that mental health problems are not rare (Ojio et al., 2015). This first session was meant to improve recognition of mental health problems as this is the first step in help-seeking (Santor et al., 2007). The second session occurred one week later and provided information on sources of help such as psychiatric outpatient clinic pictures, methods of diagnosis, and clinical examinations (Ojio et al., 2015). The goal of this session was to improve awareness of how to help themselves and peers when they are suffering from mental health problems in the secondary student population (Ojio et al., 2015). Following the second session, there was a discussion and role play activity where the participants were encouraged to practice finding appropriate ways to seek help if they were suffering from mental health difficulties (Ojio et al., 2015). The study's authors concluded that an educator-led program may have significant improvements on knowledge and beliefs of mental health and mental illness in a secondary population, while simultaneously increasing help-seeking behaviours among students.

Similarly, Swatz et al. (2017) enrolled grade 9 and 10 teachers to implement the *Adolescent Depression Awareness Program (ADAP)* in the health curriculum in the United States. This program is a school-based depression education program that takes 3 hours and is taught over 2-3 consecutive health classes by teachers to students (Swartz et al., 2017). Its purpose was to increase depression literacy and encourage help-seeking; content included knowledge about mood disorders and attitudes about treatment. Educators attended one, 6-hour training session where they received guidance on implementing the program and a standard teaching kit which included a detailed manual, DVDs showing the curriculum being taught, and

implementation materials such as PowerPoint presentations, handouts, and group activities (Swartz et al., 2017). They were also provided access to online refresher sessions through selfstudy modules. A total of 6679 students from 54 high schools participated. Following the implementation of the *ADAP*, at the 6-week follow-up it was found that depression literacy had increased significantly. Significance was maintained at the 4-month assessment suggesting that increases in depression literacy were sustainable. In addition, 46% of teachers reported that at least one student exhibited help-seeking behaviours. Using a whole school approach was found to be beneficial as it avoids stigmatizing target groups and has the potential to benefit many recipients (Swartz et al., 2017).

Both Ojio et al. (2015) and Swartz et al. (2017) found that concise programming delivered over multiple sessions was successful in increasing depression literacy and helpseeking behaviours in secondary students. Of note is the fact that Swartz and colleagues (2017) found that such a programming design resulted in maintained improvements 4-months following programming. Both programs lacked a component that evaluated the training days for the educators. As the educators were the delivery agents of programming, their own knowledge levels may have influenced the success of the program itself.

Kutcher et al. (2013) noted that when creating a mental health literacy curriculum for students, it is essential to recognize the mental health literacy of the educators themselves who will be applying the curriculum in their classes. These researchers developed an 8-hour, face-to-face training program to support secondary school teachers who were to deliver *The Guide* to 89 grade 9 students. This training included a review of adolescent mental health, the relationships between brain function and mental health, general concepts of mental health literacy, along with an overview of *The Guide* and some of its applications within the classroom (Kutcher et al.,

2013). It also consisted of reviewing key supplementary mental health resources that were found on various websites. Teacher participants' (*n*=89) attitudes towards mental illness were targeted through video clips of youth experiencing mental illness and discussion of the myths and facts of mental illness. Following the one-day training session, it was found that mental health knowledge was improved among teacher participants, and stigma towards mental illness was decreased. Additionally, the confidence of the educator participants in implementing the program was improved. The authors concluded that evaluating the educator training component highlighted gaps in knowledge that would negatively impact their ability to implement the program to a student population. This insight allowed the researchers to determine which aspects of training needed to be improved before the educators brought the resources to the classroom. Moreover, Kutcher and colleagues (2013) noted that this training approach is novel as it utilizes the formative impact educators can have on students, while concurrently addressing self-identified concerns teachers have previously shared such as lack of knowledge about mental health and mental disorders.

In a similar study, Wei and Kutcher (2014) explored *Go-to Educator Training*, a model for secondary schools in Nova Scotia. This program was designed to prepare educators to answer potential requests for help from students in addition to uniting schools with healthcare providers to meet the mental health care needs of youth. It was based on the notion that within each school, there are certain educators who students naturally go to for help. Therefore, it was determined that it would be beneficial to provide training to this group on how to recognize mental disorders and encourage students to access healthcare providers (Wei & Kutcher, 2014). This intervention consisted of a one-day training session that was offered to 134 secondary school educators during professional development days, and measured knowledge of mental health and attitudes toward mental disorders pre- and post-programing. Following implementation, it was found that the educators had a significant improvement in both knowledge of mental health and attitudes towards mental health disorders (Wei & Kutcher, 2014). Thus, the researchers concluded that educator-focused mental health literacy training can mitigate concerns regarding lack of knowledge while improving stigmatizing attitudes and willingness to support students within their professional roles (Wei & Kutcher, 2014). The authors concluded that training educators to identify students with mental disorders and linking them to appropriate care providers can be a valuable approach that mitigates barriers to help-seeking as the school setting becomes part of the solution along the pathway to mental health care (Wei & Kutcher, 2014).

Likewise, Jorm and colleagues (2010) explored the application of *Mental Health First Aid* training in grade 8 to 10 teachers in 14 schools: half received the training (*n*=221) and the other 7 were wait-listed (*n*=106) for future training and served as the control group in the interim. *Mental Health First Aid* is the help provided to a person experiencing mental health difficulties until appropriate professional care can be received or the crisis is resolved (Langlands et al., 2008). Teachers received the course material over two sessions that took seven hours each (Jorm et al., 2010). Part one was designed for all educators and included information on departmental policy regarding mental health difficulties, common mental health disorders in adolescents, and how to apply the material to help students who may require mental health first aid (Jorm et al., 2010). Part two was specifically for teachers who had responsibility for student welfare and consisted of information about first aid approaches that require a more comprehensive response, along with responses for less common mental health problems such as psychosis, eating disorders, or substance misuse (Jorm et al., 2010). It was hypothesized that students who were in classes of the teachers who had received the course would receive more

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information regarding mental health and that their mental health would improve (Jorm et al., 2010). Questionnaires assessing constructs such as mental health knowledge, stigmatizing attitudes, intentions, and confidence in providing help to others, and teacher mental health were implemented pre- and post-training and 6-months following (Jorm et al., 2010). Immediately following training, participants allocated to the treatment group exhibited significantly improved levels of mental health knowledge, which were maintained at follow-up. Intentions toward helping students also increased significantly in the treatment group, along with confidence in helping a student with a mental health problem. An indirect effect was identified among the students as the classes taught by a trained teacher received more mental health information compared to those without, suggesting that students benefit from their teachers having increased mental health literacy (Jorm et al., 2010).

Taken together, these studies (e.g., Jorm et al., 2010; Kutcher et al., 2013; Ojio et al., 2015; Swartz et al., 2017; Wei & Kutcher, 2014) suggest that the training of secondary school educators was successful in increasing mental health literacy, attitudes pertaining to mental health, and help-seeking behaviours to better support students. While promising, it is unclear if these results would be transferable, replicable, and maintained over time in a postsecondary setting due to the heightened autonomy of these students (Halladay et al., 2022). Uncovering these data is important given the rising prevalence of mental health challenges within this sector and recognized need for intervention (Duffy et al., 2019; Prowse et al., 2021; Vaillancourt et al., 2021a). Moreover, postsecondary education is delivered in a different manner from high school classes; the group size is typically larger with a more autonomous format (Esmaeelzadeh et al., 2018; Goldschen et al., 2019; Leong et al., 2021). Given their success in a secondary setting, it would be valuable to understand how such mental health literacy programs might be applied in a

postsecondary environment. Recently, a study conducted at McMaster University identified that postsecondary instructor training may be promising in this regard (Halladay et al., 2022). Focusing on the aptitude of the instructors to deliver the content versus focusing on student uptake is an area that warrants further investigation (Kutcher et al., 2013).

Self-Efficacy to Recommend Mental Health Resources

In the context of behaviour change, knowledge alone is often insufficient to promote positive change (Arlinghaus & Johnston, 2017). Self-efficacy, known as an individual's selfperception of their competence at performing a given behaviour (Bandura, 1977), is also a necessary pre-requisite. The results regarding self-efficacy to provide mental health supports in the secondary and postsecondary settings have been mixed. For example, some research has shown that educators cite low confidence to approach or refer students to available mental health resources as barriers to supporting mental health in the classroom (e.g., Johnson et al., 2022; Kutcher et al., 2013; Mazzer & Rickwood, 2015). Participants have similarly noted that lack of knowledge stemming from inadequate or lack of training negatively influenced their selfefficacy to support students (Mazzer & Rickwood, 2015; Whitley et al., 2012; Yamaguchi et al., 2020). Mazzer and Rickwood (2015), and Johnson et al. (2022) also found that a fear of saying the wrong thing often undermined this confidence.

Alternatively, some studies have revealed that educators have high self-efficacy when approaching and referring students to mental health supports. Mazzer and Rickwood (2015) explored self-efficacy to support student mental health among 21 teachers in Australia who taught students between the ages of 12 to 18. Using semi-structured interviews, it was found that the teachers often reported feeling comfortable or confident in providing a baseline level of support such as connecting students with appropriate resources. This finding was supported by Johnson et al. (2022), who found just over half of postsecondary instructors in their sample (*n* = 99) had high to very high confidence to recommend mental health resources to struggling students. By defining supportive roles and related expectations, there is a potential to mitigate these concerns and increase the self-efficacy of educators to recommend mental health resources to struggling students (Kalkbrenner et al., 2021; Mazzer & Rickwood, 2015). To date, there has not been a study that evaluates a program designed to increase self-efficacy to recommend mental health resources among postsecondary educators. By increasing the self-efficacy of instructors to recommend resources, struggling students may be more apt to seek help. This strategy may also prove beneficial for reducing the time it takes a student to seek help (Ojio et al., 2015; Santor et al., 2007). By concurrently increasing the mental health literacy of educators, their knowledge of available resources will improve, which in turn, may ease concerns of lack of knowledge from inadequate training (Jorm et al., 2010; Kutcher et al., 2013; Whitley et al., 2012). One possible route to improve mental health literacy and self-efficacy to recommend mental health resources is via professional development in the form of a workshop.

Workshop Components and Structures

Workshops are a form of a professional development that serve to improve teachers' knowledge, refine teaching practices, and provide active learning opportunities: often resulting in positive learning experiences (Feiman-Nemser, 2001). Workshops have proven advantageous in increasing mental health literacy (e.g., Hughes et al., 2018; Kutcher et al., 2013; Liddle et al., 2021; Patalay et al., 2017) and consist of varying formats and structures. Gaining a sense of these components is important when seeking to develop a program for postsecondary instructors. To reduce stigma, increase knowledge of available services on campus, and encourage help-seeking behaviours, it is important that all students have access and know how to access information for

key services (Harris et al., 2022). Harris et al. (2022) suggested that such information includes the phone number, website, and hours of the campus wellness centre, the contact information of any campus peer support hotlines, and the phone numbers for national hotlines. They went on to note that several schools have distributed this information as part of all course syllabi while others have placed it on student ID cards. As noted previously, much of this programming and related evaluation has focused on student populations, and few studies involved measuring the mental health literacy of educators themselves. It has been established that workshops that happen on one occasion (one-offs) are not as successful in the maintenance of learned skills (Clarke & Hollingsworth, 2002; Farmer, 2021; Hill et al., 2001; MacIntosh et al., 2010). Workshops with a one-off format have been shown to increase measures in the short-term, but at the four to six week follow up, improvements regress or are no longer significant (e.g., Liddle et al., 2021; Ventieri et al., 2011). Moreover, Pinto-Foltz et al. (2011) found that a brief 1-hour intervention may not be adequate time to produce meaningful differences in mental health literacy, suggesting that longer periods are warranted.

In order to improve the maintenance of outcome variables following the cessation of workshops and improve the ability of educators to implement new skills, delivery occurring over more than one day should be explored (Clarke & Hollingsworth, 2002; Farmer, 2021; Hill et al., 2001; MacIntosh et al., 2010). To evaluate the long-term success of programs and develop avenues that increase mental health literacy sustainably, follow-up workshops may be beneficial. In addition, one-off workshops for educators often have the limitation where teachers do not feel confident implementing new skills or knowledge into their class (Hill et al., 2001). This barrier may be mitigated by focusing on enhancing the self-efficacy of educators to implement their new knowledge. For example, a 2015 study by McKinnon and Lamberts found that a workshop was

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able to increase self-efficacy for teaching science in primary school teachers. Eight pre-service teachers in the final year of their degree and 13 in-service teachers from Australia completed four workshops, one each week for four weeks. These workshops were developed by a science centre representative on teachable science topics. Each workshop was an hour and included hands on activities that encouraged collaboration between participants. Participants worked together to solve the activity, explain their ideas, and explore how the activity could be incorporated into the classroom. Following the four weeks, there was an increase in self-efficacy for science teaching in all but one participant, and these improvements were sustained in all but three participants at the 11-month follow up. The hands-on activities were identified by almost all participants as important to their improvements along with collegial discussions. Given the success of this format, it may be concluded that training occurring over more than one day may result in lasting improvements to self-efficacy.

Outside the field of education, the *Road to Mental Readiness (R2MR)* program is an evidence-informed mental health training program that was developed by the Department of National Defence in Canada (Frank et al., 2021). Its goal is to improve short- and long-term mental health and wellbeing, reduce barriers to help-seeking, and encourage early access to mental health related care among members of the Canadian Armed Forces and their families (MHCC, 2014). It was designed so Canadian Armed Forces personnel receive appropriate mental health training throughout every stage of their career by preparing members and their family pre-deployment and then continuing with support post-deployment (Government of Canada, 2018). Fikretoglu and colleagues (2019) explored the implementation of the *R2MR* in a population of 3227 non-commissioned Canadian Armed Forces recruits. This study had three goals: 1) to increase mental health literacy; 2) to teach stress management skills; and 3) to change attitudes

and intentions towards mental health service use. The program incorporates the Mental Health Continuum Model and is delivered using PowerPoint slides via an instructor over a 160-minute classroom session. Measures were taken before programming, 5 weeks post program, and 9 weeks post program. Following the program, those who were in the treatment group had no statistically significant differences in psychological functioning or resilience when compared to the comparison group. However, increases were found in both attitudes and intentions towards mental health services use and self-efficacy, albeit these diminished by the 9 week follow up).

While both Fikretoglu et al. (2019) and McKinnon and Lamberts (2015) were successful at increasing self-efficacy in the short term, only the McKinnon and Lamberts intervention saw these changes maintained at follow up. This may have been due to training occurring over more than one day. Furthermore, McKinnon and Lamberts (2015) identified that a collaborative portion of the workshop between peers and the facilitator was cited by participants as a particularly beneficial aspect. This finding was echoed by Shelemy et al. (2019b) who sought to understand the perceived mental health training needs of 49 postsecondary teachers in the United Kingdom. This study unearthed the importance of resources and examples that are applicable in a classroom setting, and that can be easily adapted. In addition, Harris et al. (2022) recommended that faculty have access to information on key services readily available at any time, suggesting that websites may be beneficial in this regard as they can be accessed from anywhere on campus.

In sum, various components have been found to contribute to the success of workshops as per the literature (e.g., multiple training sessions; applicable examples; collaboration with peers). This suggests that taking these successful aspects and combining them may prove to amplify the

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benefit when designing a workshop focused on increasing the mental health literacy and selfefficacy to recommend mental health resources among postsecondary instructors.

Psychological Wellbeing

Psychological wellbeing is characterized as satisfaction with life experiences and one's role in the world, a sense of achievement, belongingness, and low levels of distress or worry (Shek, 1997). Ryff (1989) viewed it as characteristics that aid in positive human functioning. Furthermore, Ryff and Keyes (1995) suggested that there are six of these characteristics: purpose in life, personal growth, positive relations with others, self-acceptance, autonomy, and environmental mastery. People will experience different challenges related to each characteristic as they attempt to function positively (Ryff & Keyes, 1995). Individuals will seek to find meaning in their efforts and challenges (purpose in life), attempt to increase their skills and capacity (personal growth), make an effort to develop and maintain warm and trusting relationships (positive relations with other), will aim to feel good despite their own limitations (self-acceptance), look for a sense of self-direction and independence (autonomy), and try to manage their environment to meet their needs (environmental mastery; Ryff & Keyes, 1995). It has been well documented in the literature that one's ability to assist others is related to their own self-views and ability to engage in self-care practices (Hofmeyer et al., 2020; Poslins & Gall, 2020). Thus, when exploring mental health literacy and self-efficacy to provide support, it may be beneficial to consider the relationships both variables share with psychological wellbeing.

Siddiqui (2015) explored the relationship between the self-efficacy and psychological wellbeing of 100 undergraduate students and found that self-efficacy enhanced wellbeing. This study suggested that when self-efficacy is high, psychological wellbeing will also be high.

Similarly, Cansoy et al. (2020) found that there was a positive and significant relationship between teacher self-efficacy and wellbeing of 412 public school teachers. Likewise, Bjørnsen et al. (2019) explored the relationship between psychological wellbeing and mental health literacy in a sample of 1,888 upper-secondary students from five schools in Norway. The authors found that psychological wellbeing was positively and significantly correlated with mental health literacy (Bjørnsen et al., 2019). This suggests that lower levels of psychological wellbeing can relate to lower levels of mental health literacy and corroborates the importance of focusing on mental health promotion instead of mental illness prevention (O'Mara & Lind, 2013).

Limitations in Current Research

To date, research has demonstrated the importance of mental health literacy training for educators, but few studies have evaluated a training program designed to improve it (Kutcher et al., 2013, 2015a; Persson et al., 2021; Sharp et al., 2006; Stewart et al., 2004; Wei et al., 2001). This is important as content knowledge of educators is necessary for successful teaching (Ball et al., 2005). That is, by better understanding teaching content, instructors will be more effective in imparting this knowledge on students. Furthermore, teachers with higher content knowledge, positive attitudes, and self-efficacy seem to evoke higher student achievement, meaning that students better understand the lessons and content (Evans, 2011). By evaluating training designed to increase mental health literacy and self-efficacy to recommend resources in educators, it may be possible to assist more students with receiving mental health support and information.

Various training programs have been explored in other populations such as rural farmers in New Zealand and male football players in Australia, but it appears that postsecondary instructors have yet to be the focus of such research (Liddle et al., 2021; Morgaine et al., 2017). Furthermore, most of the educator-led mental health literacy programs have occurred in elementary and secondary schools (e.g., Fazel et al., 2014; Kutcher et al., 2013, 2015a; Sharp et al., 2006; Stewart et al., 2004; Wei et al., 2011). As postsecondary students are at heightened risk for mental health difficulties and related adverse effects, along with negative coping strategies (Duffy et al., 2019; Pritchard & Wilson, 2003; Prowse et al., 2021), it is imperative to determine the utility of classroom-based interventions intended to benefit this population. Moreover, the timing of such an intervention is ideal given post-secondary students are transitioning from a familial level of support to independence (Chow & Healey, 2008; Esmaeelzadeh et al., 2018; Leong et al., 2021; Robinson et al., 2016). Based on the existing literature, educators across elementary, secondary, and postsecondary levels seem to acknowledge that supporting student mental health is an important part of their job (e.g., Albright & Schwartz, 2017; Andrews et al., 2015; Johnson et al., 2022; Kalkbrenner et al., 2015; Mazzer & Rickwood, 2015). Furthermore, most have stated they are willing to assist but often lack both the confidence and training to do so (Andrews et al., 2015; Shelemy et al., 2019a).

Overall, various interventions have been implemented within and outside of an educational setting and suggest that workshops are valuable avenues to explore in this context (Hughes et al., 2018; Kutcher et al., 2013; Liddle et al., 2021; McKinnon & Lamberts, 2015; Morgaine et al., 2017). Novel approaches that incorporate systematic procedures are required to alleviate this systemic burden (Swartz et al., 2017; Washburn et al., 2013). In addition, while there is a consensus that one-off workshops are not highly effective in the *maintenance* of improved mental health literacy and self-efficacy, little has been done to evaluate a lengthier intervention in this regard (Clarke & Hollingsworth, 2002; Farmer, 2021; Hill et al., 2001; Liddle et al., 2021; MacIntosh et al., 2010). Previous literature recommends an interactive, recurrent

workshop format designed to improve mental health literacy and self-efficacy to recommend mental health resources (Farmer 2021; Harris et al., 2022; McKinnon & Lamberts, 2015). To date, there has not been a study of this nature, especially one using a mixed methods approach (Mazzer & Rickwood, 2015; Wei et al., 2011). Finally, the utility of an online workshop has not been explored, which may prove valuable in today's pandemic recovery era where postsecondary students report having elevated stress and display significantly worse mental health (Talarowska et al., 2023).

Purpose

The overarching objectives of this research were threefold. I) The primary purpose was to evaluate the impact of a two-session, education-based virtual workshop designed for postsecondary course instructors entitled Building an EMPOWERed Classroom: Enhancing student Mental health via Professors' Openness to Wellness Embedded Resources using a twophase sequential mixed methods study design. The workshop was offered in collaboration with the host institution's Student Health and Wellness department with content designed to improve measures of mental health literacy and self-efficacy to recommend mental health resources, and to assess instructor wellbeing to help contextualize these results. The first session was offered in February 2023 during the institution's designated weeklong student winter break. The second took place in April, approximately 10 weeks later when classes had finished for the term. Similar interventions have utilized latency periods of four weeks (Liddle et al., 2021), nine weeks (Fikretoglu et al., 2019), four months (Ventieri et al., 2011), and 11 months (McKinnon & Lamberts, 2015). Ten weeks was selected in line with the literature and based on participant views, determined by an anonymous poll administered following session one. II) Given the absence of a control group, a secondary purpose of the study was to collect measures of mental

health literacy, self-efficacy to recommend mental health resources, and assess psychological wellbeing from course-instructors employed at the host institution during the study period and compare these data to those obtained from workshop participants before and after study involvement. **III**) A tertiary purpose was to explore the workshop experience qualitatively. In line with a mixed methods approach, it was determined that this qualitative dataset would be used to enhance understanding of the quantitative data (Hesse-Biber, 2010). In particular, the experiential accounts were used to provide a clearer understanding of workshop outcomes including benefits, limitations, and future recommendations.

Hypotheses

Similar recurrent designs have produced more successful increases in outcomes compared to one-off studies (Clarke & Hollingsworth, 2002; Farmer, 2021; Hill et al., 2001; MacIntosh et al., 2010). Thus, in line with the *primary purpose*, mental health literacy and selfefficacy to recommend mental health resources were expected to improve following each of the two sessions; however, they were expected to be highest following the April session compared to all other timepoints since this was the second time relevant information was delivered (Clarke & Hollingsworth, 2002; Farmer, 2021; Hill et al., 2001; MacIntosh et al., 2010). Similar to previous studies, psychological wellbeing was also expected to relate to higher mental health literacy and mental health self-efficacy (Bjørnsen et al., 2019; Cansoy et al., 2020; Siddiqui, 2015). In regards to the *secondary purpose* it was expected that workshop participant scores post involvement would be higher than those in the non-workshop cohort. To address the *tertiary purpose*, a series of open-ended questions were included following the second session to explore the utility of the workshop and the impact of involvement on the dependent variables. It was hoped that cumulatively, this qualitative information would provide valuable insights into the effectiveness of this workshop approach for equipping course instructors with knowledge and confidence to enhance student mental health while promoting awareness regarding personal psychological wellness.

Methods

Study Design

This study used a sequential explanatory mixed method design with repeated measures (Kowalski et al., 2022). Quantitative data were collected before and after each session; data derived from the first workshop were used to inform the qualitative questions posed following the second. By incorporating a mixed methods design, the strengths of both qualitative and quantitative data were employed to help better understand the impact of the two workshop sessions (Creswell, 2015). Quantitative data can be valuable for objectively determining the effect of an intervention and tends to remove the bias of the researcher from data analysis (McCusker et al., 2015). Changes between pre and post tests can be measured with quantitative data, which can allow for effect size and significance to be evaluated if adequately powered. Conversely, qualitative data can help one to better understand participants experiences through the collection of rich data (Merriam & Tisdell, 2016). By implementing and analyzing both methods together, the research outcome can be more comprehensive than using each approach individually (Malina et al., 2011; Merriam & Tisdell, 2016). Pre-test-post-test designs are primarily used when measuring change resulting from experimental treatments (Dimitrov & Rumeill, 2003). For this study, the use of a pre-test-post-test design was utilized to measure changes in the dependent variables among postsecondary instructors following two workshops spaced 10 weeks apart and to compare measures across the four time points. A pre-experimental design exists when participants are not randomly assigned to groups and when there is no control group to make comparisons to (Kowalski et al., 2021). To offset related limitations and enable conclusions to be made with more confidence, the contextualizing data were added (Martin-Misener et al., 2019).

The Virtual Workshop

Participants

Participants were eligible to enroll if they were employed as a faculty member with a teaching assignment or contract lecturer at Lakehead University (including both Thunder Bay and Orillia campuses). Those on sabbatical or with a teaching release were also included given they may have had more time to dedicate to professional development. All faculties were approached (i.e., Business Administration, Engineering, Education, Law, Health and Behavioural Sciences, Natural Resources Management, Science and Environmental Studies, and Social Sciences and Humanities). Participants were excluded if they did not have access to a computer as the workshops took place online using a virtual format.

Recruitment

Participants were recruited using purposive sampling through individualized emails (N = 414) sent directly to faculty members/course instructors at the host institution. In addition, the workshop was added to the Student Health and Wellness calendar and promoted through their website. Johnson et al. (2022) found individualized emails to be a successful means of recruitment at the host institution previously. Snowball sampling, a distinct form of convenience sampling where participants tell those in their social group about the study (Emerson, 2015), was also encouraged.

Sample Size

The goal of this study was to recruit 49 workshop participants. This number was calculated using G*Power software for a repeated measures ANOVA with one group and four measurement times (Faul et al., 2007). This calculation was based on an alpha level of 0.05, a medium effect size of f=0.25, and used mental health literacy as the primary outcome measure similar to Hurley et al. (2018) and Mcluckie et al. (2014). This sample size also considered an attrition rate of 26%, which aligns with related studies where 26% (Hurley et al., 2018) and 14% (Ojio et al., 2015) of participants were lost respectively.

Context

At the host institution, the wellness centre, referred to as Student Health and Wellness, provides a range of counselling options, health services, and wellness programs for students (Glena et al., 2023). The mission of this wellness centre is to foster an environment that facilitates physical, emotional, intellectual, and spiritual aspects of health through providing holistic, evidence-informed services. Student Health and Wellness was an active partner in the pilot study which was used to inform this thesis (i.e., Johnson et al., 2022) and one of the senior staff was responsible for designing both workshop sessions and delivering them. Content for each was derived from related workshops offered previously to faculty and tailored in conjunction with the student researcher for the present study. In order to accommodate instructors from either campus of the host institution, the workshops took place online via Zoom. *Workshop Procedures*

Recruitment began in February 2023 for the Workshop. Individualized emails were sent to all faculty/course instructors (Appendix A) which included the Information Letter (Appendix B), study poster (Appendix C), and link to the Google Form where instructors could sign up to

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take part in the study. Once prospective participants agreed to participate, they were sent via email one week prior to session one, a link to Survey Monkey for the Baseline Questionnaire which included the letter of information detailing the study purpose, expected time commitment, perceived benefits and harms of involvement and other pertinent details. An informed consent statement was also included. Once consent was provided electronically, the participant was prompted to click 'next' to begin. This survey started with asking participants to create a unique ID in order to match responses over time and included demographic information and employment details (Appendix D), measures for mental health literacy (Appendix E), selfefficacy to recommend mental health resources (Appendix F), and psychological wellbeing (Appendix G). The survey was expected to take 25 to 30 minutes. During the institution's designated weeklong student winter break, the first of two 90-minute virtual workshops took place. This timeframe was selected because the student winter break may contain fewer perceived time commitments for instructors as classes do not typically take place.

Immediately following the first workshop, attendees were sent an email with a link to the Post Session 1 Questionnaire, which assessed the same three variables as the pre-survey: mental health literacy, self-efficacy to recommend resources, and psychological wellbeing. In addition, this survey included qualitative questions designed to explore experiences of the first session (Appendix H). This allowed for session two content to be adapted in line with participant needs.

Following the first workshop, participants were provided access to a Google Drive containing versatile resources regarding supporting student mental health that could be implemented in the classroom. Provision of an open access platform for similar resources has been offered by Student Health and Wellness previously. The intent of providing them in the current study was to enable participants to bridge the gap between learning information and implementing knowledge in the classroom during the 10-week period between sessions (Harris et al., 2022; Perry et al., 2014; Shelemy et al., 2019b). Examples included pre-made slides designed by Student Health and Wellness and contact information for key mental health resources (see Appendices I and J). Access and perceived utility of these resources were qualitatively explored via a Google Drive Resource Use Questionnaire administered at the halfway point between the two workshop sessions to glean real-time views (Appendix K) and the survey administered following the last session (Appendix L).

Measures of mental health literacy, self-efficacy to recommend resources, and psychological wellbeing were once again measured prior to the second workshop, held in April, to examine the degree to which changes were sustained. The survey was sent via an emailed Survey Monkey link one week prior to the second session. This nudge also served as a reminder for the upcoming session.

One final survey was administered immediately following the second workshop that included the dependent measures and incorporated open-ended questions on the utility of the workshop including challenges faced, benefits, and recommendations for future implementations (Appendix L). Figure 2 depicts the timeline of survey administration.

Figure 2

Survey Implementation and Administration Timeline



Workshop Description

Workshop content was developed specifically for instructors working in the classroom and facilitated by a senior counsellor from the Student Health and Wellness centre who has over 10 years of experience working in a postsecondary setting. The content was informed using an evidence-based approach which integrated the training and professional expertise of the senior counsellor. Data collected from a pilot study conducted at the same institution previously exploring instructors' views on professional roles and responsibilities, and supporting student mental health in the classroom was also used (Johnson et al., 2022). In addition, previous workshops delivered by Student Health and Wellness such as "Supporting Students in Distress" (Appendix M) and "Stop the Stigma: We're Stronger as a Pack" (Appendix N) were adapted in response to recommendations made via the Johnson et al. (2022) study and to align with the EMPOWERed Classroom study purpose. Both sessions took place via Zoom to allow participants from the institution's two campuses to take part and information was presented using a combination of PowerPoint slides shared by the facilitator, group-based activities, and discussions.

Session One. The first session focused on benefits of embedding mental health resources within the postsecondary classroom such as preprepared PowerPoint slides, syllabus wording, classroom practices to support wellbeing (e.g., incorporating breaks), and information on available mental health resources and supports on and off campus. It also included resources available for faculty to support their own mental health and wellbeing. Information on the current state of postsecondary student mental health, specifically at the host institution, and key findings from the pilot study (Johnson et al., 2022) were shared. In addition, research regarding the benefits of embedding wellness practices and mental health knowledge into the classroom along with best practices were included (i.e., how, and when to best incorporate knowledge and practices). Finally, the facilitator explained and explored the Student Health and Wellness website (i.e., where to find resources, book a classroom visit, and how to contact Student Health and Wellness) along with the WellU Key (Appendix I) which is a campus mental health navigation hub based on a stepped-care approach.

Session Two. This session was a refresher of key resources available, and information shared during session one such as the WellU Key, and also incorporated a collaborative participant component (McKinnon & Lamberts, 2015). Then, to promote engagement and ease into an interactive discussion, questions that arose in the Post Session 1 Questionnaire following the first session were explored with the facilitator (e.g., "What happens after a student is referred

to a counsellor?" and "What is available to support faculty and staff mental health?"). Discussion questions were provided in the email all participants received with the Pre Session 1 Survey one week prior to the workshop to provide time to prepare their thoughts. Participants were then asked to discuss experiences with the resources and information learned. As participants shared what practices they implemented in their classrooms and which ones they found to be the most successful, the facilitator encouraged the sharing of specific questions or challenges experienced and provided feedback and guidance. An opportunity for discussion around barriers experienced similarly across participants and suggestions for future Student Health and Wellness workshops and presentations was also provided. Once participant questions were answered and the facilitator had completed associated goals for the session, participants were thanked for their time and encouraged to follow up with the facilitator with subsequent questions.

Instruments

Demographic Questionnaire

The Demographic Questionnaire (Appendix D) was created by the researcher and informed by similar research conducted previously at the institution (Johnson et al., 2022). The purpose of this questionnaire was to collect information on personal characteristics of the participants such as age, gender, and ethnicity along with employment details such as time employed, faculty, and campus location to better understand the population as it related to intervention involvement. This questionnaire was administered as part of the Baseline survey.

Mental Health Literacy and Capacity Survey for Educators

The Mental Health Literacy and Capacity Survey for Educators (MHLCSE; Appendix E), herein referred to as mental health literacy, was used to measure mental health literacy of participants in the present study (Mansfield et al., 2021). This survey is comprised of four subscales: awareness and knowledge of mental health issues (items 1,2,6; α =.89), treatments and services (items 3-5; α =.89), legislation and processes (items 7-9; α =.88), and comfort providing active support (10-14; α=.91; 37). It uses a 5-point Likert scale with 1 being "not at all aware," "not knowledgeable," or "not comfortable" and 5 being "very aware," "very knowledgeable," or "very comfortable" (Fortier et al., 2017; Mansfield et al., 2021). Awareness and knowledge is meant to capture awareness and knowledge of mental health issues including risk factors, signs and symptoms, and the range of issues experienced by students. Treatments and services relates to degree of knowledge regarding available treatments and mental health services. Legislation and processes represents knowledge of legislation and processes related to supporting students' mental health while comfort providing active support pertains more to translating this knowledge to practice behaviourally (Mansfield et al., 2021). All subscales have a possible range of scores from 3 to 15, with the exception of the comfort subscale, which ranges from 4 to 20 (Mansfield et al., 2021). While this questionnaire was originally used to assess mental health literacy in Ontario elementary teachers, it was modified to fit this population of postsecondary instructors. For example, "Talking with parents about their child's mental health" was changed to "Talking with students about their mental health." This measure was administered at four time points: baseline, following session one, one week prior to session two, and immediately following session two (See Figure 2).

10-Item Mental Health Self-Efficacy Scale

Self-efficacy to recommend mental health resources was measured using the 10-item Mental Health Self-Efficacy Scale (Frank et al., 2021; Appendix F). This 10-item scale was modified by Frank and colleagues (2021) from an original 14-item scale after they found that the shorter version was more concise and valid compared to its lengthier counterpart. The scale was developed to assess the self-efficacy component of the *R2MR* program for the Canadian Armed Forces (Frank et al., 2021). Specifically, the items measured general understanding of mental health and the mental health continuum model, confidence in one's ability to identify signs of mental illness in oneself or in team members, ability to cope with and manage stress, and the ability to provide support for others. Questions are scored on a 5-point Likert scale with 1 being "strongly disagree" to 5 being "strongly agree" with higher scores reflecting higher mental health self-efficacy. While this questionnaire was originally used to assess mental health self-efficacy in the Canadian Armed Forces, it was modified to fit the current study population. For example, "I am confident in my ability to help <u>CF members</u> get assistance for a mental health problem" was changed to "I am confident in my ability to help <u>students</u> get assistance for a mental health problem." The 10-Item Mental Health Self-Efficacy Scale was found to show good reliability with an alpha of .88. This scale was administered at four time points: baseline, following session one, one week prior to session two, and immediately following session two (See Figure 2).

18-Item Version of Ryff's Scale of Psychological Well Being

The 18-item version of Ryff's Scale of Psychological Well Being was be used to measure this construct among participants (Ryff & Keyes, 1995). The scale includes six sub-scales with three questions each: purpose in life, personal growth, positive relations with others, selfacceptance, autonomy, and environmental mastery (Ryff & Keyes, 1995; Wilson et al., 2013). The subscale *purpose in life* refers to one having personal goals and feeling that there is meaning to living. *Personal growth* is comprised of continual development, openness to new experiences, and changing in ways that indicate more self-knowledge and effectiveness (Ryff & Keyes, 1995). *Positive relations with others* includes the ability to form trusting relationships, displaying empathy, affection, and intimacy, and being concerned about the welfare of others. *Self*- *acceptance* is having a positive attitude towards oneself and acknowledges one's multiple good and bad self-qualities. *Autonomy* refers to being independent and regulating behaviour from within while resisting social pressure. Finally, *environmental mastery* means having a sense of achievement and competence in managing one's environment while making use of the surrounding opportunities it provides. Questions were scored on a 7-point Likert scale with 1 being "strongly agree" and 7 being "strongly disagree." Item scores for each dimension were averaged to yield domain specific wellbeing scores (Wilson et al., 2013). This scale was found to show good reliability and has been validated in various populations such as secondary and postsecondary students (Khanjani et al., 2014; Klainin-Yobas, 2020). According to Khanjani et al. (2014), *autonomy* has a Cronbach's alpha of .72, *environmental mastery* has a Cronbach's alpha of .76, while *personal growth* has an alpha of .73, *positive relationships* has an alpha of .75, *purpose in life* has an alpha of .52, and *self-acceptance* has a Cronbach's alpha of .52. This scale was administered at four time points (See Figure 2).

Institutional Comparator

In lieu of a control group, contextualizing data were collected from willing course instructors outside of the workshop who were employed at the host institution during the study window.

Institutional Comparator Participants and Procedures

Similar to the workshop participants, individuals were eligible to enroll if they were employed as a faculty member with a teaching assignment or contract lecturer at Lakehead University (including both Thunder Bay and Orillia campuses). In addition, those on sabbatical or with a teaching release were included given they may have had more time to dedicate to professional development. All faculties were approached (i.e., Business Administration, Engineering, Education, Law, Health and Behavioural Sciences, Natural Resources Management, Science and Environmental Studies, and Social Sciences and Humanities). Participants were excluded if they had participated in the Building and EMPOWERed Classroom Workshop. After the first workshop took place in February, personalized emails were sent to all faculty/course instructors who did not take part in the workshop. Individualized emails (Appendix O) included the Information Letter (Appendix P), study poster (Appendix Q), and link to the workshop Baseline Survey which included demographic information along with measures of mental health literacy, self-efficacy to recommend resources, and psychological wellbeing.

The Qualitative Exploration

Post Session 1 Experiential Account

The Post Session 1 Experiential Account Questionnaire (Appendix H) was designed by the student researcher and was based on similar studies examining participant workshop experiences (Hurley et al., 2018). This questionnaire was implemented following the first workshop session with the purpose of exploring experiences of the first session qualitatively, which allowed for session two follow-up questions to be adapted in line with participant needs and views. Examples of questions included: "What components of the first workshop were done well (if any)?" and "How might the session have been improved?"

Google Drive Resource Use

The Google Drive Resource Use Questionnaire (Appendix K) was designed by the student researcher to track resource use at the halfway point between workshops (5-weeks following the first session). It included questions such as "What resources provided in the

Google Drive have you accessed most (if any)?" and "Have you implemented or tried to implement new skills or knowledge into the classroom (If so, explain)?".

Post Program Experiential Account

The purpose of this component was to explore the experiential account of the two-session virtual remote workshop such as challenges faced by participants, perceived utility of the workshop content, and acceptability of workshop format (i.e., online remote vs in person). The questionnaire included some foundational questions such as "What components of the first session were done well (if any)?" and "How might the session have been improved?" In line with the sequential mixed methods design of this study, questions were adapted following the first session in an effort to address emerging themes (i.e., to better understand the relationships between the dependent and independent variables). This questionnaire was delivered once after the completion of the second workshop.

Data Analysis

Quantitative Data

All quantitative data were analysed using IBM SPSS Software. First, descriptive statistics (i.e., frequencies, means, standard deviations) were used to contextualize the results and populations (Fisch, 2017). Mental health literacy, self-efficacy to recommend mental health resources, and psychological wellbeing were then compared across the four time points (i.e., baseline, post session first session, prior to the second session, and post second session) using visual inspection. Additionally, effect sizes (η^2) were calculated to determine clinical significance based on changes in the dependent variables from Baseline to Post Session 2 (Levine & Hullett, 2002).

Effect size is independent of sample size which can help to reduce type I error and provide a standardized metric that is understood no matter the scale used to measure the variable; this also allows for comparison across like studies (Levine & Hullett, 2002). An effect size of 0.02 is considered small, 0.13 medium, and 0.26 large, with the value never exceeding 1.00 (Adams & Conway, 2014; Levine & Hullett, 2002). A large effect size would suggest that a large proportion of the variance can be attributed to the effects or interactions of the variables rather than error (Levine & Hullett, 2002).

The use of η^2 was selected given the smaller than anticipated sample size. Type I and II error may have resulted otherwise were parametric tests used (Christley, 2010; Levine & Hullett, 2002). Additionally, Olejink and Algina (2003) noted that using η^2 in a repeated measures design is more efficient as the correlation between the time points (i.e., the same people completing both measures) reduces the error sum of squares used in hypothesis testing.

To provide a comprehensive picture of the intervention's impact, Pearson correlations using change scores between Baseline and Post Session 2 were calculated to explore the relationships between the dependent variables (i.e., mental health literacy and self-efficacy, mental health literacy and psychological wellbeing, and self-efficacy and psychological wellbeing) and determine how changes in one variable related to changes in another (Bjørnsen et al., 2019; Whitley et al., 2012). Given that educator wellbeing has been linked to creating a positive school climate and educational experience for students (Grey et al., 2019; Kutcher et al., 2013), it was determined that assessing these relationships may provide further insight into the utility of this type of intervention. Finally, the institutional data collected were used to compare the dependent measures between workshop and non-workshop participants. Missing data for mental health literacy, self-efficacy to recommend mental health resources, and psychological wellbeing was imputed using the last outcome carried forward method (Siddiqui & Ali, 1998). Across the four time points, there were 164 questions (each time point was comprised of 41 questions). The percentage of missing data replaced was 14.29% for the three variables.

Experiential Account

Deductive thematic analysis was first used where themes were predetermined; this type of analysis is suitable when the researcher has prior knowledge of the phenomenon (Elo & Kyngas, 2008). The predetermined themes aligned with the structure of the questionnaire and included challenges of the workshop and content, benefits of the workshop sessions and content, utility of the workshop, and applicability of content and resources provided. These categories were developed based on the research questions and used to organize the data for subsequent interpretation (Crabtree & Miller, 1999). Inductive thematic analysis, where there are no preconceived themes and instead themes are developed from the data, was then used to position data within these categories (Easton et al., 2018; Fereday & Muir-Cochrane, 2006).

Trustworthiness, which is the systematic rigor of the research design, credibility of the researcher, and applicability of the findings, aids in enhancing and maintaining data quality (Johnson & Parry, 2015; Rose & Johnson, 2020). Qualitative studies that are more trustworthy are more likely to contain research that makes a difference (Bochner, 2018). Validity and reliability are important components of trustworthiness where validity refers to the accuracy of the findings and appropriateness of the methods and reliability refers to the consistency of the researchers and approach (Creswell, 2014; Gibbs, 2007). Reliability was addressed through the justification of research methods used via past literature and the clarity of research processes

which would allow this study to be replicated (Creswell, 2014). Validity refers to fidelity of the findings (Creswell, 2014) which was addressed by the researcher attending the two sessions and taking notes to ensure that content delivered was in line with the study's purpose. In addition, utilizing participant quotations in the experiential account section aided in enhancing the trustworthiness of this study by evoking a sense of realism for the reader and helping to provide context and participant perspectives (Furman et al., 2006; Thomas et al., 2005).

Results

I) The Virtual Workshop

In total, 18 individuals inquired about the study during the recruitment window. Of these, 12 were subsequently enrolled and completed the baseline assessment. Nine attended the first workshop session; seven attended both. To determine the degree to which the dependent variables changed over time, only those who completed both sessions and at least two of the four assessments were included in the analysis. Among those who provided informed consent and did not participate in the workshops (n = 7), reasons for withdrawal included scheduling conflicts such as administrative duties or teaching responsibilities, lack of childcare, deficiency of time, and illness.

Demographic Information

For those who participated in both workshops (n=7), four identified as male and three as female; all were Caucasian and were between 37 and 66 years of age (mean [M]=50.43, standard deviation [SD]=9.25). Most were from the faculty of Health and Behavioural Sciences (n=5) and were full-time tenured or tenured track employees (n=5). Participants indicated that they had been employed by the host institution for 1 to 34 years (M=14.14, SD=11.04) and many (71.4%)

had not taken part in previous mental health literacy training (n=5). See Table 1 for a complete summary of workshop participant demographic characteristics.

Table 1

Variables	$Mean \pm$ Standard Deviation	% (<i>n</i>)
Age (years)	$\frac{(\text{Min-Max})}{50.43 + 9.25(37-66)}$	
	50.15 <u>·</u> 9.25 (57 00)	
Gender		
Male	-	57.1% (4)
Female	-	42.9% (3)
Ethnicity		
Caucasian	-	100.0% (7)
Faculty		
Health and Behavioural Science	-	71.4% (5)
Education	-	14.3% (1)
Science and Environmental Studies	-	14.3% (1)
Campus		
Thunder Bay	-	85.7% (6)
Orillia	-	14.3% (1)
Time Employed (years)	$14.14 \pm 11.04 (1-34)$	-
Job Title		
Full-Time, tenured, or tenured track	-	71.4% (5)
Limited term appointment	-	14.3% (1)
Contract Lecturer	-	14.3% (1)
Taken Part in Previous Training		
No	-	71.4% (5)
Unsure	-	28.6% (2)
0.5 Credit Courses Taught in an	3.5 ± 1.44 (2-6)	-
Academic Year	_ ()	
1.0 Credit Courses Taught in an Academic Year*	0.33 ± 0.52 (0-1)	-

Demographic Characteristics of Workshop Participants (n=7)

**Note*. For 1.0 credit courses taught in an academic year n=6.

Mental Health Literacy

Visual Inspection. Mental health literacy was measured using four subscales, each representing a unique dimension of this multi-faceted construct (Mansfield et al., 2021). At baseline, *awareness and knowledge of mental health issues* had an average score of 11.00 (*SD*=1.83), *treatments and services* had an average score of 9.43 (*SD*=2.76), *legislation and processes* had an average score of 9.71 (*SD*=2.56), and *comfort providing active support* had an average score of 13.00 (*SD*=2.52). Visual inspection indicated that following the first session, all four subscales increased.

Prior to the second workshop, which occurred ten weeks after the first session, mental health literacy was measured again. Both *awareness and knowledge of mental health issues* (M=11.57, SD=0.79) and *comfort providing active support* (M=17.43, SD=1.81) increased compared to Post Session 1 scores, while *treatments and services* (M=11.29, SD=2.29) and *legislation and processes* (M=11.00, SD=2.16) decreased at this same timepoint. Finally, following the second workshop session, all four subscales increased again, and were highest when compared to any other time point. See Figure 3 for the mean mental health literacy subscale scores across time.

Clinical Significance. Effect sizes (η^2) were used to evaluate the degree of change in mental health literacy from Baseline through to Post Session 2. This served to identify the clinical significance of the workshop (Harvey et al., 2017; Thompson, 2022). When using η^2 , an effect size of 0.02 is considered small, 0.13 medium, and 0.26 large, with the value never exceeding 1.00 (Adams & Conway, 2014; Levine & Hullett, 2002). Participant scores for the subscale of *awareness and knowledge of mental health issues* showed a medium effect size $(\eta^2=0.193)$, *treatments and services* showed a large effect size $(\eta^2=0.362)$, *legislation and*
health literacy increased following participation in the two workshop sessions.

Building an EMPOWERed Classroom

Figure 3





Self-Efficacy to Recommend Mental Health Resources

Visual Inspection. At Baseline, self-efficacy to recommend mental health resources was found to be 3.81 (*SD*=0.64), which increased following the first workshop session (*M*=4.13, *SD*=0.60) and continued to increase until the Post Session 2 assessment (*M*=4.31, *SD*=0.64). See Figure 4 for an illustrative summary of mean scores across time.

Clinical Significance. Effect sizes (η^2) were similarly used to determine the impact of the workshops on self-efficacy to recommend resources between Baseline and Post Session 2. Participant scores for *self-efficacy* showed a large effect size $(\eta^2=0.356)$ suggesting that there was an increase in this construct over time.

Figure 4



Self-Efficacy to Recommend Mental Health Resources Across Four Time Points (n=7)

Psychological Wellbeing

Visual Inspection. Psychological Wellbeing was measured using six subscales. Between Baseline and Post Session 1, there were increases in the *autonomy* and *purpose in life* subscales. Between Post Session 1 and Pre Session 2, there were increases in scores for *environmental mastery, positive relationships*, and *self-acceptance*. Finally, between the Post Session 2 and Pre Session 2 timepoints, all subscales with the exception of *purpose in life*, and *self-acceptance* increased. See Figure 5 for a depictive representation of mean scores across time.

Clinical Significance. Effect sizes (η^2) were similarly used to assess psychological wellbeing dimensions between Baseline and Post Session 2. Participant scores for the subscales *environmental mastery* ($\eta^2=0.363$) and *positive relationships* ($\eta^2=0.374$) showed large effect

sizes, suggesting that there may have been a meaningful increase in these characteristics of psychological wellbeing over time.

A summary of descriptive statistics associated with the three dependent variables in contrast to the institutional comparator data collected can be found in Table 2.

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Figure 5



Psychological Wellbeing Across Four Time Points (n=7)

Table 2

Dependent Measures for Workshop and Institutional Comparison Participants

Variable	Workshop	Workshop	Workshop	Workshop	Change	Institutional
	Baseline	Post Session	Pre Session 2	Post Session	Between	Comparison
	(n = 7)	1 (<i>n</i> = 7)	(n = 7)	2(n=7)	Baseline	(<i>n</i> =28)
					and Post	
					Session 2	
					(n = 7)	
	<i>Mean</i> \pm SD	<i>Mean</i> ± SD	Mean \pm SD	<i>Mean</i> \pm SD	(Post	<i>Mean</i> \pm SD
					Session 2-	
					Baseline)	
Mental Health Literacy						
Awareness and Knowledge	11.00 <u>+</u> 1.83	11.43 <u>+</u> 0.98	11.57 <u>+</u> 0.79	12.14 <u>+</u> 1.35	1.41	11.18 ± 2.75
Treatments and Services	9.43 ± 2.76	11.57 ± 2.37	11.29 <u>+</u> 2.29	11.86 ± 2.27	2.43	9.14 <u>+</u> 3.36
Legislation and Processes	9.71 <u>+</u> 2.56	11.14 ± 2.41	11.00 ± 2.16	11.43 ± 2.23	1.72	9.64 <u>+</u> 3.51
Comfort Providing Support	13.00 ± 2.52	17.00 ± 1.63	17.43 ± 1.81	17.57 ± 1.90	4.57	14.25 ± 4.37
Self-Efficacy	3.81 ± 0.64	4.13 ± .60	4.20 ± 0.56	4.31 ± 0.64	0.50	3.79 ± 0.72
Derrahala ai asl Wallhain a*						
Autonomy	10 14 1 2 40	10.00 + 0.00	10 14 1 2 27	10.57 1.60	0.42	15.02 + 4.00
Autonomy Environmental Mastery	18.14 <u>+</u> 3.49	18.29 ± 2.63	18.14 ± 2.27	$18.5 / \pm 1.62$	0.43	15.92 ± 4.06
Parsonal Growth	13.71 ± 2.29	13.43 ± 3.21	15.71 ± 4.03	16.14 ± 3.13	2.43	13.88 ± 3.48
Personal Orowin Desitive Pelationships	$18.5 / \pm 2.44$	18.14 ± 2.27	$1/.86 \pm 2.12$	18.00 ± 2.58	-0.37	18.54 ± 2.76
Purpose in Life	$15.5/\pm 3.26$	14.14 ± 5.05	$15.5 / \pm 4.86$	$1/.14 \pm 3.34$	0	16.46 ± 3.59
Self Accentance	16.00 <u>+</u> 1.29	$1/.29 \pm 2.06$	16.86 ± 2.48	16.00 ± 2.77	0.29	1/.35 ± 2.94
Sen Acceptance	16.14 ± 5.52	16.00 ± 5.69	16.43 ± 5.86	16.43 ± 5.83	0.29	16.19 <u>+</u> 4.25

**Note*. SD = standard deviation; For psychological wellbeing of the contextualizing participants n=2

Dependent Variable Relationships

To provide additional context regarding the intervention's impact, Pearson correlations were used explore the relationships between the dependent variables and determine how changes in one variable related to changes in another. This was achieved using change scores between Baseline and Post Session 2. A correlation coefficient less than .30 is considered weak, .40 to .60 is moderate, and .70 and above is strong (Dancey & Reidy, 2007; Hinkle et al., 2003).

Mental Health Literacy and Self-Efficacy. Correlational analysis revealed that there was a strong positive relationship found between the *treatments and services* subscale of mental health literacy and *self-efficacy* (r[7]=.793, p=0.05). No other significant relationships were found between the remaining three mental health literacy subscales and self-efficacy.

Mental Health Literacy and Psychological Wellbeing. When exploring the relationships between mental health literacy and psychological wellbeing subscales, there was a strong positive relationship between *treatments and services* and the *environmental mastery* subscale of psychological wellbeing (r[7]=.835, p=0.05). Additional significant relationships were found between *legislation and processes* and *environmental mastery* (r[7]=.801, p=0.05), and *comfort providing active support* and *personal growth* (r[7]=.778, p=0.05).

Self-Efficacy and Psychological Wellbeing. Correlational analysis revealed that self-efficacy had a strong positive relationship with *environmental mastery* (r[7]=.952, p=0.01). See Table 3 for additional relationships.

Psychological Wellbeing. Within psychological wellbeing, strong positive relationships were found between *autonomy* and *personal growth* (r[7]=.884, p=0.01) and *autonomy* and *positive relationships* (r[7]=.770, p=0.05). See Table 3 for additional relationships.

Table 3

Pearson Correlations Between Mental Health Literacy, Self-Efficacy, and Psychological Wellbeing (n=7)

Variable	п	М	SD	1	2	3	4	5	6	7	8	9	10	11
1. Awareness and Knowledge	7	1.14	1.21	-										
2. Treatments and Services	7	2.43	2.37	.496	-									
3. Legislation and Processes	7	1.71	2.29	.736	.641	-								
4. Comfort Providing Support	7	4.57	3.10	.417	.074	.731	-							
5. Self-Efficacy	7	0.50	0.66	.648	.793*	.744	.311	-						
6. Autonomy	7	0.43	2.76	071	.528	.577	.434	.525	-					
7. Environmental Mastery	7	2.43	3.26	.613	.835*	.801*	.433	.952**	.643	-				
8. Personal Growth	7	-0.57	2.51	.141	.385	.722	.778*	.558	.884**	.667	-			
9. Positive Relationships	7	1.57	1.52	.039	.385	.537	.559	.252	.770*	.517	.716	-		
10. Purpose in Life	7	0	3.12	485	.136	211	346	082	.447	.066	.064	.532	-	
11. Self Acceptance	7	0.29	1.98	.327	.325	.390	.377	.643	.432	.728	.509	.494	.271	-

* Correlation is significant at the 0.05 level.

** Correlation is significant at the 0.01 level.

II) Institutional Comparator

For the institutional comparator data, 29 participants started the survey; however, two did not complete the psychological wellbeing portion, and one did not complete the mental health literacy, self-efficacy, and psychological wellbeing portions; this latter participant was removed from the dataset. Thus, 28 participants were included in the analysis.

Demographic Information

Of the 28 individuals who completed the Baseline Survey, the sample was primarily Caucasian (n=21), 60.7% identified as female (n=17), and the mean age was 49.42 (SD=10.14). Twenty-five percent of participants were each from the faculty of Science and Environmental Studies (n=7) and Social Sciences and Humanities respectively (n=7). Most indicated their home campus was Thunder Bay (n=23), and most were full-time tenured or tenured track employees (n=25). See Table 4 for a complete summary of demographic characteristics

Table 4

Variables	$Mean \pm$ Standard Deviation (Min-Max)	% (<i>n</i>)
Age (years)*	49.42 ± 10.14 (30-66)	-
Gender		
Male	-	39.3% (11)
Female	-	60.7% (17)
Ethnicity		
Caucasian	-	75.0% (21)
African	-	3.6% (1)
Chinese	-	3.6% (1)
Pakistani	-	3.6% (1)
Unknown	-	14.4% (1)
Faculty*		10.70/(2)
Education	-	10.7%(3) 10.7%(3)
Saianaa and Environmental Studia	-	10.770(3) 25.0% (7)
Social Sciences and Humanitias		25.0%(7)
Business Administration	-	25.0%(7) 10.7%(3)
Engineering	-	3.6%(1)
Law	-	3.6%(1)
Natural Resource Management		3.6%(1)
Unknown		3.6%(1)
Chkhowh	-	5.070(1)
Campus		
Thunder Bay	-	82.1% (23)
Orillia	-	17.9% (5)
Time England (manual)*	12,41,1,7,(9,(1,25))	
Time Employed (years)*	$12.41 \pm 7.68 (1-35)$	-
Job Title		
Full-Time, tenured, or tenured trac	k -	89.3% (25)
Limited term appointment	-	3.6% (1)
Contract Lecturer	-	7.1% (2)
0.5 Credit Courses Taught in an Acad	emic $4.09 \pm 2.58 (1-14)$	-
Year		
1.0 Credit Courses Taught in an Acad	emic $0.46 \pm 0.69 (0.2)$	-
Year	0.10 1 0.09 (0-2)	

Demographic Characteristics of Institutional Comparator Group (n=28)

**Note*. For age, faculty, and time employed of the contextualizing participants, n=26.

Psychological Variables

Mental health literacy, self-efficacy to recommend resources, and psychological wellbeing were assessed among the institutional comparison participants and compared to the Baseline and Post Session 2 data for study participants. Table 2 provides a summary of these variables by group.

Mental Health Literacy. For participants in the institutional comparison group, mental health literacy was similarly assessed via four subscales: *awareness and knowledge, treatments and services, legislation and processes,* and *comfort providing active support.* Using visual inspection, it appears that Baseline measures compared to the workshop participants are similar. The *comfort providing active support* subscale for those in the workshop (M=13.00, SD=2.52) group was slightly lower when compared to the institutional comparison group (M=14.25, SD=4.37); however, at the Post Session 2 time point, scores were higher when compared to both Baseline and institutional comparator. In addition, *treatments and services* and *legislation and process* also appear to be higher when compared to Baseline.

Self-Efficacy to Recommend Mental Health Resources. Self-efficacy to recommend mental health resources for the institutional comparison sample was 3.79 (*SD*=0.72), which was similar to the self-efficacy of the workshop sample at Baseline. At the Post Session 2 time point, scores appear to be elevated for workshop participants. Refer to Table 2.

Psychological Wellbeing. Finally, apart from *autonomy* and *self-acceptance*, four of the six subscales representing psychological wellbeing were higher in the institutional comparison sample when compared to that of workshop participants at Baseline. Following workshop involvement, those who took part in the workshop had four of the six subscales were higher when compared to those in the institutional comparator. Refer to Table 2.

III) Experiential Account

Four categories were pre-determined for the qualitative study component and included: challenges of the workshop and content; benefits of the workshop sessions and content; utility of the workshop; and applicability of content and resources provided. Inductive thematic analysis, where there are no preconceived themes and instead these emerge from the data, was then used to develop themes for within these categories (Easton et al., 2018). A detailed description of each is included below.

Challenges of the Workshop and Content

Two subthemes arose from the data: 1) timing of the workshop as a barrier to implementing learned skills, and 2) feeling underprepared for the collaborative component. A few participants discussed the challenges of attempting to incorporate mental health materials acquired through the workshop into lecture material when it had not been planned ahead of time: Participant 4 said, "It was challenging to incorporate a discussion into lecture material where it felt out of place. Perhaps it's easier at certain planned pressure points... It takes forethought and admittedly now I realize it should be prepared earlier on." The same participant also noted that due to professional obligations they were hesitant to incorporate resources into certain classes "As a psychologist I have to be very careful in what and how I present mental health information...In certain courses I think this would be ideal, even appropriate to include ... In my particular course this semester, it was not..." Similarly, most participants also struggled with changing course delivery and structure part way through the semester and indicated they plan on using the resources and skills provided in their classes next year. As Participant 1 relayed, "I'll be spending time reviewing the resources over the summer to determine which [resources] I may be able to implement next year (September)." This same participant noted that, "It is difficult to make any changes to the way a course is offered while in the middle of the semester."

Many participants discussed the effectiveness of the facilitated discussion in session two, but mentioned they would have liked to receive questions ahead of time or to have a clearer purpose. Participant 7 noted, "The purpose of the 'focus group' wasn't clear at the beginning, but after people became engaged it appeared to evolve into a forum where we could share insights and challenges." Participant 1 similarly shared, "I would have liked the discussion questions to be provided in advance."

Benefits of the Workshop and Content

Three subthemes arose in this category: 1) group camaraderie; 2) improved empathy and understanding; and 3) increased knowledge of mental health resources available. Following the second session, most participants expressed their appreciation of the collaborative discussion. Some noted that they were able to share similar experiences and views. According to Participant 7: "The other participants brought up challenges and ideas that I could relate to..." They also mentioned "...after people became engaged, it appeared to evolve into a forum where we could share insights and challenges." Similarly, Participant 4 expressed, "The discussion was engaging and interesting."

A second theme was improved empathy and understanding regarding student mental health concerns. For example, one participant stated, "Although I haven't used any tools, I think that attending the workshop and browsing through the resources has increased my awareness and sensitivity towards the struggles students may be experiencing." Similarly, Participant 7 said, "...I just pushed the empathy needle up a bit." Following study involvement, participants expressed they had gained increased knowledge of mental health resources available for both themselves as faculty members and their students. This corroborates the quantitative findings. Furthermore, by exploring the available resources as a group and then briefly reviewing these in the second session, participants were introduced to the content twice. Participant 4 stated that, "I was happy with it [the workshops]. If anything, perhaps a review of specific components or resources." Participant 5 mentioned recommending available resources in between study sessions by encouraging specific students to access Student Health and Wellness for support, "… I also encouraged 4 different students to contact SHW (Student Health and Wellness) for counselling (3 international and 1 domestic)."

Utility of the Workshop

Two subthemes arose in this category: 1) the virtual and two session format; and 2) the resource overview. Overall, participants expressed their acceptance of the virtual format which utilized the Zoom platform such as Participant 1, "...Overall it was positive. I'm OK that we met over Zoom, but I would have preferred it to be in person. The length of each meeting was appropriate." Similarly, Participant 5 noted, "Remote delivery is useful for bringing Orillia and Thunder Bay participants together..." Participants found the virtual format to be a useful and relevant form for professional development workshops designed to include participants from various campus locations. Participants also stated that the workshop format was useful including the two-sessions design which allowed for additional questions to be addressed such as Participant 5, "All the components were very well done. I was especially pleased with how well you analyzed the data and listed the 'top' questions that had been asked by participants..." Future recommendations that arose included: an in-person option and introducing participants at the start of each session through 'ice breakers.'

A second subtheme was resource overview. The use of PowerPoint slides, links sent via the Zoom chat for participants to explore alongside the facilitator and walk throughs of how to navigate key resources such as the Student Health and Wellness website and the WellU Key all contributed to a positive experience according to participants. Participant 5 noted that the workshop sessions were "[w]ell organised. Slides were informative. Links to resources in real time [was] helpful." Similarly, Participant 6 stated that "[s]howing us the breadth of resources available [was a component done well.]"

Applicability of Content and Resources Provided

Following the first workshop session, participants received access to a Google Drive containing key resources developed by Student Health and Wellness. Resource use and access was assessed via a brief Google Drive Resource Use Questionnaire and the Post Session 2 Questionnaire. Resources that were accessed the most included the WellU Key (n=2), a brief video introducing a stepped care approach to mental health (n=2), and access to a premade email signature indicating working hours and including links to the WellU Key and a helpline (n=2). Three participants indicated that they had not yet accessed any resources in particular; however, had future intentions to do so.

This category had three subthemes 1) resource interest; 2) current resource applicability; and 3) future resource application. While some participants indicated that they did not use any provided resources, they still explored the Google Drive. As Participant 3 noted, "...I've just clicked around in the file to become oriented to the resources." Participants expressed interest in the resources and took the time to explore the options available.

The second subtheme was current resource applicability. Resources and content appeared to be appropriate according to some participants who attempted to integrate different strategies

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and resources into their classrooms over the duration of this study. Participant 4 said that: "The resources are helpful and make one pause and reflect on how to better engage students." Participant 2 noted that they, "...often mention anxiety coping strategies in my classes with nursing students." In addition, one participant indicated they learned about supports for faculty members. Participant 5 shared, "...the health/therapy benefits were very useful... I did not know how much better they [resources] are now for mental health supports."

Similarly, the third subtheme was future resource application. Almost half of participants noted that they intended to implement resources at the start of the next academic year. Participant 4 discussed the long-term implications of sustainable resources, "We are planning to implement information into year 1 and 2 undergrad courses for next year. We took a more long-range outlook with material and will definitely use several resources." Many discussed the applicability of implementing skills and resources next year (e.g., due dates that promote healthy sleep habits, email signatures, mental health statements in syllabi, contact information for various resources and the WellU Key. Participant 2 similarly stated, "I am planning to implement earlier in the evening [instead of at midnight to help to promote sleep hygiene] assignment deadlines next semester."

Discussion

The primary purpose of this study was to evaluate the impact of a two-session, educationbased virtual workshop delivered by a senior counsellor from the host institution's Student Health and Wellness on mental health literacy and self-efficacy to recommend mental health resources and assess the psychological wellbeing of postsecondary course instructors. A secondary purpose was to collect the same dependent measures from course instructors employed at the host institution during the study period and compare these data to those obtained from workshop participants before and after study involvement. A tertiary purpose was to qualitatively explore the experience of the workshop.

In line with the hypotheses, improvements were observed for all mental health literacy subscales and self-efficacy to recommend mental health resources. The *environmental mastery* and *positive relationships* subscales of psychological wellbeing improved over time; several significant correlations between variables were also observed. Post-intervention values were higher for workshop attendees when compared to their institutional counterparts. Qualitatively, participants shared that they valued the intervention, noting a number of strengths and recommendations for future iterations. Taken together, these study data suggest that a two-session, education-based virtual workshop can increase mental health literacy, self-efficacy to recommend mental health resources, and dimensions of psychological wellbeing in postsecondary course instructors, and that several benefits exist regarding this format and content.

To date, this is one of few studies to focus on the educators themselves, rather than the students. According to Harris et al. (2022) and Trolian et al. (2020), addressing the prevalence of student mental health concerns by targeting those who work with them directly can be a valuable health promotion approach. A post-secondary context and step-wise, two-session virtual approach were also unique study features. Through increased mental health knowledge and confidence to recommend related resources, these educators may be well positioned to impart their learnings on students and support those who may be struggling (Ball et al., 2005; Evans, 2011). The EMPOWERed classroom model is particularly noteworthy in today's pandemic recovery era where postsecondary students display significantly worse mental health than prior to the emergence of COVID-19 (Talarowska et al., 2023). Furthermore, this study highlights the

utility of creating partnerships with institutional wellness centres to design and deliver health promotion-oriented programming and professional development opportunities for educators. In return, centres can simultaneously increase awareness of campus resources and external supports while receiving valuable feedback for future programming. A more detailed discussion of each of the dependent variables ensues below.

Mental Health Literacy

Mental health literacy is a multi-dimensional construct that encompasses knowledge of and attitudes toward mental health disorders, knowledge of available mental health resources, and help-seeking behaviours (Jorm, 2012; Kutcher et al., 2015b). In support of the hypothesis, improvements were observed visually across time for all subscales, and this was supported further by large and medium effect sizes. This may suggest that the workshop created practical improvements among participants in this context (Armijo-Olivo, 2018).

As a whole, it is noteworthy that improvements to scores continued between the baseline assessment held in February, and the post session 2 assessment held in April. This may have occurred for a few reasons:1) the two-session design format; 2) the mid-session resource "nudge" (Velde et al., 2021); and 3) the content itself.

The Two-session Design Format. First, it is possible that the follow-up session was successful in addressing gaps in knowledge and understanding that were identified following the first session via from the questions that participants shared. This is on par with the literature which suggests that a second workshop session can increase knowledge when utilized as a reinforcing opportunity to deliver relevant information (Clarke & Hollingsworth, 2002; Farmer, 2021; Hill et al., 2001; MacIntosh et al., 2010). Healey and colleagues (2013) found that by having more than one workshop, ideas translate better to subsequent action and serialization (i.e.,

returning to ideas and commitments over a series of events). Having two sessions might also have served to extend participant involvement and engagement with the resources and knowledge gained over time, as there was an expectation that the material would be re-visited in the future.

The Mid-session Resource Nudge. Second, there was a Google Drive Resource Use Survey and related communication that took place between the Post Session 1 and Pre Session 2 timepoints. This may have acted as a "nudge" (Ledderer et al., 2020; Velde et al., 2021), thereby encouraging participant engagement and subsequent improvements in mental health literacy over time. Nudging is used often in public health as a subtle means to steer people toward making a positive decision or behavioural change for themselves or others (Ledderer et al., 2020; Velde et al., 2021). Some examples include diet, exercise, sleep, and substance use (Ledderer et al., 2020). In this case, the resource reminder may have reinforced information acquired through session one and promoted engagement with the material before and during session two.

The EMPOWERed Classroom Content. Third, the workshop content itself may have contributed to the improvements observed in mental health literacy over time. The materials were developed to include an in-depth explanation of key resources along with a detailed virtual walk through of how to access and navigate these resources online. Opportunities for questions and discussion to enhance clarity regarding concepts was also encouraged. This notion was supported by the qualitative data obtained. Participants stated that they had increased knowledge of the resources available for students, which links to *treatments and services*. In addition, some participants noted experiencing an increased sense of empathy following study completion: a multi-dimensional concept that involves the ability of one to understand another's situation, perspective, and feelings and a critical component for successful mental health support (Mercer

& Reynolds, 2002; Sharma et al., 2020). This concept links directly to the *knowledge and awareness* subscale which refers to participants' degree of understanding regarding mental health in areas such as risk factors, symptoms, and the range of mental health problems that individuals may face (Mansfield et al., 2021). By increasing understanding in this context through tailored content, participants may more empathetic toward students, and therefore better able to support them within the classroom (Mercer & Reynolds, 2002; Sharma et al., 2020).

Comfort Providing Active Support

Comfort providing active support is defined as translating mental health knowledge to practice behaviourally through supporting and recommending resources to students who have mental health concerns (Mansfield et al., 2021). At Baseline, all subscales of mental health literacy were similar between the institutional comparator and the workshop participants with the exception of the comfort providing active support subscale which was lower for those in the workshop condition. One reason for this difference may be related to home faculty. The workshop group was primarily from the Faculty of Health and Behavioural Sciences (71%) compared to 11% of the comparison group. This may be because those with higher background knowledge of mental health and related facets due to their professional training have higher selfawareness regarding their gaps in knowledge and relevance of the workshop content to the classroom. Those who have self-awareness that they are less comfortable supporting students may be more receptive to learning and improving related knowledge; feeling more prepared can help to increase comfort (Cone & Giske, 2016). This notion was supported by the correlational analysis which revealed a significant positive relationship between *comfort providing active* support and personal growth: a dimension comprised of continual development, openness to new experiences, and changing in ways that indicate more self-knowledge and effectiveness (Ryff & Keyes, 1995).

At the Post Session 2 timepoint, scores increased in the workshop group suggesting that the intervention impacted this variable positively over time. A factor that may have contributed to this improvement is the notion of autonomy which, according to Ryff and Keyes (1995), involves being independent and regulating behaviour from within while resisting social pressure. The program was designed to promote choice by providing a range of readymade resources and easy to implement mental health supporting practices (Kutcher et al., 2015a; Perry et al., 2014; Shelemy et al., 2019b). This structure allowed participants to select those that best fit their teaching style and needs. In this instance, the options offered may have enhanced comfort through fostering the ability to decide how, when, and what they were going to implement into their classroom, enabling them to ultimately select those they felt more knowledgeable about and resonant with.

This notion of choice aligns directly with Self-Determination Theory (SDT), which states that humans have an innate need to grow, master challenges, and engage in new experiences volitionally (Guay, 2022; Ryan & Deci, 2017). According to Deci et al. (2013), an important component of this theory is autonomy which involves individuals experiencing a sense of choice when it comes to behaviour change; when actions are aligned with one's interests and values, the likelihood of meaningful engagement and outcomes is greater. A significant positive correlation was found between *personal growth* and *autonomy* which supports the value of endorsing choice in this context. In addition, a positive correlation was similarly revealed between the *positive relations with others* subscale (i.e., the ability to form trusting relationships, display empathy, affection, and intimacy; being concerned about the welfare of others) and *autonomy*. Relatedness

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is another integral facet of SDT which refers to one's innate need to feel secure emotional bonds with important others and part of a group (Guay, 2022; Ryan & Deci, 2017). It is possible that as participants became increasingly comfortable with the program content over time, they simultaneously felt more connected to the student population, and autonomous in terms of how they might provide assistance. According to Guay (2022), educational intervention programs created for teachers that are grounded in SDT principles typically lead to more autonomous motivation and outcomes experienced by students. As programs of this nature continue to develop, it would be of value to identify ways to tailor information to individual values and needs to optimize choice for educators and students alike. In doing so, a positive relationship may be fostered between educator and student which has been shown to enhance the likelihood of meaningful change (i.e., seeking out mental health supports; Guay, 2022).

In line with past literature that suggests education-based workshops are a valuable avenue to increase mental health literacy within and outside of an educational setting (e.g., Hughes et al., 2018; Kutcher et al., 2013; Liddle et al., 2021; McKinnon & Lamberts, 2015; Morgaine et al., 2017), the EMPOWERed classroom appears to be a viable avenue to improve mental health literacy in postsecondary course instructors: a population not often explored. Participant 5 mentioned encouraging four different students to access resources as a result of workshop learnings. This illustrates the direct applicability of a brief classroom-based intervention. This novel virtual approach to addressing the increasing mental health concerns experienced among postsecondary students in the pandemic recovery era should be examined further with a larger sample size and greater representation across faculties to determine whether results can be replicated.

Self-Efficacy to Recommend Mental Health Resources

Self-efficacy refers to an individual's self-perception of their competence at performing a behaviour (Bandura, 1977). This is particularly noteworthy as self-efficacy is a known prerequisite for behaviour change (Bandura, 1977; Holloway & Watson, 2002). Self-efficacy scores for workshop participants at baseline mirrored the institutional values. In accordance with the hypothesis, this variable improved consistency across the intervention and a large effect was revealed upon completion suggesting that the workshop improved participants' belief that they could recommend mental health resources to their students.

The observed improvements in self-efficacy over time could have involved: 1) the 2session workshop structure; 2) the delivery agent; and 3) the interactive format. Each is discussed below.

The 2-Session Workshop Structure. One unique study feature was its use of two sessions to deliver material instead of a "one-off" format (Clarke & Hollingsworth, 2002; Farmer, 2021; Hill et al., 2001; MacIntosh et al., 2010). At the last assessment, scores were the highest. This increase may be attributed to the two-session design, as there was a second opportunity for participants to receive relevant information. The gap between sessions might have provided participants with the opportunity to make initial attempts at implementing resources and techniques into the classroom, and then refine their attempts independently or following feedback from the second session. This gradual skill building relates to the notion of mastery, in that experiencing previous success with a given behaviour increases both selfefficacy and engagement (Bandura, 1977; Han et al., 2016; Tschannen-Moran & McMaster, 2009). Mastery experiences are an essential component for positive self-efficacy (Bandura, 1977). They are opportunities for an individual to practice, refine, and correct task and outcome specific skills (Calahan et al., 2019). Furthermore, mastery experiences are events where an individuals can practice performing new skills or concepts without fear of reprisal or reprimand (Bandura, 1977). Calahan et al. (2019) explored this concept through a mixed-method study examining the influence that mastery experience opportunities had on the efficacy of five secondary school teachers. These educators chose an area of instructional focus (questioning=3; motivating students=2) that they wished to improve and met with the researcher for a coaching meeting. During this meeting, the teacher and researcher discussed current strategies for the area of focus and brainstormed strategies that could be utilized to enhance the mastery experience (Calahan et al., 2019). The teacher then executed the lesson plan incorporating the suggested strategies. Throughout the lesson, the teacher received feedback in the form of encouragement, guidance, and direction from the researcher. Measures were taken at baseline, pre-intervention, and post-intervention, in addition to interviews that occurred following participating in the mastery experience opportunity. Following intervention completion, self-efficacy of the teachers increased, which was corroborated qualitatively (Calahan et al., 2019). Findings suggested that mastery experiences have a positive influence on the self-efficacy of teachers as well as their perceptions of their efficacy levels (Calahan et al., 2019). According to the study authors and in line with the present study, by providing 'non-threatening' opportunities to develop and improve specific skills, there is a potential to enhance self-efficacy.

It is also noteworthy that a significant positive correlation was observed between selfefficacy and environmental mastery – a construct that refers to having a sense of achievement and competence in managing one's environment while making use of the surrounding opportunities it provides (Ryff & Keyes, 1995). It is possible that the information provided over time served to boost belief in ability to recommend mental health resources through its relevance to the participants and post-secondary environment. In addition, a positive significant correlation was also observed for self-efficacy and treatments and services, a mental health literacy subscale relating to degree of knowledge regarding available resources. This influx of information may also have contributed to feelings of mastery in this domain. Of note, the environmental mastery and treatments and services scales were also correlated with one another which supports these relationships further. This is unsurprising as lack of knowledge of available resources and supports negatively impacts self-efficacy for educators to support students (Mazzer & Rickwood, 2015; Whitley et al., 2012; Yamaguchi et al., 2020). This suggests that by increasing awareness of mental health resources and services available, educators are likely to feel more efficacious in recommending them to students.

The observed improvements may also have been due, in part, to the opportunity to practice learned skills following the first session. This was a recommendation that arose from educational interventions intended to increase self-efficacy in people with heart failure (Yehle et al., 2010). Including opportunities or time to practice behaviour can result in successful behaviour change (Yehle et al., 2010). Thus, the ten-week period provided between sessions may have provided an important opportunity to practice implementing resources in the classroom which is in line with past literature that found confidence in one's ability can be increased as a result of doing (Oxlad et al., 2020). Over the 10-week latency period, participants had the opportunity to practice, recommend, and implement knowledge and strategies involving mental health resources in the classroom. This *doing* (Oxlad et al., 2020) may have allowed them to feel more efficacious.

In the absence of action, this 2-session format may also have helped participants to think about how to implement learnings and skills into the classroom, as content knowledge was acquired over time; this increasing familiarity with concepts has been shown to positively impact how educators approach a lesson (Ball et al., 2005; Cox & Carpenter, 1989; Evans, 2011). The 2session format was also supported qualitatively. For example, one participant discussed the benefit of a second workshop in answering questions that arose from the first. It may be valuable to undertake a content analysis in the future to determine if certain types of information are more likely to contribute to enhanced feelings of environmental mastery and self-efficacy in this context, and how these improvements link specifically to a multi-session format.

The Delivery Agent. A second factor which may have influenced self-efficacy positively was the delivery agent – a content expert from the university's Student Health and Wellness centre. Similar to McKinnon and Lamberts (2015) who saw improved self-efficacy for teaching science in primary teachers following professional development workshops delivered by a science centre employee, the EMPOWERed classroom team partnered with a senior counsellor from the host institution who designed and delivered programming. Not only did this help to remove any biases that may have existed had the student researcher carried out this process, but the messages were also likely strengthened due to the experience and related credibility this individual held. This sentiment was expressed similarly in a study conducted by Glena and colleagues (2023) which involved the delivery of a 4-week classroom-based mindfulness intervention among first-year university students by a counsellor from the institution's Student Health and Wellness centre. It was noted by these researchers that the inclusion of a delivery agent removed from the study itself may have created a supportive space for participants to immerse themselves more fully in the intervention: an experience that may not have occurred had the intervention been delivered by a graduate student or principal investigator (Glena et al., 2023). This partnership is particularly important in this context given these agents have

experience with workshops that contain enjoyable, accessible, and comprehensible content that have been developed by someone with subject matter expertise (Aubusson et al., 2010; Melber & Cox-Peterson, 2055; So & Watkins, 2005).

The Interactive Format. Finally, the intent of this program was not to provide information in a didactic manner, but to engage participants through interactive activities and discussions (McKinnon & Lamberts, 2015). For example, participants were invited throughout to bring forth examples of how they had implemented or attempted to implement learned skills and resources into their classroom along with barriers they had faced. This provided an opportunity for the senior counsellor from Student Health and Wellness to provide feedback and advice: a strategy that has been shown to increase performance whereby subjects who receive feedback on their performance experience greater improvements in self-efficacy (Karl et al., 1993).

McKinnon and Lamberts (2015) found that discussions between the participants themselves was an important aspect in enhancing understanding and furthermore, led to the development of new ideas that were later explored. By fostering a collaborative environment among participants which included explaining their experiences to one another and demonstrating successes, self-efficacy may have been enhanced. This may have alleviated perceived concerns and enhanced comfort through developing a sense of community and connection. McKinnon and Lamberts (2015) also explored the importance of having colleagues take part in workshops together, which helps to create a 'collegial atmosphere' conducive to collaboration. This collegial atmosphere and support was cited by many participants as particularly important in sustaining their increased self-efficacy and motivation following the workshop (McKinnon & Lamberts, 2015). This was an approach used in the present study which was qualitatively corroborated by Participant 7 who stated, "The other participants brought up challenges and ideas that I could relate to..." Having intimate discussions with likeminded peers and facilitated by an experienced counsellor who provides real-time meaningful feedback, may allow instructors to talk out their concerns and challenges, allowing them to overcome hesitancy ultimately increasing confidence in their abilities.

While research has found self-efficacy to increase through the use of workshops for primary school educators (McKinnon & Lamberts, 2015), no research to date evaluates a program designed for post-secondary instructors to increase their self-efficacy in order to recommend mental health resources. This two-session virtual approach has shown promise in that self-efficacy scores increased throughout intervention involvement. The partnership with the university's Student Health and Wellness centre may have strengthened participant experiences of efficacy through enhanced credibility and expertise. Furthermore, similar to McKinnon and Lamberts (2015), participants qualitatively expressed that interactive collegial discussions were an important aspect that helped foster a sense of connection with likeminded peers.

Psychological Wellbeing

Psychological wellbeing is characterized as satisfaction with life experiences and one's role in the world, a sense of achievement, belongingness, and low levels of distress or worry (Shek, 1997). Ryff and Keyes (1995) suggested that there are six characteristics that aid in positive functioning: purpose in life, personal growth, positive relations with others, self-acceptance, autonomy, and environmental mastery. This is an important aspect to consider when designing professional development opportunities for educators as it is a profession that often leads to burnout (Zia et al., 2014. Those who have a lower psychological wellbeing are at elevated risk, which in turn decreases engagement (Supervia & Bordas, 2020).

The reason for assessing psychological wellbeing among course instructors was to better understand intervention involvement outcomes and ideally frame future recommendations with this concept in mind.

Educators and Psychological Wellbeing

Those in the education profession are at high risk of burnout and susceptible to mental health concerns themselves due to workloads, time pressure, emotional load, and conflicting demands (Kidger et al., 2016; MacIntyre et al., 2019). Postsecondary educators in particular are under an immense amount of stress due to the pressure to publish, intense competition for research funding, changes to the field such as increased digitization resulting from the pandemic, increasing student numbers, and heightened personalization of support for students (Kinman, 2014; Lei et al., 2021; Watts & Robertson, 2011). While this intervention briefly included information on resources available to faculty, it did not incorporate profession specific self-care or stress reducing techniques. Qualitatively, it was revealed that following the first session, faculty wanted to hear more about supports available for themselves. While a long-term goal of this study is to increase help-seeking behaviours in students, it is clear that educators themselves could benefit from increased awareness of resources available to faculty along with ways to support their own mental health.

Psychological wellbeing quantitively fluctuated throughout the study period. This may relate to professional demands occurring at the assessment timepoint along with personal pressures. The second workshop took place at the same time that winter term marks were due, which may have been a particularly stressful time for some. Exploring how these demands vary throughout the term and the impact they have on educator wellbeing may be a valuable avenue to explore in future studies. While through the duration of this study improvements to all subscales

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were not observed, large effect sizes were revealed for *environmental mastery* and *positive relationships* suggesting that the intervention did play a role in improving these variables. This is similar to a study by Gast and colleagues (2022) who explored how teaching-related professional development could enhance new university educators' wellbeing. Ten new postsecondary educators took part in six professional development activities (reflection, interactive workshops, feedback, expert coaching, learning community, and the program overall). Following the program, semi-structured interview findings revealed that the dimension of *environmental mastery* was most influenced by formal workshops that provide pedagogic tools and structures designed to support teachers' ability to control activities in the classroom (Gast et al., 2022). Furthermore, along with the learning community, formal workshops were also found to be associated with increases in the *positive relationships* dimension of wellbeing. In both professional development opportunities, discussions with colleagues existed fostering chances for participants to connect and receive social support (Gast et al., 2022; Onyura et al., 2017).

Environmental Mastery

This subscale of psychological wellbeing refers to having a sense of achievement and competence in managing one's environment while making the most of opportunities it provides (Ryff & Keyes, 1995). The large effect size suggests that following workshop involvement, participants felt they were in charge of their environment, which may be in reference to their classroom and the workshop skills, knowledge, and resources they received and were encouraged to use in a way that worked for them. As noted above, this heightened knowledge may have enabled participants to feel more efficacious to manage or address any mental health related concerns students present with as they were equipped with the knowledge and resources to do so. Gast et al. (2022) found that workshops are a successful means of targeting the *environmental*

mastery dimension of wellbeing through assisting educators in acquiring knowledge needed to effectively design courses, thereby shaping their work environment in a way conducive for student learning, and still fitting their own teaching style and personal needs. Workshops that provide concrete tools to effectively make use of opportunities improve this dimension of wellbeing through supporting participants in enhancing feeling of preparedness and efficacy (Gast et al., 2022).

Positive Relationships

The subscale *positive relationships* includes the ability to form trusting relationships, display empathy, affection, and intimacy, and displaying concerns regarding the welfare of others (Ryff & Keyes, 1995). This is a particularly important aspect of wellbeing for educators as it relates to school climate and the educator-student relationship (Gray et al., 2019; Ryff & Keyes, 1995; Thapa et al., 2013). By fostering a positive school climate through favourable relationships between educators and students, the environment is more facilitative for mental and physical health for all (Grey et al., 2019; Thapa et al., 2013). Based on this finding, it would appear that following study involvement, participants felt they were better able to form and maintain healthy relationships. Similarly, this increase may in part be attributed to the group discussion that occurred during the second session. Formal workshops can foster promising relationships between colleagues, especially when they provide knowledge-sharing opportunities (Gast et al., 2022). Through collegial collaboration along with a safe and open space conducive to cooperation and interaction, participants are more likely to share issues or solutions (Gast et al., 2022). Additionally, this may increase collaboration outside the professional development program. Taken together, this suggests that postsecondary educators wellbeing may be

interrelated with the social dimension of work, which can be impacted through professional development programs.

Strengths and Limitations

This study had many strengths such as being the first to explore mental health literacy and self-efficacy to recommend mental health resources in postsecondary course instructors. Similarly, through using an online virtual platform, participants from two campus locations had the opportunity to participate. Throughout the COVID-19 pandemic, online meeting and learning platforms such as Zoom increased in popularity. This platform allowed participants to take part in this professional development opportunity from the comfort of their own home, which may have increased comfort, especially when discussing the sensitive topic of mental health. Additionally, the added burden of travelling to a location for the workshop was removed, which may have lessened the time commitment perceived by some and increased the efficiency. Furthermore, this format may have increased ease and can make similar professional development opportunities such as this one more accessible for more people.

This study utilized a mixed methods design which entailed both quantitative and qualitative data to be explored thereby adequately addressing the study's purposes. Another strength of the design is the collaborative partnership with the host institution's Student Health and Wellness. This was particularly important as these professionals have experience with workshops and creating content as subject matter experts (Aubusson et al., 2010; Melber & Cox-Peterson, 2055; So & Watkins, 2005). The collaboration also allowed for an extended reach of mental health education and support through the centre staff's direct channels to students accessing services. Finally, by including a contextualizing comparison group, more definitive conclusions regrading the data and the impact of the workshop could be made.

It is also important to recognize limitations associated with this research. Due to smaller than anticipated uptake, this study was not adequately powered. Additionally, despite the positive improvements to the dependent variables that were supported qualitatively, in small sample sizes, η^2 has been found to overestimate effect sizes by overestimating the population variance (Bakeman, 2005; Fisher, 1973; Harvey et al., 2017). Relatedly, population-based wording within the 10-Item Mental Health Self-Efficacy Scale was modified to better fit the current sample of postsecondary course instructors which may have altered the psychometric properties of the tool. Taken together, these limitations suggest that results should be interpreted with caution. Furthermore, generalizability of the findings may be limited as all participants in the workshop group were Caucasian and mainly from the Faculty of Health and Behavioural Sciences.

From a recruitment standpoint, only 18 educators showed interest in enrollment despite over 400 personalized emails being sent. This may be due to a number of factors including timing of the intervention, competing schedules, and personal views regarding mental health. To mitigate some of these concerns, future researchers may want to identify other times to run similar studies and include an asynchronous option to minimize competing agendas and optimize involvement. Working with administrators and key stakeholders to explore the possibility of mandating training as part of institutional commitment to health and wellness may also be a worthy consideration. Finally, the dual role of the student researcher as a graduate student and session delivery facilitator may have influenced participant responses (e.g., social desirability). The main purpose of the latter role was to assess fidelity of the workshop content; interaction with participants was limited and tasks included monitoring the Zoom chat and providing an introductory script and thank you for the two sessions. Providing transparency around this role to participants and ensuring time is provided where they can speak freely should be considered for future studies.

Future Recommendations

Future researchers should look to include more participants in order to explore changes in the dependent variables over time using parametric tests. This would also increase the likelihood of statistical significance being attained (Hubbard & Armstrong, 2006). Additionally, researchers should consider adding a fifth time point to explore the sustainability of increases in dependent the variables following intervention involvement. While this study evaluated the sustainability of increases to dependent variables 10 weeks following the first session, a long term follow up was not included following session two. Previous studies have explored the role of self-efficacy on long-term behaviour change (i.e., five years post exercise intervention) and found it is important to the long-term maintenance of physical activity (McAuley et al., 2007). Future studies should look to incorporate a long-term follow up to explore the maintenance of knowledge and confidence increases following involvement in the two-sessions to gain a better understanding of the long-term impacts similar workshops may have. To explore the long-term impact of this workshop on students, future researchers might also consider incorporating a component that assesses help-seeking behaviours among students in the classes of instructors enrolled. This could involve a pre- and post-assessment to explore the uptake in relevant mental health resources and available services. The timing of the workshop should be considered in order to coincide with the start of or preceding the semester rather than occurring halfway through: a time when educators may find it difficult to implement structural change (i.e., due dates, assignment weights, resubmission opportunities, etc.). Including formal introductions of participants to one another should also be considered to enhance learning, foster relationship development, and

improve collaboration. Finally, it would be interesting to qualitatively explore the psychological wellbeing of course instructors involved to determine how their personal experiences may impact their ability to support students in this context while identifying was to enhance their own well-being simultaneously.

Conclusion

Postsecondary students are an at-risk population for mental health concerns (Duffy et al., 2019; Prowse et al., 2021; Statistics Canada, 2020). By engaging multiple sectors of the postsecondary institution, more students can be reached and supported through a large-scale health promotion approach that specifically targets the faculty and staff who work directly with students. Given the likelihood that they are addressing health-related concerns indirectly and more frequently than ever (Harris et al., 2022), educators have a unique position that may allow for early detection of mental health difficulties in their students. This is why it is commonplace to observe them as delivery agents of wellness-promoting, classroom-based initiatives (Whitley et al., 2013).

To date, research has demonstrated the importance of mental health literacy training for educators, but few studies have evaluated a training program designed to improve it (Kutcher et al., 2013, 2015a; Persson et al., 2021; Sharp et al., 2006; Stewart et al., 2004; Wei et al., 2001). This is important as content knowledge of educators is necessary for successful teaching (Ball et al., 2005). By evaluating training designed to increase mental health literacy and self-efficacy to recommend resources in educators, it may be possible to assist more students with receiving mental health support and information. This approach has been found to be a successful avenue for supporting primary and secondary students (Kutcher et al., 2013, 2015a; Persson et al., 2021;
Sharp et al., 2006; Stewart et al., 2004; Wei et al., 2001), which is consistent with the findings from the present study.

This study was the first of its kind to evaluate a two-session virtual workshop delivered by a senior counsellor at the host institution's Student Health and Wellness on mental health literacy, self-efficacy to recommend mental health resources, and psychological wellbeing of postsecondary course instructors. Overall, mental health literacy and self-efficacy to recommend mental health resources increased following each session when compared to pre-session scores; however, scores were higher following the second session as this was the second time relevant information was being delivered. These results were supported by the experiential accounts of the workshop which revealed that participants enjoyed the two-session virtual format and found both the content of the sessions along with the resources provided to be relevant and applicable. Participants experienced benefits in the form of group camaraderie, improved empathy, and increased knowledge of mental health resources available. While many participants found that the workshop occurring partway through the semester was a barrier to implementing learned skills, the information obtained was valuable as evidenced by the observed improvements to mental health literacy dimensions and self-efficacy scores.

When compared to that of the general institution, Baseline scores were similar across groups. Following intervention involvement, workshop participants had higher mental health literacy, self-efficacy to recommend mental health resources, and *positive relationships* and *environmental mastery* (subscales of psychological wellbeing) scores which may suggest that the intervention evoked improvements.

Cumulatively, these study data suggest that a two-session, education-based virtual workshop can be useful in this context, and that several benefits exist regarding this format and

content. To the knowledge of the research team, this is the first study of its kind to focus on the educators themselves, rather than the students. According to Harris et al. (2022), addressing the prevalence of student mental health concerns by targeting those who work with them directly can be valuable. A postsecondary context and stepwise, two-session virtual approach were also unique study features. Through increased mental health knowledge and confidence to recommend related resources, these educators can better impart their learnings on students and better support those who may be struggling (Ball et al., 2005; Evans, 2011). The EMPOWERed classroom is particularly noteworthy in today's pandemic recovery era where postsecondary students display significantly worse mental health than prior to the emergence of COVID-19 (Talarowska et al., 2023). Additionally, fostering partnerships with student wellness centres may prove to be a valuable avenue to explore. These connections allow for an extended reach of mental health education and support by involving those with expertise in the area who are equipped to develop and deliver content in meaningful ways. Staff may also be viewed positively by students which may make them more receptive to help seeking behaviours. Taken together, these study findings suggest that by leveraging partnerships with those who have direct channels to students accessing services, the reach of mental health education and support can be extended which in turn can support a whole campus approach to mental health.

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Appendix A

Workshop Recruitment Email

Workshop Recruitment Email

Dear Dr. [insert last name],

You are invited to participate in a project titled "Building an EMPOWERed Classroom: Examining the Impact of a Two-Day Virtual Workshop Among Postsecondary Course Instructors The project is being led by MSc Candidate Delaney Johnson from the School of Kinesiology along with Supervisor Dr. Erin Pearson in the School of Kinesiology.

The purpose of this project is to evaluate the impact of a two session, education-based virtual workshop for postsecondary course instructors. It is being offered in collaboration with Lakehead Student Health and Wellness and focuses on sharing mental health information and strategies to support students in the classroom through resource provision. You are invited to participate because you are a faculty member/contract lecturer who teaches at Lakehead University. Those who are on sabbatical or have a teaching release are also welcome to participate. Because this workshop is virtual, you will need access to a device and stable internet connection.

The first of the two online session offered in collaboration with Student Health and Wellness will take place in February, over reading week, with the second session taking place eight weeks later in April. These sessions will last approximately 60-90 minutes. To see if the workshops increased mental health literacy and self-efficacy to recommend mental health resources, you will be asked to complete questionnaires prior to and immediately following each session.

Content may increase your knowledge of resources and supports available for both students and you as faculty along with heightened confidence to recommend these services. This new knowledge may also help to offset any burden you as an instructor feel with regards to assisting students in the classroom. Data obtained can help to shape future programming aimed at supporting both students and instructors. Additionally, stigmatizing attitudes may be decreased, which has been shown to foster a more supportive and accepting environment.

To learn more about the study and to register for the workshop, please see the link below:

[Insert Link]

Thank you for your consideration. Yours truly, Delaney Johnson,

HBKin, MSc (C)

Appendix B

Workshop Letter of Information



School of Kinesiology t: 807-343-8544 f: 807-343-8944

Letter of Invitation for Lakehead University Course Instructors

Dear Lakehead Course Instructor,

You are invited to participate in a project titled "Building an EMPOWERed Classroom: Examining the Impact of a Two-Day Virtual Workshop Among Postsecondary Course Instructors." The project is being conducted by Delaney Johnson, a MSc Candidate in the School of Kinesiology at Lakehead University, along with her supervisor Dr. Erin Pearson, (School of Kinesiology), and committee members Dr. Kathryn Sinden (School of Kinesiology), Dr. Aislin Mushquash (Department of Psychology), and Ms. Lindsey Wachter (Student Health and Wellness).

Purpose of Study

The purpose of this project is to evaluate the impact of a two session, education-based virtual workshop for postsecondary course instructors. It is being offered in collaboration with Lakehead Student Health and Wellness and focuses on sharing mental health information and strategies to support students in the classroom through resource provision. You are invited to participate because you are a faculty member/contract lecturer who teaches at Lakehead University. Those who are on sabbatical or have a teaching release are also welcome to participate. Because this workshop is virtual, you will need access to a device and stable internet connection.

What is Expected of Participants

As a participant in this study, you will be asked to attend two Zoom-based workshop sessions. Each will take approximately 60-90 minutes: the first will be held in February during reading week; the second, eight weeks later in April. You will also be encouraged to apply the resources provided in session one within your classroom during the term.

To assess the utility of the workshops, you will be asked to complete a series of questionnaires before and after each session. Variables being assessed include mental health literacy, self-efficacy to recommend mental health resources, and psychological well-being. The first survey will also ask you some demographic (e.g., age, gender, ethnicity) and employment details (e.g., campus location, time employed) questions. The second and fourth survey administration will also include a few open questions to better understand your study-related experiences. Each survey will take approximately 25-30 minutes of your time.

Following the first session you will receive access to an online resource bank that contains versatile ready-made resources that can be implemented within the classroom (e.g., pre-made slides designed by Student Health and Wellness). Halfway between the two sessions, a brief five-minute survey will be administered to explore your resource use.

Your Participation is Voluntary

It is important for you to know that your participation in this study is completely voluntary. Therefore, there is no risk to your status or employment with Lakehead University. You can also choose not to participate by not attending the workshop sessions. If you choose to participate



School of Kinesiology t: 807-343-8544 f: 807-343-8944

there are no anticipated physical or psychological risks that could come to you. However, you may feel uncomfortable divulging views on mental health. All data collected will be anonymous. You are also free to skip questions you feel could serve as identifiers or you are uncomfortable with. Finally, you can withdraw at any time up to the point of data submission. A list of mental health resources is provided at the end of this letter.

Confidentiality and Anonymity

Your participation in this study is completely confidential. You will be asked to create a unique identification number to protect your anonymity and questionnaire answers. Because this is a group-based program, you may know others in the group. To protect the privacy of all involved, we would ask that you please keep what happens in the group, in the group.

Benefits of Involvement

On an individual level, workshop content may increase your mental health literacy including knowledge of resources and supports available for both students and you as faculty along with heightened confidence to recommend these services. This new knowledge may also help to offset any burden you as an instructor feel with regards to assisting students in the classroom. There may also be an indirect benefit to students. These might include- an increase in knowledge of mental health resources and help-seeking behaviours. On a societal level, data obtained can help to shape future programming aimed at supporting both students and instructors. Additionally, stigmatizing attitudes may be decreased, which has been shown to foster a more supportive and accepting environment.

Data Use

The information from the survey will only be for the use of the researchers listed. It is important to note that due to the type of survey software being used, we cannot absolutely guarantee the full confidentiality of your data. Survey Monkey is hosted by a server located in the USA, and the US Patriot Act permits US law enforcement officials, for the purpose of anti-terrorism investigation, to seek a court order that allows access to the personal records of any person without the person's knowledge. With your consent to participate, you acknowledge this fact. The completed survey responses will be stored on a password protected computer belonging to the student researcher and Dr. Erin Pearson for a minimum of 7 years per Lakehead University Policy.

By participating in this research, you agree that your anonymous results may be used for scientific purposes, including local presentations and publications in scientific journals. The results of the study will be reported without identifying you personally and without financial gain. You may ask for a copy of the general findings of this research after the study is complete. If you have any concerns, please feel free to contact the researcher below.

This research has been funded by a student award provided by the Centre for Applied Health Research at St. Joseph's Care Group. The researchers declare there are no conflicts of interest relating to the conduct of this research. This project has been approved by the Lakehead University Research Ethics Board. If you have any questions related to the ethics of the research and would like to speak to someone outside of the research team, please contact Sue Wright at the Research Ethics Board at research@lakeheadu.ca.



School of Kinesiology t: 807-343-8544 f: 807-343-8944

If you have questions, please contact Delaney Johnson via email to discuss (dljohnso@lakeheadu.ca). Otherwise, please review the following to proceed

Clicking 'next' means that I have read and understand this letter. I am aware of the study purpose, its benefits, and potential risks. I understand that I am a volunteer and free to not answer any of the questions included. I agree to have my anonymous information used by the researchers as part of their project. I am aware that the survey results will be securely stored for a minimum of 7 years after the project is finished. I understand that I can request a copy of the general findings by contacting the researcher below.

Thank you for your consideration.

Yours truly,

Delaney Johnson, Student Researcher HBKin, MSc (c), School of Kinesiology, Lakehead University E-mail: dliohnso@lakeheadu.ca

Dr. Erin Pearson, Principal Investigator Associate Professor, School of Kinesiology, Lakehead University E-mail: erin.pearson@lakeheadu.ca



Below is the contact information for community-based health resources;

White Cedar Health Care Centre 807-475-4357

Northwest Community Health Centre - Urgent Care Clinic 807-622-8235

Thunder Bay Counselling Centre 807-684-1880

North West LHIN, 975 Alloy Drive, Suite 201, (807) 684-9425, northwestlhin.on.ca The North West LHIN provides community care services, which were formerly provided through Community Care Access Centre. The LHIN is responsible for planning, integrating, and funding local health care while also delivering and coordinating home and community care services. They may be able to fill an unmet service need or recommend other available services.

Appendix C

Workshop Recruitment Poster

SEEKING FACULTY/COURSE INSTRUCTORS

To take part in a research study examining the impact of a brief two-session virtual workshop

LEARN MORE ABOUT SUPPORTING Students in the classroom



Appendix D

Demographic Questionnaire

1. What is your ID number?

Create using the first letter of your first name, the last digit of your birthday, the first

letter of your birth month, and then the first letter of the place you were born

For example, if Elizabeth was born on August first and she was born in Thunder

Bay, her ID would be E1AT

- 2. What is your age? _____
- 3. What is your gender?
- 4. What is your ethnicity?_____
- 5. What is your faculty?
 - a. Health and Behavioural Sciences
 - b. Social Sciences and Humanities
 - c. Science and Environmental Studies
 - d. Business Administration
 - e. Education
 - f. Engineering
 - g. Law
 - h. Natural Resource Management

6. What is your campus?

- a. Thunder Bay
- b. Orillia

7. How long have you been employed by Lakehead? (Round to the nearest year)

years

- 8. How would you describe your job title?
 - a. Full-Time, Tenured or Tenured Track
 - b. Contract Lecturer
 - c. Limited Term Appointment
 - d. Term Lecturer
 - e. Other._____

Appendix E

Mental Health Literacy and Capacity Survey for Educators (MHLCSE)

1. The range of mental health issues that students experience during the school years.

1. Not at all aware 2. Slightly aware 3. Somewhat aware 4. Moderately aware 5. Very aware

2. The risk factors and causes of student mental health issues

1. Not at all aware 2. Slightly aware 3. Somewhat aware 4. Moderately aware 5. Very aware

3. The types of treatments available to help students with mental health issues (e.g., counselling).

1. Not at all aware 2. Slightly aware 3. Somewhat aware 4. Moderately aware 5. Very aware

4. The local community services for treating students with mental health issues (e.g., do you know who to call?)

1. Not at all aware 2. Slightly aware 3. Somewhat aware 4. Moderately aware 5. Very aware

5. The steps necessary to access local community services for mental health issues

1. Not at all aware 2. Slightly aware 3. Somewhat aware 4. Moderately aware 5. Very aware

6. About the signs and symptoms of student mental health issues.

Not at all knowledgeable 2. Slightly knowledgeable 3. Somewhat knowledgeable 4.
 Moderately knowledgeable 5. Very knowledgeable

7. About appropriate actions to take to support student mental health at school.

Not at all knowledgeable 2. Slightly knowledgeable 3. Somewhat knowledgeable 4.
 Moderately knowledgeable 5. Very knowledgeable

8. About legislation related to mental health issues (confidentiality, consent to treatment, etc.).
1. Not at all knowledgeable 2. Slightly knowledgeable 3. Somewhat knowledgeable 4.
Moderately knowledgeable 5. Very knowledgeable

9. About school system services and resources for helping students with mental health issues.

1. Not at all knowledgeable 2. Slightly knowledgeable 3. Somewhat knowledgeable 4.

Moderately knowledgeable 5. Very knowledgeable

10. Talking with students about mental health.

1. Not at all comfortable 2. Slightly comfortable 3. Somewhat comfortable 4. Moderately comfortable 5. Very comfortable

11. Talking with students about their mental health.

1. Not at all comfortable 2. Slightly comfortable 3. Somewhat comfortable 4. Moderately comfortable 5. Very comfortable

12. Providing support to students with mental health issues.

1. Not at all comfortable 2. Slightly comfortable 3. Somewhat comfortable 4. Moderately comfortable 5. Very comfortable

13. Accessing school and system services for students with mental health issues.

1. Not at all comfortable 2. Slightly comfortable 3. Somewhat comfortable 4. Moderately comfortable 5. Very comfortable

Appendix F

10-Item Mental Health Self-Efficacy Scale

The purpose of this questionnaire is to gain an understanding of your mental health self-efficacy. When responding, we are interested in your degree of knowledge.

- 1. I have a good understanding of mental health
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree
- 2. I have a good understating of coping strategies
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree
- 3. I have a good understating of the continuum of mental health
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree
- 4. I am confident in my ability to identify early warning signs of mental health difficulties in myself
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree
- 5. I am confident in my ability to help students get assistance for a mental health problem
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree
- 6. I am confident in my ability to identify students at risk for a mental health problem
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree
 - 7. I have a good understating of the impact of stress on performance
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree
 - 8. If I have a mental health problem, there are things I can do to get better
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree

- 9. The earlier I or someone else seeks help for mental health issues, the better the outcome is likely to be
- Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree
 It is possible for a student who is exhibiting the first signs of mental health issues to never develop a full-blown mental illness.
- 1. Strongly Disagree 2. Disagree 3. Neither Disagree or Agree 4. Agree 5. Strongly Agree

Appendix G

18-Item Version of Ryff's Scale of Psychological Well Being

Instructions: Circle one response below each statement to indicate how much you agree or disagree.

1. "I like most parts of my personality."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

2. "When I look at the story of my life, I am pleased with how things have turned out so far."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

3. "Some people wander aimlessly through life, but I am not one of them."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

4. "The demands of everyday life often get me down."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

5. "In many ways I feel disappointed about my achievements in life."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

6. "Maintaining close relationships has been difficult and frustrating for me."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree

7. "I live life one day at a time and don't really think about the future."

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree
8. "In gener	al, I feel I am in	charge of	the situation i	in which I liv	e."	
Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree
9. "I am goo	od at managing	the respor	nsibilities of da	aily life."		
Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree
10. "I somet	times feel as if	l've done a	all there is to d	o in life."		

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

11. "For me, life has been a continuous process of learning, changing, and growth."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

12. "I think it is important to have new experiences that challenge how I think about myself and the world."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

13. "People would describe me as a giving person, willing to share my time with others."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

14. "I gave up trying to make big improvements or changes in my life a long time ago"

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

15. "I tend to be influenced by people with strong opinions"

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

16. "I have not experienced many warm and trusting relationships with others."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

17. "I have confidence in my own opinions, even if they are different from the way most other people think."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

18. "I judge myself by what I think is important, not by the values of what others think is important."

Strongly	Somewhat	A little	Neither	A little	Somewhat	Strongly
agree	agree	agree	agree nor	disagree	disagree	disagree
			disagree			

Appendix H

Post Session 1 Experiential Account

1. What components of the first session were done well (if any)?

- 2. What could have been done differently in the first session (if anything)?
- 3. Was there something that you wanted to learn more about (if so, explain)?
- 4. Was there something you wanted to learn about and did not (if so, explain)?_____
- 5. Any other comments?

Appendix I

Example of Preprepared PowerPoint Slide: WellU Key Resource



All of us can benefit from support during times of struggle. If you or anyone you know experiences academic stress, difficult life events or feelings of anxiety or depression, Lakehead has resources available to you. Check in with the <u>WellU Key</u> to find the mental resources you are looking for.

Remember that getting help is a smart and courageous thing to do- for yourself, for those you care about, and for those who care about you. Asking for support sooner rather than later is almost always helpful.





Appendix J

Examples of Preprepared PowerPoint Slide: Classroom Breaks Resource





STEP 5

3 TIMES



10-12 SECONDS 1 TIME

10-15 SECONDS **1 TIME**

STEP '

STEP 8 10-15 SECONDS 1 TIME

🚟 Lakehead 🛛 student Healt

Appendix K

Google Drive Resource Use Questionnaire

- 1. What resources provided in the Google Drive have you accessed most (if any)?
- 2. What resources provided in the Google Drive have you found most useful and why?
- Are there any resources you would find valuable that aren't included on the Google Drive? If so, please describe.
- 4. Have you implemented or tried to implement new skills or knowledge into the classroom (If so, explain)?

Appendix L

Post Program Experiential Account

- 1. What components of the second session were done well (if any)?_____
- 2. What could have been done differently in the second session (if anything)?_____
- What resources/information provided in the Google Drive did you access most between Session 1 and today (if any)?
- 4. What resources/information provided in the Google Drive did you find most useful and why?
- 5. What workshop related information have you used/applied in your classroom?
- 6. What challenges did you encounter when implementing or attempting to implement workshop related information into the classroom (if any)?
- 7. How did you overcome these challenges?_____
- 8. What was your overall experience (e.g., content; format; pros/cons; remote delivery; length; etc.)?
- Did you attend/engage in any other mental health training since February 2023? If yes, please list:
- 10. Do you have any other comments, questions, or feedback?_____

Appendix M

Supporting Students in Distress





Often, Lakehead University faculty and staff will be the first ones to notice a concerning behaviour which may indicate a student is having difficulty and may need help.

This guide outlines how to recognize when a student is in distress and how to respond effectively when a student approaches you looking for help.

Guidelines for Supporting Students in Distress

Support is noticing when someone is struggling and having the confidence to engage them.

1. Notice

You may be the first person to recognize a student is in distress or to notice a change in their behaviour. Distress or difficulty describes the emotions or feelings that interfere with a person's ability to carry out daily activities. You may see some of the following indicators:

Academic/Work Indicators:

- · Changes in quality of work, attendance, productivity or participation
- · Inconsistency/changes in performance, responses to feedback, social interactions
- Emotional and Behavioural Indicators:
- · Emotional responses/changes in emotional responses (tearful or angry outbursts)
- · Expression of suicide/despain/worthlessness · Changes in behaviour (anxiety, withdrawn or extroverted, too little/too much sleep)

Physical Indicators:

- · Changes in personal hygiene
- · Frequent or chronic illness or absenteeism
- · Disorganized, rapid or slurred speech
- · Visible changes in weight (either loss/gain)

2. Engage

- Speak with the student in person and in private (unless it is unsafe to do so). Stay calm, be welcoming.
- · Provide the student with your undivided attention and patience.
- · Express concern and be specific about behaviour. "I've noticed that you haven't been to class lately, I'm concerned about you."
- Actively listen and ask questions. "So what you're saying is... tell me more about that."
- · Listen to the content of the student's issues, not just the volume, tone and pace.
- · Validate student's feelings/experience. "It sounds like you feel lonely since coming to Lakehead." "I'm sorry you're going through this.
- · Convey caring and instill hope. Be cautious about giving advice. "It sounds like there is a lot going on, there are some resources I can connect you with that may provide help."

3. Refer

Encourage the student to get help.

- · Emphasize what you notice and the reason for concern.
- Explain help is available and seeking help is a sign of strength and courage.
- · Ask if they are connected to resources on or off campus. Offer a resource and/ or make a referral to one of the services on campus. "Is this something you would like help with? I can recommend resources.

If the student seems hesitant to access resources, offer to contact the resource with the student present or offer to walk the student to the resource if on campus.

Can I share Information with other members of the University?

You can share information with other University employees on a "need to know" basis. You can contact another department and disclose details necessary to ensure a student's safety and help them access support.

If a student says "no" to a referral:

Students may say no to a referral or not follow up with resources. Respect their decision and offer your assistance if they reconsider or need additional help.

Always Consider Safety!

An emergency is any reference to physical harm to self or others, violence or weapons. In the case of an emergency, the student needs immediate help, call 911 immediately. State your concern to the student. "I'm worried about your safety, I need to get support for you."



important! A student who discloses sexual violence should be referred to the Office of Human Rights and Equity (OHRE). If a student declines this referral, use a Sexual Violence Disclosure form to report to the OHRE





Steps to Take with Students when Encountering Concerning Behaviour

You may be the first person to recognize that a student is in distress, your interest and assistance may play a crucial role in the student finding resolution to a problem.

Stressed

Student is showing some signs of distress and can identify a few coping strategies. Signs may include: academic, financial, health or personal issues, homesickness, heightened emotions or lack of support.

Behaviours you may notice:

- Student states need for help
- Decline in appearance and personal hygiene
- Sudden change in attitude, withdrawal, disruptive behaviour in class, changes in energy levels, emotional outbursts or irritability
- Coming to class under the influence of alcohol/drugs
- Struggles with/withdrawal from or decline in academic work, difficulty learning, large disparity between assignment grades and test grades, request for academic accommodation without SAS accommodation documentation

What To Do:

- Provide student with information on appropriate resource (see next page)
- · Offer encouragement and support
- · Follow up with the student. Have they reached out to resources?
- · Remind them of your support

Distressed

Student's coping strategies are not effective, needs are complex. No imminent risk of harm to self or others. Signs may include: Significant changes in behaviour or appearance, recent trauma (relationship break-up, discloses sexual violence, harassment or discrimination, illness/death of family or close friend...), declining mental health, serious emotional difficulties, isolation/withdrawal, or alcohol/drug use.

Behaviours you may notice:

- · Student states need for help
- · Escalated/continued stressed behaviours
- Academic work affected negatively by student's state of distress; inability to attend class/to write tests/exams/complete assignments

What To Do:

- · Connect and encourage student to access resources
- · Provide information, offer to make call to resource and/or walk to resource
- Behaviours that cause concern for the safety of the student/yourself/ others, consult Security to establish safety procedures
- Keep your Chair/Director, Dean informed

Emergency

Student's coping strategies are not effective, needs are complex. There is **INMINENT RISK** of harm to self or others. Student is threatening physical harm to you/others/self or is escalated to physical violence/threats/weapons. Signs may include: Student is actively planning suicide or is at risk of immediate harm to self.

Behaviours you may notice (in person or in writing):

- Any direct or indirect reference to suicide
- Expressing feelings of worthlessness, despair; world, family, friends better without them
- · Unreasonable feelings of guilt
- · Threatening, violent or destructive behaviour
- · Incoherent or out of touch with reality
- The situation feels unsafe
- Aggressive/extreme remarks or reactions
- · Sabotaging projects or equipment
- · Direct threat of harm
- · Student discloses they are afraid of someone coming to harm them

What to Do:

- Immediate action is required
- Remain calm. Ensure your immediate safety
- Call 911 and then notify Security 807-343-8569 or extension 8569
- Keep your Chain/Director, Dean informed

Counselling and Wellness

Student Health & Wellness Provides health services by a team of physicians, nurses and counsellors to students. Medical and counselling services are available	Prettie Residence t. 807-343-8361
Chaplaincy Provides counselling on issues of a personal, spiritual nature, grief and addictions	ATAC 5031 t. 807-343-8002
Aboriginal and Cultural Support Services Academic, personal, and financial services including cultural services and activities	University Centre UC 1007 t. 807-343-8085

Academic Services/Disability Services

Student Accessibility Services Supports students with permanent or temporary disabilities/medical conditions (including mental health) which affect their academics, through reasonable academic accommodations	Student Centre SC 0003 t. 807-343-8047
Student Success Centre Offers academic support such as academic skill development, career exploration and leadership development Includes the Academic Support Zone for tutoring and writing support	Student Centre SC 0008 t. 807-343-8018 Chancelor Paterson Library LI 2004
Student Central Provides academic advising, financial planning and budgeting assistance, OSAP, degree audits, exam coordination and graduation assistance	University Centre UC 1002 t. 807-343-8500

Legal and Conduct

Security Services Offers 24 hour security to the campus community	University Centre UC 1016 t. 807-343-8569
Office of Human Rights and Equity Ensures that Lakehead University is a human rights compilant, inclusive and accommodating space that champions diversity OHRE office works to prevent and respond to discrimination, harassment and sexual violence	Chancellor Paterson Library LI 5012 t. 807-346-7765
Orbuds Office Consults on academic or non-academic concerns with a goal to ensure that all members of the Lakehead University community are invated fails and equitably	ATAC 5031 E. 807-343-8061

Office of Student Affairs

Assists with non-academic behavioural t. 807-343-8163 student conduct matters

Stay Connected

🗿 @mylakehead 💟 @mylakehead 😭 lakeheaduniversity

ATAC 5031

Special advocwlodgement to Cartelee University for creating the original Supporting students in Distress Guide to which this was adapted for use at Lakahaad University.

Other

International Student Services Services and support for international students	Chancellor Paterson Library LI 0008 L. 807-346-7848 Emergency On-Call Advisor: 1-807-627-8701
Lakehead University Student Union (LUSU) Offers various centres on campus including Campus Food Bank, Pride Central and the Gender Equity Centre. Administers extended health care benefits package	Student Centre SC 0001 t. 807-343-8259
Residence Life Provides guidance on issues and concerns that relate to the well-being of students living in residence	Bartley Residence K 202 t. 807-343-8512

Off-Campus Support

Community			
Thunder Bay Crisis Response Mental Heath Emergencies	24 hrs, 7 days/week t. 807-346-8282		
Sexual Assault/Sexual Abuse Counselling & Crisis Centre	24 hrs, 7 days/week t. 807-344-4502 (Crisis Line)		
Good/ZTalk Post-Secondary Helpline	24 hrs, 7 days/week t. 1-866-925-5454		
Beendigen Crisis Line Counseling and assistance for First Nations	t. (807) 346-4357		
Thunder Bay Regional Health Sciences Centre	24 hrs, 7 days/week Located across the street from the Lakehead University Fieldhouse/		

Hangar



Contact Us

Office of Student Affairs t: 807-343-8522 studentaffairs.lakeheadu.ca

Appendix N

Stop the Stigma Tool Kit

ST&P THE STIGMA TOOLKIT

Resources and strategies for Lakehead staff and faculty to embed in their spaces that support student well-being during the year



ABOUT STUDENT HEALTH AND WELLNESS

<u>Student Health and Wellness</u> aims to provide holistic, evidence-informed health and wellness services to meet the diverse needs of our student population. We provide counselling, health services, and wellness programs so that students can get the most out of their Lakehead experience.

WHY HEALTH AND WELLNESS MATTERS FOR STUDENT SUCCESS

- Research shows that student health and wellbeing is inextricably linked to academic success, retention, and persistence to graduation.
- More students with pre-existing and or complex mental health needs are attending postsecondary institutions (CICMH, 2015).
- According to Lakehead University data, the four top impediments to academic performance as reported by students include stress, sleep, depression, and anxiety (NCHA, 2022).
- Languishing mental health and the development of mental illnesses have been linked to absenteeism, dropout, substance misuse, declining academic performance, and suicide (<u>Alberta Advanced</u> <u>Education, 2017</u>).
- Lakehead recognizes that investing in the enhancement of health and wellness interventions will better position us for success in both the classroom and the workplace (Our Trail to Wellness, Lakehead University Wellness Strategy, 2020-2025)

Student Health and Wellness

PREPARING YOUR PLAN HOW STUDENT HEALTH AND WELLNESS CAN SUPPORT YOU

Supporting student wellbeing is all of our responsibility. We all play an essential role in creating a culture of wellbeing, helping connect students to resources, and helping students thrive at Lakehead University. Student Health and Wellness offers various resources, programs, and services that you can connect students to. In addition, Student Health and Wellness can assist you in implementing evidence-based strategies in your settings to support student well-being. The following includes some actionable strategies and suggestions faculty and staff can implement to enhance student wellbeing in their own settings. We also regularly update and add content to our Information and Resources for Staff and Faculty page.

HEALTH AND WELLNESS RESOURCE EDUCATION & GENERAL STRATEGIES

COURSE OR MEETING STRUCTURE AND CONTENT

- Include a health and wellness presentation, training or program in your class or meeting.
- Add or adapt a class assignment, like a reflection or paper topic, to focus on public health or wellness current issues.
- Use <u>instructional strategies</u> that promote a culture of wellbeing.
- Adjust deadlines to promote sleep hygiene
 - Have assignments due by 10 pm instead of midnight.
 - Have all meetings end prior to 10 pm.
- Include <u>Health and Wellness Syllabus</u> statements into your course syllabi.

- Use the <u>Thriving in the Classroom</u> toolkit to find resources which can easily be inserted directly into your curriculum and to support you in designing curriculum and utilizing pedagogical approaches that promote resilience.
- Have students attend a <u>health and wellness event</u> on campus for extra credit or as a group activity.
- Incorporate breaks into longer classes or meetings.
 Focus these breaks on wellbeing practices like stretching, relaxing music, or mindfulness.

PROVIDE INFORMATION AND RESOURCES

- Promote Student Health and Wellness <u>flyers/brochures</u> in your spaces.
- Share Student Health and Wellness <u>slide decks</u> in your meetings and classes.
- Add the Stepped Care <u>video</u> to your D2L classroom. This provides a detailed overview of the services and resources available to students on campus.
- Add Information to your <u>Email Signature</u> about Health and Wellness.
- Promote the <u>Staying Healthy</u> self-help resources available for students, faculty, and staff.
- Follow Us and Share Social Media Content on your pages.
 - Thunder Bay- <u>@lakeheadlife</u>
 - Orillia- <u>@lakeheadlifeor</u>
- Encourage students to take the WellU Key- a screening assessment to learn more about areas of wellbeing that may be affecting them and resources they can access for support.
- Promote the <u>TalkCampus app</u>- a 24/7 global peer support app available to students with their Lakehead email.



- <u>Thunder Bay</u>
- Orillia
- Promote <u>food security resources</u> on campus including the <u>LUSU Food Resource Centre</u>

PROGRAMMING AND EDUCATION

- Complete and promote <u>Living Works Start</u> a self-guided e-learning program that teaches how to recognize when someone is thinking about suicide and steps to connect them to help
- Have all staff/faculty in your department complete the <u>Stop the Stigma or Supporting Students in Distress</u> training
- Encourage students to complete the self-guided <u>WellU</u> <u>Resilience</u> course in D2L

SUPPORTING YOUR OWN WELLBEING

Your well-being should not be put on the backburner.

- Visit HR's <u>Wellness Resources and Events</u> page
- The <u>Employee and Family Assistance Plan</u> provides confidential and professional counselling assistance for employees, spouses and dependents.
- Learn how taking care of your own well-being helps others.

*THIS TOOLKIT WAS ADAPTED FROM THE IOWA STATE UNIVERSITY SUPPORTING Student Wellbeing Toolkit

Appendix O

Institutional Comparison Recruitment Email

Dear Lakehead Course Instructor,

You are invited to participate in a project titled "Building an EMPOWERed Classroom." The project is being conducted by MSc Candidate Delaney Johnson from the School of Kinesiology along with Supervisor Dr. Erin Pearson in the School of Kinesiology.

The purpose of this project is to survey Lakehead University faculty to better understand mental health literacy, self-efficacy, and psychological wellbeing. Faculty members and contract lecturers are invited to participate including those on sabbatical or with a teaching release.

The online survey will take approximately 15-30 minutes of your time and will ask you to provide some demographic information, employment details, and include questions pertaining to the variables noted above.

Responding before April 1st would be most appreciated.

To learn more about the study and access the survey please click the link below:

https://www.surveymonkey.com/r/EMPOWERedClassroom

Thank you for your consideration.

Yours truly,

Delaney Johnson, Student Researcher HBKin, MSc Candidate, School of Kinesiology, Lakehead University Email: dljohnso@lakeheadu.ca

Please direct any questions or concerns about the research to:

Dr. Erin Pearson, Principal Investigator Associate Professor, School of Kinesiology, Lakehead University Email: <u>erin.pearson@lakeheadu.ca</u>

Appendix P

Letter of Information for Institutional Comparison



School of Kinesiology t: 807-343-8544 f: 807-343-8944

Letter of Invitation for Lakehead University Course Instructors

Dear Lakehead Course Instructor,

You are invited to participate in a project titled "Building an EMPOWERed Classroom: Examining the Impact of a Two-Day Virtual Workshop Among Postsecondary Course Instructors." The project is being conducted by Delaney Johnson, a MSc Candidate in the School of Kinesiology at Lakehead University, along with her supervisor Dr. Erin Pearson, (School of Kinesiology), and committee members Dr. Kathryn Sinden (School of Kinesiology), Dr. Aislin Mushquash (Department of Psychology), and Ms. Lindsey Wachter (Student Health and Wellness).

Purpose of Study

The purpose of this project is to understand course instructor views on mental health literacy, self-efficacy, and psychological wellbeing. You are invited to participate because you are a faculty member/contract lecturer who teaches at Lakehead University. Those who are on sabbatical or have a teaching release are also welcome to participate. If you have taken part in the Building an EMPOWERed Classroom workshop, we ask you to refrain from participating in this survey.

What is Expected of Participants

The on-line survey will take approximately 25-30 minutes of your time and will ask you to provide some demographic information (e.g., age, gender, ethnicity), employment details (e.g., campus location, time employed), questions about your mental health literacy, self-efficacy, and psychological wellbeing.

Your Participation is Voluntary and Confidential

It is important for you to know that your participation in this study is completely voluntary. Therefore, there is no risk to your status or employment with Lakehead University. If you choose to participate there are no anticipated physical or psychological risks that could come to you. However, you may feel uncomfortable divulging views on mental health. All data collected will be anonymous. You will be asked to create a unique identification number to protect your anonymity and questionnaire answers. You are also free to skip questions you feel could serve as identifiers or you are uncomfortable with. Finally, you can withdraw at any time up to the point of data submission. A list of mental health resources is provided at the end of this letter.

Benefits of Involvement

Survey data will help to shape future programming aimed at supporting both students and instructors. Additionally, it will also provide institutional data on mental health literacy, self-efficacy, and faculty wellbeing.

Data Use

The information from the survey will only be for the use of the researchers listed. It is important to note that due to the type of survey software being used, we cannot absolutely guarantee the



School of Kinesiology t: 807-343-8544 f: 807-343-8944

full confidentiality of your data. Survey Monkey is hosted by a server located in the USA, and the US Patriot Act permits US law enforcement officials, for the purpose of anti-terrorism investigation, to seek a court order that allows access to the personal records of any person without the person's knowledge. With your consent to participate, you acknowledge this fact. The completed survey responses will be stored on a password protected computer belonging to the student researcher and Dr. Erin Pearson for a minimum of 7 years per Lakehead University Policy.

By participating in this research, you agree that your anonymous results may be used for scientific purposes, including local presentations and publications in scientific journals. The results of the study will be reported without identifying you personally and without financial gain. You may ask for a copy of the general findings of this research after the study is complete. If you have any concerns, please feel free to contact the researcher below.

This research has been funded by a student award provided by the Centre for Applied Health Research at St. Joseph's Care Group. The researchers declare there are no conflicts of interest relating to the conduct of this research. This project has been approved by the Lakehead University Research Ethics Board. If you have any questions related to the ethics of the research and would like to speak to someone outside of the research team, please contact Sue Wright at the Research Ethics Board at research@lakeheadu.ca. research@lakeheadu.ca.

If you have questions, please contact Delaney Johnson via email to discuss (dljohnso@lakeheadu.ca). Otherwise, please review the following to proceed

Clicking 'next' means that I have read and understand this letter. I am aware of the study purpose, its benefits, and potential risks. I understand that I am a volunteer and free to not answer any of the questions included. I agree to have my anonymous information used by the researchers as part of their project. I am aware that the survey results will be securely stored for a minimum of 7 years after the project is finished. I understand that I can request a copy of the general findings by contacting the researcher below.

Thank you for your consideration.

Yours truly,

Delaney Johnson, Student Researcher HBKin, MSc (c), School of Kinesiology, Lakehead University E-mail: dljohnso@lakeheadu,ca

Dr. Erin Pearson, Principal Investigator Associate Professor, School of Kinesiology, Lakehead University E-mail: erin.pearson@lakeheadu.ca

955 Oliver Road, Thunder Bay, ON, Canada, P7B 5E1 | lakeheadu.ca





Appendix Q

Institutional Comparison Recruitment Poster

