

March 2018

# Barriers and Facilitators to Positive Mental Health on a University Campus

Sheldon Hill

*The University of Western Ontario*

Supervisor

Rodger, Susan C.

*The University of Western Ontario*

Graduate Program in Education

A thesis submitted in partial fulfillment of the requirements for the degree in Master of Arts

© Sheldon Hill 2018

Follow this and additional works at: <https://ir.lib.uwo.ca/etd>



Part of the [Counseling Psychology Commons](#)

---

## Recommended Citation

Hill, Sheldon, "Barriers and Facilitators to Positive Mental Health on a University Campus" (2018). *Electronic Thesis and Dissertation Repository*. 5242.

<https://ir.lib.uwo.ca/etd/5242>

## Abstract

The prevalence of mental health concerns among university students is well-documented and students accessing campus supports appear to be increasing. The objective of the current study was to gain a holistic and thorough perspective of the facilitators and barriers affecting positive mental health from the undergraduate student perspective. Data collected via an online form asked students about their current perspectives of mental health at an institutional level. A thematic analysis was performed and four overall themes were identified: trust in and quality of services, validation of mental health concerns, institutional procedures and environment, and stigma. The various themes and factors identified highlight the complex nature of mental health at the post-secondary level. Implications for institutional practice and broad understanding of student mental health are discussed.

*Keywords:* student mental health, post-secondary education, undergraduate student, mental health services, stigma, campus culture

## Table of Contents

Abstract.....	ii
Table of Contents.....	iii
List of Tables.....	v
List of Figures.....	vi
Introduction.....	1
Literature Review.....	2
Dual Continuum Model of Mental Health	2
Mental Health of Post-Secondary Students	4
Ecological Systems Theory	7
Self-Determination Theory	8
Institutional Role in Supporting Student Mental Health	9
Benefits of Positive Student Mental Health from an Institutional Perspective	11
Mental Health and Academic Success	13
Mental Health Resources on Post-Secondary Campuses	14
Barriers to Mental Health Help-Seeking	16
Facilitators to Mental Health Help-Seeking	19
Mental Health Strategy	20
Research Question.....	21
Methods.....	22
Measure	23
Site of Study	24
Participants	24
Data Analysis	25
Trustworthiness	27
Results.....	28
THEME 1: Trust in, and Quality of, Professional Services	30
Features of Services	30
Awareness and Accessibility	31
Reputability	32
THEME 2: Validation of Mental Health Concerns	32
Understanding of and Compassion for Student Experience	33
Faculty and Staff Response	34
THEME 3: Institutional Procedures and Environment	34
Academic Breaks	34
System Navigation	35
Environment	35

THEME 4: Stigma	36
Public	36
Self	37
Discussion.....	37
Trust in, and Quality of, Professional Services	38
Number and Types of Services	38
Awareness of Services	40
Counselling Expectations	41
Accessibility of Services	41
Reputability of Services	44
Validation of Mental Health Concerns	46
Institutional Procedures and Environment	49
Stigma	52
Implications	54
Limitations	57
Strengths	59
Implications for Practice	60
Future Directions	61
Summary	61
References.....	62
Curriculum Vitae.....	70

## List of Tables

Table 1: Themes and Frequency of Subtheme Responses.....	28
Table 2: Themes and Subthemes Written as Facilitators by Respondents.....	29

List of Figures

Figure 1: Dual Continuum Model of Mental Health and Mental Illness.....

## **Introduction**

Mental health issues are prevalent and well-documented as affecting the functioning of the general population, and studies show that the rate of mental health concerns have remained persistently high. A study from the National Population Health Survey in Canada examined mental health trends and found the self-reported frequency of poor mental health remained approximately the same over a six-year span (Simpson, Meadows, Frances, & Patten, 2012). The conclusions from this survey also indicate an increase in the diagnosis and treatment of mental illness, showing increased importance of mental health among Canadians. Of particular importance are post-secondary education students, who make up a sizeable proportion of the Canadian population and may face mental health challenges during their studies.

In 2015, more than two million students enrolled in post-secondary education in Canada, which is an increase from the previous year (Statistics Canada, 2016). With over 280 Canadian colleges and universities available for students to attend, understanding the mental health needs of this large demographic becomes an important research focus, especially when considering the effect that mental health issues have on academic achievement and retention rates (Statistics Canada, 2014; Antaramian, 2014; Coniglio et al., 2005). Furthermore, in contrast to the greater Canadian population, mental health issues are increasing on post-secondary campuses. This conclusion was reflected in a qualitative study by Watkins, Hunt, and Eisenberg (2011) who interviewed post-secondary counselling centre administrators. The importance of supporting mental health at the post-secondary level has become a focus of institutions across Canada, therefore, having a holistic and comprehensive understanding of the factors that affect student mental health is crucial.

The current study examined mental health among university students, exploring the barriers and facilitators to positive mental health on a university campus. This study examined the student experience and understanding of mental health at an institutional level. The data is themed into overarching and holistic factors that affect student mental health on a university campus, with implications and future directions discussed. In this literature review, the theories that were considered while analyzing this research, the literature related to mental health at post-secondary institutions, the institutional role in supporting mental health, and previously studied barriers and facilitators to positive mental health will be explored.

## **Literature Review**

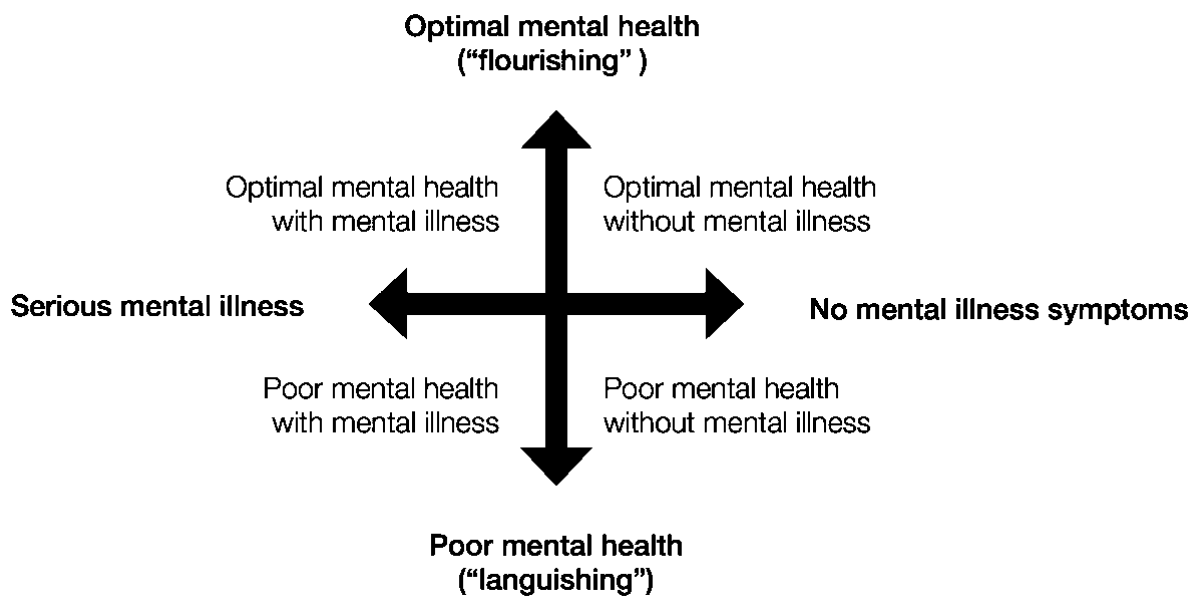
### **Dual Continuum Model of Mental Health**

Mental illness is a series of diagnosable disorders, such as anxiety or depression, which impair functioning (Westerhof & Keyes, 2010). The extant literature defines mental health as the absence of mental illness, but this concept is contested by Westerhof and Keyes (2010), who posit that while previous models suggest that mental health is entirely informed by the presence or absence of mental illness, their Dual Continuum Model of Mental Health suggests that mental health and illness are separate, but related constructs. Research has shown this model to have been successfully applied to data that treats these constructs as separate (Westerhof & Keyes, 2010). This means that a person who has mental illness can have positive mental health, and a person living without mental illness can be mentally unhealthy. This more inclusive definition allows for a broader exploration and understanding of mental health and illness because it allows for a complex understanding; specifically, a person may be struggling with their mental health in the absence of a diagnosable mental illness.



Westerhof and Keyes (2010) further explored the construct of mental health by outlining three influential components: emotional, psychological and social wellbeing. Emotional wellbeing pertains to feelings of satisfaction, happiness and accomplishment in one’s life. Psychological wellbeing pertains to optimal functioning in our individual life, while social wellbeing pertains to optimal functioning of a group or community in which we live. The authors note that these three concepts are all subjective evaluations that the individual makes about themselves, their lives and those around them. Positive mental health, called “flourishing” by the authors, combines high emotional wellbeing with high psychological and social functioning. Negative mental health, called “languishing” by the authors, combines low emotional wellbeing with low psychological and social functioning. A combination of high and low wellbeing among the three components is referred to as moderate mental health.

Figure 1. Dual Continuum Model of Mental Health and Mental Illness (MacKean, 2016)



As shown in Figure 1, mental health is on a spectrum, with flourishing at one end and languishing on the opposite. The model also indicates that mental illness is on a spectrum with the presence of mental illness at one end and no mental illness at the opposite. The authors define

“complete mental health” as reaching a state of flourishing with no mental illness. The authors also found that the experience of languishing was comparable to that of living with a mental illness. The importance of this model is that it broadens the definition of mental health and illness, going beyond relying on psychiatric diagnoses of mental health disorders. Both concepts of mental health and illness will be considered in this study, but will be referred to as “mental health” which encompasses mental illness and mental health related concerns. When “mental illness” is used in the literature review, the author’s focus was on examining only mental illness.

For the purpose of this study, mental health is defined as a “state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (World Health Organization, 2014). Furthermore, health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 2014).

### **Mental Health of Post-Secondary Students**

While research has found that there is no significant difference in the prevalence of mental health issues between college students and their non-college peers (Blanco et al., 2008), post-secondary education can be a difficult transition for many students which affects their mental health. Specifically, increased academic challenge, loss of previous social relationships, living with roommates, physical illness and developing new attachments and relations have all been shown to affect mental health (Cleary, Walter & Jackson, 2011; Carr, Colthurst, Coyle & Elliott, 2013). A consequence of negative mental health during a student’s post-secondary career has been shown to have a detrimental impact on academic achievement, which can lead to students leaving the institution prior to successful completion of their degree (Renshaw &

Cohen, 2013). This provides evidence supporting the notion that mental health concerns can act as a barrier to completing post-secondary education, threatening future career prospects for these students (Coniglio, McLean, & Meuser, 2005). However, what trends of mental health concerns are there among post-secondary students?

The post-secondary experience can be stressful and wrought with emotion. A survey completed by the American College Health Association (2016) gathered responses from 41 Canadian post-secondary institutions and over 43,760 student respondents, and included questions pertaining to mental health. The results showed that 64.5 percent of participants reported that they had felt ‘overwhelming anxiety’, 60.6 percent had felt ‘more than average’ to ‘tremendous stress’, 88.2 percent had felt ‘exhausted’ and 89.5 percent had felt ‘overwhelmed by the amount of work’ they had to do during their post-secondary studies. In addition, respondents indicated what had been traumatic or difficult to handle over the previous twelve months, and the results showed that 58.1 percent struggled with academics, 40.4 percent with finances, and 33.8 percent with intimate relationships (American College Health Association, 2016). These results demonstrate that post-secondary students struggle during their studies with a variety of problems, and highlight the importance of services to support students on campus.

The previous survey examined self-reported feelings, which are different than diagnosed mental illness. A study by Zivin, Eisenberg, Gollust, and Golberstein (2009) examined mental illness among post-secondary students by utilizing a web-based survey to obtain data from 763 students at a large, public university in the United States. The survey measured depression, anxiety, disordered eating, self-injury, suicidal thoughts, medication use, therapy use, and the perceived need for professional help. The results showed that about 33 percent of the sample reported living with a mental illness: depression and disordered eating were the most frequently

identified. Furthermore, an additional survey was administered two years after the first and the results indicated that these problems persisted over time in the student population.

A national study of American college students by Blanco et al. (2008) examined the prevalence of mental illness in college and non-college populations. With over 2,000 respondents, the results showed that about 46 percent of college students met the diagnostic criteria as outlined in the Diagnostic and Statistical Manual for Mental Disorders (DSM-IV), for at least one mental illness. Specifically, 20 percent met the criteria for alcohol use disorder, about 18 percent for a personality disorder, about 12 percent for an anxiety disorder, and about 11 percent for a mood disorder. This aligns with the findings of Zivin et al. (2009), and reflects the broad range of mental illnesses that post-secondary students experience. Therefore, the percentage of those living with mental illness during post-secondary education is quite high, showing that post-secondary students are a high-risk population for mental illness (Blanco et al., 2008). However, the authors did not differentiate between those students experiencing a single mental illness and those experiencing more than one, which may have made the number of diagnoses appear more frequent if some respondents had multiple comorbid disorders.

Some of the risk factors of mental health issues for post-secondary students include their age, the common age of the onset of many mental illnesses, the transition to post-secondary education, and the increased number of students attending post-secondary institutions with pre-existing mental health issues. A study by Kessler et al. (2005) examined the age of onset for a variety of mental illnesses outlined in the DSM-IV and found that 75 percent of adults with mental illness could be identified by the age of 24. Considering that finding with the American College Health Association (2016) survey which shows the average post-secondary student age as 23, there is a high likelihood that there are students attending a post-secondary institution who

have experienced the onset (or full effect) of a mental illness during their studies. Considering that many factors can affect student mental health, it is pertinent to recognize the various levels of the post-secondary environment which affect student health.

Ecological Systems Theory, which considers what affects mental health on various levels is an applicable and important theory that was used when analyzing the data in the current study, and considering the institutional implications of student mental health (Bronfenbrenner, 1994).

### **Ecological Systems Theory**

The Ecological Systems Theory posits that humans' experiences are informed by many factors on multiple levels, ranging from an individual level (microsystem) to a community level (macrosystem; Bronfenbrenner, 1994). Bronfenbrenner's Ecological Systems Theory defines microsystems as the person-to-person or person-to-environment interactions that people have, while macrosystems operate at a much broader level, encompassing culture, values, and societal norms (Bronfenbrenner, 1994). This model was applied to mental health in a study by Byrd and McKinney (2012) which examined college student mental health. An important aspect of the theory underscored in this study is that there are multiple factors that impact the mental health of a student and that it cannot be isolated to a single variable. Byrd and McKinney (2012) applied the theory to college student development by reducing Bronfenbrenner's theory (1994) from five levels to three: individual, interpersonal and institutional.

The individual level focuses on students' emotional, cognitive, and physical health, as well as internal influences of confidence, motivation, and self-evaluation of skills and qualities. The interpersonal level focuses on interactions and engagement with other people. The institutional level focuses on the impact of social culture, academic pressures and teaching practices at the post-secondary institution (Byrd & McKinney, 2012). This theory is explained as

a series of levels of a circle where individual is the center and the levels move outward, with institutional being the outer level. This means that the outer level encompasses all other levels and levels all affect each other.

The Ecological Systems Theory (Bronfenbrenner, 1994) is applicable to mental health research because it takes a holistic approach to the wellbeing of people, including mental health in post-secondary students. This approach aligns with many aspects of student development and factors that can impact wellbeing. Additionally, it highlights post-secondary institution's responsibility and ability to provide an environment and culture that is conducive to positive mental health, rather than mental health as the sole responsibility of the student. Specifically, the policies, procedures, campus culture and environment are all affected by the post-secondary institution and operate at the interpersonal and institutional levels that affect the student. This suggests that both the student and the institution must take responsibility for mental health, so it is apt to consider individual motivation and institutional goals for student mental health.

### **Self-Determination Theory**

Factors to consider in terms of what post-secondary services, policies, procedures, campus culture and environment are needed to enhance student mental health can be informed by Ryan and Deci's Self-Determination Theory (SDT; 2000) which is a meta-theory that explains human motivation as humans having an internal drive to meet three psychological requirements necessary for wellbeing: competence, relatedness, and autonomy. Competence, when met, is a feeling of experience and mastery, sometimes described as confidence in oneself. For example, competence among university students may be achieving a high grade-point average after learning all required material. Relatedness, when met, is meaningful connections with others and the feeling of being cared for and caring for others. For example, relatedness among university

students may be forming authentic relationships with peers. Autonomy, when met, is a feeling of control and choice in one's life. For example, autonomy among university students may be choosing degree specializations without interference from family or friends. Self-Determination Theory posits that if these three needs are met, one is psychologically well.

Using the SDT framework, barriers to student mental health can be conceptualized as anything that undermines competence, relatedness, or autonomy. Conversely, facilitators to student mental health can be conceptualized as anything that enhances competence, relatedness, or autonomy. While Self-Determination Theory focuses on the individual (Ryan & Deci, 2000), it is important to recognize that the Ecological Systems Theory posits an impact of various levels on the individual, such as institutional and community factors (Bronfenbrenner, 1994).

The current study considers the student perspective and, as such, the psychological needs of Self-Determination Theory (Ryan & Deci, 2000) are applicable to each and every student. However, the Ecological Systems Theory (Bronfenbrenner, 1994) is applied to the factors that impact their mental health which can be on an individual, interpersonal, and institutional level, but these factors are still understood to undermine or enhance feelings of competence, relatedness, and autonomy. Following the tenets of Ecological Systems Theory (Bronfenbrenner, 1994) and Self-Determination Theory (Ryan & Deci, 2000), the role of the institution in supporting student mental health emerges as a joint responsibility shared by both students and institutions.

### **Institutional Role in Supporting Student Mental Health**

The current study predominantly focuses on the barriers and facilitators affecting student mental health at the institutional level. Students may require support and guidance during many points of struggle throughout their academic careers and post-secondary institutions can assist

them. A report by the Canadian University and College Counselling Association (Coniglio et al., 2005) explored the current climate of personal counselling on Canadian campuses. The authors suggest, based on the perspective of students and some post-secondary counsellors, that institutions should be responsible to provide personal, career, and academic support in order to promote student success. However, the authors state that at its most basic level, on campus mental health support should align with the mandate and mission of the post-secondary institution. Furthermore, they highlight that many institutions strive for positive mental health on campus can affect student success, with the ultimate goal of having high rates of student retention. This perceived responsibility for post-secondary institutions to support students who are struggling with their mental health has led to institutions developing resources and services focused on mental health.

A survey of Canadian post-secondary counselling centres was performed, examining many different components of the centres at 56 institutions and included questions about the institution, staff, budget, services, clients, concerns, and suggestions for change (Crozier & Willihnganz, 2005). Focusing on the data from the services component, 97 percent of institutions offered personal counselling, 81 percent offered career counselling and academic counselling, and 69 percent offered learning skills services. Based on this data, it appears that the majority of post-secondary institutions have support available for their students. Additionally, support was not isolated to counselling services, with many institutions offering a preventive approach to mental health concerns: 49 percent providing outreach to students, 44 percent offering psychoeducational workshops, and 22 percent offering growth, sensitivity, and/or encounter groups. The existence of these resources and funding that institutions allocate to mental health services is indicative of the importance of student mental health at an institutional level.



Ten American post-secondary institutions were studied by Watkins, Hunt, and Eisenberg (2011), examining mental health services on campuses. The authors interviewed administrators in post-secondary counselling centres to determine whether there was a change in service utilization and student needs. They found that the need for student support is not static, but that mental health concerns are increasing in severity. The results indicate that there is an increased need for mental health services on campus and the concerns that students are presenting with are becoming more severe. Further questions focused on this increase and the results suggest that the generation entering post-secondary education may have been raised to value academic competition with their peers, leading to anxiety when entering post-secondary if they cannot meet their own expectations. The results showed a theme of parents who were highly involved when the students were growing up and they would resolve many obstacles and challenges for their children. As such, when students enter post-secondary education and they have less parental support, they may struggle to do all of the activities of daily living that were once done for them.

A comment one of the interviewees made was that it is important for the institution to work collaboratively when supporting students because the student experience is multi-faceted. This multi-faceted student experience is important to institutions partially because of the financial impact of students leaving the institution before completing their degree.

**Benefits of positive student mental health from an institutional perspective.** As Coniglio et al. (2005) reported, institutions supporting their students' mental health can affect their retention rates, and high retention rates are a financially motivated goal for institutions. In a report by Statistics Canada (2011) that surveyed spending in post-secondary institutions, the findings showed that the majority of money at institutions comes from public sources like government grants, but 39 percent comes from private sources. Specifically, 22 percent of

university revenue comes from tuition and ancillary student fees in Canada. With a large portion of post-secondary institutions' finances coming from tuition and student fees, the importance of retaining students for the duration of their degrees becomes crucial, from an institutional perspective. Since Coniglio et al. (2005) found negative mental health can decrease retention rates, supporting positive mental health has become a focus at institutions for the financial benefits of having more students paying post-secondary tuition and fees (Hunt, Watkins, & Eisenberg, 2012).

A study by O'Keeffe (2013) reviewed the extant literature pertaining to student retention rates, exploring common causes of student attrition. O'Keeffe's review aligns with the findings of Coniglio et al. (2005), where the author notes that mental illness has been linked to non-completion of post-secondary programs. Further, O'Keeffe (2013) asserts that post-secondary institutions must maintain a supportive environment for the mental health of their students because the environment and services are being evaluated by potential students when selecting an institution to attend. This emphasizes the value of maintaining positive student mental health from an institutional perspective as it not only affects retention rates, but can impact the number of incoming students.

A qualitative study examined how funds are allocated toward mental health support on campuses and the emerging theme that mental health became a focus only once mental health crises were happening at the institution or were in the media at other institutions (Hunt et al., 2012). This study was based in the United States and the authors interviewed administrators from ten different institutions. The authors state that a theme of mental health support as a reaction to a mental health related events would lead to a greater allocation of funding for mental health concerns for students. The financial burden of students leaving the institution and the reactive

approach that post-secondary institutions may take highlights the importance of understanding the facilitators and barriers to enhancing student mental health.

**Mental health and academic success.** The implications of negative mental health can be broad and all encompassing, but of particular interest are academics and engagement as important factors for students (Antaramian, 2014). A study conducted by Antaramian (2014) applied the Dual Continuum Model of Mental Health to examine the impact of mental health on academic success and engagement. A number of different questionnaires comprised a survey that was administered to 561 students at a post-secondary institution in the United States. The author created four groups based on the Dual-Continuum Model. About 47 percent of students were “well-adjusted”, with positive mental health and low mental illness. About 5.5 percent of students were “ambivalent”, with positive mental health and high mental illness. About 26 percent of students were “at-risk”, with negative mental health and low mental illness. About 21 percent of students were “distressed”, with negative mental health and high mental illness.

Antaramian (2014) then examined the groups of students in relation to academic performance and engagement. The results showed that well-adjusted students had the highest grade point averages (GPA), significantly higher than distressed students, but not significantly different than ambivalent or at-risk students. Well-adjusted students had significantly higher academic, peer, faculty, intellectual, and beyond-class adjustment than both at-risk and distressed students, but no difference compared with ambivalent students. Interestingly, the two groups of students that had positive mental health (well-adjusted and ambivalent) showed the greatest significant differences with the groups that had negative mental health (at-risk and distressed). This suggests that, in terms of student engagement, mental health is a stronger mediator of behaviour than mental illness. This study has two important conclusions: the Dual-Continuum

Model of Mental Health can be applied to post-secondary student populations and mental health influences both academic success and student engagement. With the clear presence of negative mental health on post-secondary campuses, a question that becomes important to consider is how can post-secondary institutions support their students?

### **Mental Health Resources on Post-Secondary Campuses**

The extant literature has a heavy focus on exploring and assessing campus counselling centres, but as the Ecological Systems Theory (Bronfenbrenner, 1994) posits, there are many factors and levels that impact students' mental health which may not be best supported with counselling; for example, campus culture is a factor that is not addressed at the individual level and is beyond the scope of personal counselling. Looking at the extant literature on mental health support, there is a thorough review of negative mental health prevention programs in post-secondary education (Conley, Durlak, & Kirsch, 2015). Prevention programs focus on developing skills and disseminating information to students before negative mental health symptoms present, with the goal that students become able to help themselves to avoid having negative mental health experiences.

A meta-analysis by Conley et al. (2015) examined 103 research studies that discussed prevention and interventions offered at post-secondary institutions. The authors considered six categories of programs to measure: psychoeducational, cognitive-behavioural, relaxation, mindfulness, social skills, and other. Psychoeducational and cognitive behavioural interventions were the most frequently implemented among institutions, accounting for 24 and 36 percent of the sample, respectively. The results showed that mindfulness, relaxation, and cognitive-behavioural interventions were the most effective, followed by social skills interventions, then psychoeducational interventions. The results are interesting, since psychoeducational workshops

were quite high in frequency, yet were the least effective at enhancing positive student mental health. The interventions were also categorized based on how the service was facilitated: supervised practicing of skills, unsupervised practicing of skills, or strictly psychoeducational information. The results showed that interventions with supervised skill-building components were more effective in supporting students than unsupervised skill-building or psychoeducational programming. Furthermore, Conley et al. (2015) found that mental health programs have been successful in helping students by changing perceptions and behaviours. This supports the importance of having preventive, educational, skill-building initiatives that positively impact mental health before students present with negative mental health.

As previously discussed, many post-secondary institutions offer personal, academic, and career counselling (Coniglio et al., 2005) and the utilization of counselling services has been increasing due to increasing severity of student mental health issues (Watkins et al., 2011). Although this has not been directly studied within the extant literature, it is important to recognize that the average increase in enrolment across Canadian post-secondary institutions is 1.2 percent which may affect the demand for services since the number of students increase on campuses each year (Statistics Canada, 2015). However, despite the presence of on campus services, a study by Rosenthal and Wilson (2008) found that many students who need counselling services and support do not use the services on campus, which was mediated by students' level of psychological distress. The study previously discussed by Zivin et al. (2009) measured any professional help the students utilized and found that over 50 percent of students surveyed had a mental illness, but less than 50 percent of respondents who had a mental illness sought help. This finding is reflected in a review of counselling service utilization on post-

secondary campuses (Rosenthal & Wilson, 2008), highlighting the contradiction between those students who need mental health support, yet do not seek out help.

Rosenthal and Wilson (2008) focused on the use of counselling services on campus by surveying a large number of students at two post-secondary institutions. The results showed that about 74 percent of the respondents were in moderate distress and 9 percent in significant distress, as measured by the Psychological Distress Scale which had questions focusing on anxiety, depression, and anger. Further, 90 percent of the respondents indicated that they had not used counselling in the last six months, with 5 percent reporting they had attended a single counselling session. The findings in Zivin et al.'s (2009) and Rosenthal and Wilson's (2008) studies give a clear context of the use of counselling services on campus, but it is contradictory to the need shown by the students, based on the experiences and threats to their mental health during their post-secondary career (Cleary et al., 2011; Carr et al., 2013).

### **Barriers to Mental Health Help-Seeking**

While attending a post-secondary institution, the onus of responsibility for seeking help is on the student and, as discussed, most institutions have resources available to support mental health concerns (Eisenberg, Hunt, & Speer, 2012; Coniglio et al., 2005). In a review of mental health help-seeking behaviour, Eisenberg et al. (2012) define help-seeking as a student's decision and willingness to find and utilize mental health resources. Furthermore, examining the barriers and facilitators to help-seeking, such as attitudes and knowledge about mental health, is important to understand the disconnection between perceived need of help (Watkins et al., 2011) and service utilization on post-secondary campuses (Rosenthal & Wilson, 2008).

The factors that impact the use of mental health services on campus may be mediated by help-seeking behaviour (Eisenberg, Golberstein, & Gollust, 2007). A study by Eisenberg et al.

(2007) examined university students' rates of mental illness, whether they had sought help, and the reasons that stopped them from utilizing services. The results showed that about 15 percent of the respondents sought out psychotherapy or psychiatric help. The survey screened for a number of different disorders and the proportion of respondents who sought help differed based on the disorder for which they screened positive. However, the authors concluded that the percentage of people utilizing services on campus, considering the number of students who tested positive for at least one mental illness, was quite low.

The survey provided an opportunity for students to indicate what factors influenced the likelihood of seeking professional help. This component of the survey showed help-seeking behaviour was negatively impacted by unawareness of services on campus, the perception of therapy and medication as somewhat or not helpful, an unawareness of health insurance coverage for mental health, and growing up in a poor family. The authors conclude that institutions can increase help-seeking behaviour by offering more educational programs and workshops to counteract the unawareness of resources and misperceptions about the use of therapy and medication. However, a limitation in the design of this study is that the factors associated with help-seeking were pre-selected by the researchers, limiting the responses that the students may have given if a survey with open-ended questions had been used.

A study by Tinklin, Riddell, and Wilson (2005) examined the students experiencing mental health issues at a post-secondary institution in the United Kingdom. The design of the study was a qualitative approach, using interview methods to explore and understand the perspective and experience of the students. There were a number of themes identified after the five interviews were examined which speaks to the overall experience of mental health support on campus. One prominent barrier was the stigma associated with mental health concerns, which

stopped students from seeking help from others and led to a fear of disclosure, and previous experiences of alienation after disclosing mental health concerns. The students identified that there was a culture on campus that seemed to be uncaring, speaking to times when other students noticed something was wrong, but said or did nothing to help.

Stigma has been found to impact help-seeking behaviour, as studied by Eisenberg, Downs, Golberstein, and Zivin (2009). The authors surveyed 5,555 students at 13 post-secondary institutions in the United States, seeking to understand any association between help-seeking behaviour on campus and feelings of stigma. The authors focused on two types of stigma: self-stigma, which is defined as stereotypes and prejudices toward mental health, and perceived public stigma, which is defined as the individual perception of the public's stereotypes and prejudices towards mental health. The results indicate that those students with high levels of perceived public stigma were correlated with high levels of self-stigma. While perceived public stigma was not correlated with help-seeking behaviour, the results indicate that high levels of self-stigma are correlated with low help-seeking behaviour. The impact of self-stigma appears to negatively impact help-seeking behaviour, which may hinder on campus service utilization by post-secondary students.

Further, academic experiences contributed to negative mental health of participants, evidenced by participants reporting feeling “put down” when asking questions, experiences with unsupportive faculty members, and loss of identity when not excelling academically (Tinklin et al., 2005). Finally, the authors found that the students spoke to a lack of empathy from lecturers and staff who dismiss their mental health concerns as “normal stress” from school. In contrast to the study by Eisenberg et al. (2007), this qualitative approach by Tinklin et al. (2005) gained different insight since the participants were given the flexibility to speak to their experiences



through a qualitative design, with themes being developed based on student responses, rather than before data collection. While Tinklin et al.'s study (2005) identified some areas of improvement for post-secondary institutions, it did not focus on what serves as facilitators for enhancing student mental health.

### **Facilitators to Mental Health Help-Seeking**

Gulliver, Griffiths, and Christensen (2010) reviewed quantitative and qualitative studies examining perceived barriers and facilitators to help-seeking in young adults. The authors examined 22 published studies and found a number of themes for perceived barriers to help-seeking for mental health concerns. It is important to note that there were 13 studies that examined barriers while only 3 studies examined facilitators, so the authors recognized the limited analysis that they were able to provide. Additionally, the three studies analyzed were all qualitative, suggesting that the authors did not find any randomized controlled trials that focused on facilitators for seeking help with mental health concerns.

The themes that emerged from the three studies that studied facilitators act as an important starting point for the current study. The eight themes that Gulliver et al., (2010) found are positive past experience with help-seeking, social support or encouragement from others, confidentiality and trusted providers, positive relationships with service staff, awareness and education, perceiving the mental health problem as serious, ease at expressing emotion, and attitudes toward seeking help. The lack of literature in this area underscores the importance of examining both barriers and facilitators to promoting and enhancing student mental health. With the review of barriers and facilitators in the extant research, it is clear that the number of considerations and factors required to holistically understand student mental health is quite high. As such, some post-secondary institutions in Canada have begun creating a comprehensive,

systemic approach to student mental health in the form of mental health strategies or frameworks (Canadian Association of College and University Student Services [CACUSS] & Canadian Mental Health Association [CMHA], 2013) to develop positive change on post-secondary campuses.

### **Mental Health Strategy**

An examination of the current state and future directions of mental health has been addressed by governments in the form of mental health strategies, frameworks, or charters, with post-secondary institutions adopting the method of studying mental health on campus and creating a mental health strategy to understand current needs and possible changes for the institution (Mulvale, Chodos, Bartram, MacKinnon, & Abud, 2014). Mental health strategies evaluate the gaps and barriers to positive mental health and seek to understand what promotes and enhances mental health (Mulvale et al., 2014). Additionally, some responses to mental health concerns on post-secondary campuses are a reaction to circumstance (Hunt et al., 2012), so developing a mental health strategy gives a holistic perspective of student mental health, rather than a reaction to circumstance or events (Mulvale et al., 2014). Further, in a review of current student mental health policies across Canada, De Somma, Heck, MacQueen and Jaworska (2017) found that less than 25 percent of institutions stated they had policies in place for supporting various mental health concerns among students. This suggests that more policy and institutional change is needed on post-secondary campuses to increase the number of policies and procedures that underpin positive student mental health.

CACUSS and CMHA (2013) collaborated to create a guide for post-secondary institutions to examine student mental health from a systemic perspective, considering institutional reform of policies and procedure to be conducive of positive student mental health.

Furthermore, authors of the Okanagan Charter (2015), a framework developed for universities and colleges, state that post-secondary institutions have the responsibility to “incorporate health promotion values and principles into their mission, vision and strategic plans, and model and test approaches for the wider community and society”. Factors within the post-secondary system can promote and enhance positive student mental health, suggesting that research should consider mental health at an institutional level, rather than solely focusing on the other levels discussed in Bronfenbrenner’s Ecological Systems Theory (1994).

The Okanagan Charter (2015) recommended that an institutional review and proposed changes should consider the student voice and experience. The authors reported that there are connections between environments and individuals, and that health is created and affected by people within environments that affect their daily life, such as post-secondary campuses (Okanagan Charter, 2015). Additionally, CACUSS and CMHA (2013) authors stated that a systemic approach should be student-directed with inclusion of the student voice in development of any strategy or framework. These statements suggest that the levels of Bronfenbrenner’s Ecological Systems Theory are interconnected on post-secondary campuses, with the individual perspectives and experiences of students being used to inform change at the institutional level.

### **Research Question**

As reflected in this review, there are numerous factors that can affect mental health for post-secondary students, which can impact academic success and retention; this gives post-secondary institutions a vested interest in exploring the factors that impact student mental health (Cleary et al., 2011; Carr et al., 2013; Eisenberg et al., 2007; Conley et al., 2015).

The current study examined what prohibits and enhances positive mental health on a large university campus by analyzing information gathered to create a university mental health

strategy. Specifically, what are the perceived barriers and facilitators mental health on a university campus? The current study is exploratory in nature, taking a holistic approach to understanding the factors that impact services, policies, procedures, campus culture and environments at all levels of the university experience, as informed by Bronfenbrenner's Ecological Systems Theory (1994). This holistic approach considers many disparate factors that affect the experience of student mental health and how these factors are connected. Barriers are any factors that undermine feelings of competence, relatedness, and autonomy in students, as described by Self-Determination Theory (Ryan & Deci, 2000). Similarly, facilitators are any factors that enhance feelings of competence, relatedness, and autonomy in students. This study will extend previous research by holistically examining all factors that impact student mental health without focusing on a singular source. Furthermore, the design of this study allows for the student perspective to be heard and understood, something that has been limited in previous research that used structured, quantitative methods (Eisenberg et al., 2007).

### **Methods**

The data being analyzed in this study was secondary data collected as a part of mental health strategy development and consultation process at a large, research-intensive university in Ontario, Canada which will hereafter be referred to as University X. This project was supported by the institution with the intention of creating a holistic institutional strategy which would outline the current status of mental health, perceived limitations, and recommendations for changes on campus. The data was collected by the Mental Health Strategist, an employee of University X who has a strong background in research and mental health. There were various forms of data collection, but survey data via an online form was analyzed in this study. As the data analyzed was secondary data, the questions asked in the online form were created by the

Mental Health Strategist with no input from the principal investigator. The online form included questions about the respondents' year of study, level of study, and asked a number of open-ended questions with textboxes available to provide written answers. This form was available for all students to access for approximately six weeks and all students were invited to participate via campus-wide emails that the Mental Health Strategist was given access to in order to perform her work.

### **Measure**

The questions asked in the online form were:

1. "What does University X do well with respect to creating a culture on campus that promotes wellbeing?"
2. "What are the gaps and barriers to promoting wellbeing on campus?"
3. "Do you have any ideas on how University X can improve wellbeing among students?"
4. "What programs and services are needed to support students who experience mental health challenges in effectively navigating their studies?"
5. "What can we do to promote help-seeking behaviour among students?"

Responses to all of the questions were considered during data analysis. While the first three questions noted above use the word "wellbeing" without indicating "mental wellbeing", this questionnaire was explained in the email as lending towards the mental health strategy, providing context for the word "wellbeing".

The online data was collected from November 2015 to January of 2016. All data was stored on a password protected computer and was only accessible to the Mental Health Strategist, any additional staff working on the project, and the principal investigator. There was no identifying information collected from participants who responded via the online response

form. Further, the study was deemed to be using secondary data by the Research Ethics Board and as such, the project did not require an ethics review.

### **Site of Study**

University X is a public, research-intensive university located in southwestern Ontario, Canada. University X had a student population of approximately 29,000 in 2016, with approximately 23,500 of those students being undergraduate students. The institution offers a number of different resources meant to enhance positive student mental health (Reference suppressed). These resources target various levels as outlined in the Ecological Systems Theory (Bronfenbrenner, 1994), with the main categories focusing on prevention, support, and crisis response of mental health concerns (Reference suppressed).

### **Participants**

The participants were undergraduate students at University X. The focus of the current study was on undergraduate students because the institution is primarily an undergraduate institution, with 82 percent of the student population being undergraduates (Reference suppressed). All undergraduate students, totaling approximately 23,139 students, were invited to complete the online form, communicated to them by multiple emails from the Mental Health Strategist which included a link to the online form.

Approximately 321 responses were collected through the online feedback form, which is a response rate of about 1.4%. Responses came from undergraduate students in their first to fifth year and were organized in a Microsoft Excel document. The responses were sorted to group respondents by year of study with the sample including 61 first year students, 76 second year students, 78 third year students, 93 fourth year students and 13 fifth year students. Responses

were only sorted by year of study and as such, within each group there were no other characteristics that affected the order of responses.

All participants were numbered from one to 321 based on the order they appeared in the Excel spreadsheet after sorting by year of study. An online random number generator was used to ensure random sampling of 20 participants from the data. Twenty respondents were selected as the sample with the intent of assessing if saturation of content was met after the data was analyzed (Creswell, 1998). If saturation had not been met with 20 responses, more respondents were to be included in the data analysis. Saturation was reached when responses from participants repeated previous comments or informed similar themes. Analysis of the twentieth participant's responses revealed that all responses fell within preliminary themes and saturation was met.

Sampling was done such that the year of study of the 20 participants was roughly equivalent to the overall sample of respondents. Specifically, there were four first, four second, four third, seven fourth and one fifth year student's responses that were selected for analysis. As such, some participants who were initially selected were not included in the sample if including that respondent did not align with the demographic year of study representation of the overall sample. Further, if participants had not answered all questions on the online form, they were not included in the analysis and another participant was selected using the online random number generator.

### **Data Analysis**

A thematic analysis was performed based on six steps outlined by Creswell (2003). In the first step, data was organized and prepared for analysis. Specifically, responses were copied from an Excel spreadsheet into a Microsoft Word document and sorted based on each question, across

respondents. For each respondent, all of their responses were marked by the same colour and font to allow differentiation between respondents, and to be able to track all of the participants' answers across all questions. Line numbering was used in the document to allow simple documentation of what themes were noted at what line. This document was printed for analysis by the principal investigator.

In the second step, all of the sampled responses were read by the principal investigator to form a general impression of the data before coding began. This step was used to familiarize the researcher with the data before coding each response. The third step included coding and chunking information into themes. Upon a second review of the data, initial coding was completed for each response, which included writing initial thoughts in the margins of the data, and the development of approximately 20 themes emerged. The fourth step involved creating a description of overall common themes, generating themes that are more encompassing and holistic of the data. A third review of the data included consistent coding of data based on all of the previous themes created. The themes were reviewed and consolidated, resulting in four themes, with a varying number of subthemes for each theme.

The fifth step involved selecting quotations that represented each theme and subtheme to illustrate the descriptions of the themes. These quotations are presented in the results section and act as examples and evidence of the themes created. The sixth and final step involved interpreting the data, considering this writer's educational and experiential background, and the literature review was completed to understand the implications and future directions of this data.

For the most part, themes operated at the institutional level of the Ecological Systems Theory (Bronfenbrenner, 1994). Themes were originally considered to be grouped into barriers or facilitators, however, each theme identified as a facilitator was also identified as a barrier. As



such, some themes and subthemes act as both a barrier and facilitator, while others operate only as a barrier. The differentiation between the two is further explored in the discussion and those that acted only as a barrier and not a facilitator, have been noted.

### **Trustworthiness**

A review of Shenton's (2004) evidence-based protocols regarding research protocols, procedures and analysis was implemented to ensure that the research was trustworthy. Firstly, a thorough literature review was completed to understand the current knowledge of student mental health, as well as the common and recognized methods of completing research in this area. Secondly, steps were taken to encourage honest responses from respondents, evidenced by the anonymity when participating in the data collection and lack of identifying information collected. Thirdly, while developing the protocols for data analysis, peers in the field such as other academics and the Mental Health Strategist were consulted to help inform the process, as well as sessions of debriefing with the principal investigator's supervisor. Fourthly, stratified random sampling was completed within the sample that was collected, to ensure there was no selection bias of participants, as well as selecting a representative sample from the data based on year of study.

The findings of this research can be applied to other large, research-intensive universities in southwestern Ontario, Canada. Although this research focused on undergraduate students, anyone was able to complete the online form to inform the mental health strategy, and the opportunity to participate was promoted to all students at University X. The opportunity to participate lasted for approximately six weeks, giving respondents ample time to complete the survey, especially as the online form remained open during a holiday break from academic requirements in December.

I have a strong background in student affairs, having worked for four years as a student staff member and two years as a professional staff member at two large, research-intensive universities in Canada in a number of different roles. As such, I have a strong understanding of the culture and environment on university campuses and the impact that academic requirements and student experiences have on the undergraduate population. Further, I am currently completing an internship at Psychological Services and Learning Skills Services at a university which gives me an important perspective on the effects of the university environment, culture, and experiences on students' mental health. Finally, by completing my undergraduate and graduate degree at University X, I am familiar with the services, policies, procedures, campus culture and environment of the university under study. Considering my past experience with the university under study and having held a variety of roles on university campuses, I leveraged my institutional knowledge as a student, intern, and staff member to understand the data. However, I recognize that my experiences within post-secondary education at University X may have created a biased perception when interpreting the data. I tried to mitigate any potential biases by thoroughly reviewing data and considering the perspective of staff, student, and intern when coding the data.

## **Results**

Four themes emerged from review of the data, with a variable number of subthemes within each of the four. Considering Bronfenbrenner's (1994) Ecological Systems Theory, all of the themes operated at an institutional level. As the mental health strategy was a campus-wide, institutional project, questions focused on the institution were expected. Table 1 summarizes the themes and subthemes developed, and indicates the frequency of the themes in the responses. "Common" refers to themes that had 10 to 20 students respond with something that falls into the

subtheme, while “Typical” was for 4 to 9 students and “Variant” was for 1 to 3 students. While all responses were considered equally in the discussion, these categorizations ground each subtheme in frequency of discussion by students who responded. Furthermore, all subthemes and themes identified were discussed as barriers from the responses, but some barriers were described by others as facilitators. As such, Table 2 notes which subthemes acted as a facilitator.

Table 1.

*Themes and Frequency of Subtheme Responses*

Theme	Subtheme	Frequency
Trust in and quality of professional services	Features	Common
	Awareness	Typical
	Reputability	Variant
Validation of mental health concerns	Understanding of and compassion for student experience	Variant
	Faculty and staff response	Typical
Institutional procedures and environment	Academic breaks	Common
	System navigation	Variant
	Environment	Variant
Stigma	Public	Common
	Self	Typical

Table 2.

*Themes and Subthemes Written as Facilitators by Respondents*

Theme	Subtheme	Facilitator
Trust in, and quality of, professional services	Features	Yes
	Awareness	Yes
	Reputability	No
Validation of mental health concerns	Understanding of and compassion for student experience	No
	Faculty and staff response	Yes
Institutional procedures and environment	Academic breaks	No
	System navigation	No
	Environment	Yes
Stigma	Public	Yes
	Self	No

## **THEME 1: Trust in, and Quality of, Professional Services**

Many respondents identified and discussed the facilitators and barriers regarding the professional services available on campus at University X. This theme focused on the tangible logistics and culture surrounding the professional services aimed at supporting student mental health, with some respondents sharing anecdotal experiences that themselves or peers had experienced. Conversely, some respondents stated that they did not utilize services due to the reputation, a lack of accessibility, or perceived judgment from staff of the service.

**Features of services.** Some students considered the type and number of services available, as well as services that do not currently exist on campus. One respondent discussed the number of services available on campus as a facilitator: “There are many services available for students on campus if they feel that they need help with their wellness, most are readily available.” While the number of services acted as a facilitator in this statement, other respondents noted that a lack of resources on campus, due to the low number of mental health practitioners available, acts as a barrier to positive student mental health.

One student explored the introduction of a new type of service, which may facilitate positive student mental health: “...a regular check in program...could be out in place...this is a lot of work but it could be the school reaching out to student vs students always reaching out to the school.” This response also suggests a reconsideration for how mental health services operate, stating that outreach may be a better way of supporting students. Some students considered the number of sessions available for on campus counselling, suggesting that “...we lack actual help resources like continual, on campus, weekly counselling...” Several students made similar statements regarding an increase in the number of mental health practitioners

available to students and an increased frequency of meeting with these practitioners, with one student stating that they had received biweekly counselling in the past which was not enough.

**Awareness and accessibility.** Many responses evaluated the current awareness students had of available resources, how aware they believed others were of the resource, and how accessibility impedes their ability to utilize services. Some students recognized that promotion of resources was adequate: “I am currently on [University X’s] campus and they do an extremely amazing job at promoting wellbeing for students.” While another student said that “There has been a lot of effort made in terms of training student leaders...to understand the resources that do exist for students to use.” These statements suggest that some students believe the awareness and promotion of campus mental health services is adequate, showing that awareness acts as both a barrier and a facilitator.

The accessibility and convenience of campus mental health services was discussed by a student: “Students need to know there is counselling on hand, it should be at all hours of the school day, available on weekends and well publicized.” Another student stated that “...professionals should be available at any time.” These responses highlight the concept of having extended hours to accommodate students in crisis outside of business hours.

One student suggested that the accessibility, number of services, and promotion of services needs to be increased: “Now I think it is about making the resources more accessible – lower wait times, increased services, more accessible areas of campus, advertising them on campus, making sure people know which services are most attuned to their challenges.” Additionally, the previous statement notes that differentiating what service is most helpful for which issues through marketing may act as a facilitator for accessing services.

Accessibility in regards to gaining timely admission to services was considered, with one student saying that “Decreas[ing] wait time for on campus services” would improve student mental health. Another student said that “...if somebody needs help and has to see a psychiatrist or a counsellor it takes forever to make an appointment especially with a psychiatrist. A lot of people would just kill themselves by the time they [get] an appointment.” This response highlights the perceived need for lower wait-times to access psychiatric or psychotherapeutic support, as well as the student’s perception about the possible consequences of not decreasing wait-times or increasing capacity to see students more frequently.

**Reputability.** Some students discussed the trust or mistrust they held for on campus services, providing anecdotes about their experience or the experience of a peer. One student stated that “When it comes to booking a doctors [*sic*] appointment to talk to my doctor about my mental health, I feel like I am always heavily questioned about my situation. In some ways it feels like the validity of the problem is being questioned.” This response indicates a feeling of mistrust towards booking an appointment with one of the services on campus and perceived judgment from staff. Another student said that “when I went to see a...psychologist it was horrendous. I was told that my debilitating bouts of depression was something “every student feels”. It was disgusting.” Respondents stated their perception of the reputability of mental health services on campus, suggesting that it acts as a barrier: “I think the current reputation [University X’s] mental health programs are getting is the problem.” This response suggests that students may be aware of the positive and negative experiences of others using on campus services, which may deter students from seeking help.

## **THEME 2: Validation of Mental Health Concerns**

The response and culture around validating mental health concerns were considered by students from both an institutional and compassion perspective, and interactions respondents have had with faculty and staff at University X. These were, by and large, noted as barriers to positive mental wellbeing, as students suggested that the institution appeared to lack an understanding of and compassion for students, including the pressures and stressors that are a result of attending university.

**Understanding of and compassion for student experience.** Some students said that there appears to be a lack of understanding of the pressures (academically and otherwise) placed on students. One student asserts that a barrier is “[n]ot understanding students [*sic*] needs when it comes to assignments/tests and the pressures of post-secondary education.” Another student listed all of the barriers that impact the mental wellbeing of students:

“...demands of professors for each class (ex. excessively long readings)...money (cost of attending school + rent + food, etc. = huge stressor for students)...time (attend class, complete readings, study for exams, complete essays and assignments, part time job to supplement cost of attending school, grocery shopping, cleaning, participating in extracurricular activities, spending time with friends and family, sleeping, etc.)”.

This response came from a question about perceived gaps or barriers in supporting wellbeing, suggesting that an institutional understanding of the student experience is lacking as it pertains to the noted concerns of this student.

Related to the concept that the institution does not understand or empathize with the stressors related to the student experience, one of the students commented on a lack of perceived compassion from University X. This student said that student mental health would be more positive if students “...felt like the university actually cares. Because nobody thinks they do.” This statement suggests that a compassionate, caring response from the institution would be beneficial for students who are struggling with mental health concerns. Further, this concept may

be related to the aforementioned subtheme regarding the reputability of professional services, because if students believe that the institution is not treating them compassionately, it may extend to the use and appraisal of on campus professional services.

**Faculty and staff response.** The actions and reactions of faculty and staff members employed by University X were considered by some students, with responses that faculty and staff appear to lack knowledge or compassion when supporting mental health concerns that students are experiencing. A student stated that “Running into admin/professors who are not sympathetic or understanding of students under emotional duress” acted as a barrier to student mental health. This response appears connected to the previous discussion regarding compassion, as this student suggests that faculty and staff are not sympathetic or understanding of mental health concerns when approached by students. One students said “many [professors] don’t know how to deal with mental health or how to respond when a student approaches them with problems regarding mental health.” This response suggests a lack of understanding from faculty when faced with student mental health concerns.

### **THEME 3: Institutional Procedures and Environment**

Some students suggested that navigating services and resources to utilize on campus was difficult and that the process of obtaining academic accommodations affected their mental health. These responses suggest that the structural and logistical elements such as planning for the academic year, ease of system navigation, and physical environment impact the mental health of university students.

**Academic breaks.** Many students discussed the desire to have a break from classes during the fall semester, citing that having this time off would be beneficial to return home or to catch up on their studies, something that students suggest would positively affect their mental



health. This theme was very prominent among students' responses, with nearly every respondent mentioning it at least once throughout their responses. A "reading week" is a week that academic requirements such as classes, assignment deadlines, and exam dates are suspended. One student said:

"Give students a break. Midterms practically run throughout the whole semester so there is always a constant pressure. A fall reading week, a break for thanksgiving week or even a break in November should be beneficial."

Another student suggested that "providing a full fall break to allow students to get caught up on studies" would improve student wellbeing. Further, some students seemed to speak to the desire of having time off because other institutions had a break; one student said "Implement a full fall reading week like most other universities...". Considering the previous response, the online form became available in November, just after the proposed time for a reading week and when some other Ontario institutions had scheduled a reading week.

**System navigation.** Some students suggested that navigating services and avenues to access help on campus acts a barrier: "A lot of students either don't know where to go to get the help that they specifically need (personal to the issue they are experiencing)...". This response can also be considered in the awareness of professional services theme, but it also suggests some students are unaware about how to access support that may benefit the student.

Similar to compassionate responses from staff and faculty, this student suggested the policies of moving deadlines and academic commitments would be a facilitator of positive student mental health: "...having faculty on board with being flexible moving around due dates without penalty if a student feels overwhelmed." As suggested with the desire for breaks in the academic calendar, there appears to be a perception among students that inflexibility and continued focus on academics is detrimental to student mental health. Another respondent said

that “More flexibility during exams and with assignments...The [current] process is very stressful to go through...” would be beneficial for students. This response suggests that flexibility with academic deadlines would mitigate stress associated with academic accommodations.

**Environment.** One student considered the environment of the campus in regards to student population and physical space availability as a barrier: “Nowhere to sit down; extremely overpopulated campus. Nowhere quiet to relax and if needed, sleep.” This response suggests that perceived comfort and space availability could impact student health. Further, another student noted that something that University X does well is “having a beautiful campus,” suggesting that the atmosphere and environment are acting as a facilitator of positive student mental health

#### **THEME 4: Stigma**

Many students considered the impact of stigma regarding mental health in their responses, and evaluated the perceived stigma at University X. Some students recalled experiences where they had felt that stigma around mental health affected their willingness and ability to seek help, while other students considered the steps University X had taken to destigmatize mental health. Responses were grouped into public stigma and self-stigma.

**Public.** Public stigma was described by a number of students. One student said:

“In order for students to seek help, they must first feel comfortable enough to. Because mental health and wellbeing is something that is still not often discussed openly, it is difficult for someone with health issues to be open about them. If you find a way to make students feel comfortable about seeking help then I think that students will be more likely to.”.

Another student said “I appreciate that [University X] talks about [mental health] so often and makes it seem more normal and less stigmatized so that more students feel ‘safe’ to express themselves.” This response notes that University X is accepting and promoting the discussion of mental health among students.

**Self.** Self-stigma was described by students, although less frequently than public stigma.

One student highlighted the value of considering self-stigma and how that may act as a barrier to help-seeking:

“Stigma is one thing, but many people are scared to acknowledge poor mental health for their own sake, let alone what others think. Help needs to be accessible...people need to know it can be fixed, and know a potential path of recovery before getting help, because it will make it easier to reach out.”

This response suggests the self-stigma that students may perceive, evidenced by fear of acknowledging poor mental health “for their own sake,” as well as the public stigma evidenced by the phrase “let alone what others think.” Further, this student suggested that a factor in self-stigma is the perception that mental health concerns cannot be treated, which may affect their willingness to seek help.

### **Discussion**

The purpose of the current study was to examine the facilitators and barriers to mental health on a post-secondary campus, with the intent of gaining a holistic and thorough picture of student mental health from the student perspective. The themes identified in the data are broad, but speak to a variety of important factors in the student experience of mental health. Specifically, considerations of on campus services, the validation of mental health concerns, institutional policy and environment, and the effects of stigma were all discussed by respondents. This research is important as the academic success and attrition of post-secondary students are affected by students’ mental health (Coniglio et al., 2005; O’Keeffe, 2013), which provides a valuable incentive for institutions to implement changes with the support and success of student mental health in mind.

The current study examined the facilitators and barriers that affect positive mental health on a university campus, from the lens of Bronfenbrenner’s Ecological Systems Theory (1994)

and Ryan and Deci's Self-Determination Theory (2004). While Bronfenbrenner's theory (1994) discusses many levels of a system and the impact they have on each other, the current study examined facilitators and barriers predominantly at the institutional level. This was informed by the design of the survey for data collection which focused on respondents assessing many components of mental health at an institutional level, as the data was being collected to inform institutional policies and procedures. The results suggest a holistic understanding and considerations for promoting and maintaining positive mental health on a university campus.

### **Trust in, and Quality of, Professional Services**

**Number and types of services.** In regards to on campus mental health services, the results of the current study align with the findings in the extant literature. Mowbray et al. (2006) reviewed a number of different variables pertaining to mental health services, and many of their findings and recommendations align with the findings of the current study. The authors stated that some post-secondary students said that there is a lack of availability of services on campus, which hinders students getting help. The responses from University X students were mixed, with some students stating that there were not enough services on campus, while other students said that there are enough services on campus. This contradiction between responses may be due to a perception of increasing accessibility by increasing the number of services. If any of the students who suggested more services had waited to access campus services in the past, they may believe that more services would mean a greater volume of students could be supported, which may decrease wait-times. Conversely, students who said there were enough services may have been considering the type of services available (preventive, supportive, crisis) rather than considering wait-times.

A consideration with students asking for a greater number of services is to understand *what* services they want to see. Many services and resources can be understood in one of three ways: preventing mental health issues, addressing current and ongoing mental health issues, or supporting students with emergent mental health issues. Thus, there is a plethora of services available on post-secondary campuses, so what services should increase in number? As discussed in the literature review, many institutions have a variety of services available such as personal, career, and learning skills counselling, as well as providing outreach to students, psychoeducation, and therapy groups (Crozier & Willihnganz, 2005). In addition, a study by Jaworska, De Somma, Fonseka, Heck, and MacQueen (2016) found that some post-secondary institutions in Canada offered peer counselling, referrals to psychiatrists or physicians, mental health information online, and access to fitness and community involvement centres. The current data is not robust enough to allow interpretation of what services students would find beneficial to increase in number, as respondents indicated that the number of services and resources should increase, but did not specify which services.

A study by Katz and Davison (2014) compared the number and type of services offered on community college campuses versus university campuses. They suggested that both community colleges and universities need more resources for mental health, which aligns with some of the students in the current study asking for more services. Further, Katz and Davison (2014) examined what mental health topics could be more widely promoted or specific services created for, such as disordered eating, stress, or suicide. Considering differential mental health topics, whether they be various diagnoses or experiences, could explain why some students in the current study stated that there were enough services while others stated more services were needed. The students who believed the number of services were adequate may have their mental

health needs met by the current services; in contrast, the students who were seeking more services may feel that their experience with mental health is not being well supported by the services. A factor that may also have affected these responses is the awareness of services on campus, which was recognized by students as both a barrier and facilitator to enhancing student mental health.

**Awareness of services.** Awareness of services is an important factor to consider, as institutions may have a large number of services, but unless the student population is aware of their existence, how to access the service, and what the service can provide, then the number of services is irrelevant. A study by Yorgason, Linville, and Zitzman (2008) examined undergraduate students' understanding and awareness of on campus mental health services. The authors recommended that institutions must continue to find ways to increase awareness of on campus services, as 30 percent of respondents had never heard of services and 38 percent had heard of the services, but did not know anything about them. Further, Yorgason et al. (2008) stated that awareness of mental health services must precede service utilization and successful help-seeking. The current study found that students see value in having knowledge about what services are available and want these services to be clearly advertised. The benefits of service knowledge and awareness aligns with the findings of Yorgason et al. (2008), with increased awareness affecting service utilization.

Yorgason et al. (2008) studied what factors impact awareness and knowledge of campus mental health services and they found that awareness and knowledge increased as year of study increased. The authors stated that this relationship makes sense as students who have been attending the institution longer will have had a greater opportunity to: be exposed to advertisements and word-of-mouth promotions regarding services, increased academic demands

leading to mental health difficulties which prompted information seeking regarding services, and maturation and development of identity may have increased students' comfort in seeking help for mental health difficulties. Interestingly, considering the students in the study at hand, it was predominantly second and fourth year students who stated that an increase in awareness of resources was needed, which does not align with the findings of Yorgason et al. (2008). However, the majority of the students who indicated that awareness of services was adequate were in their fourth year of study, which does align with Yorgason et al.'s findings (2008).

**Counselling expectations.** A few students said that weekly counselling appointments would be beneficial for students. While the number of sessions expected by students has been examined in the research (Owen, Smith, & Rodolfa, 2009), the frequency of sessions for post-secondary students in counselling has not been studied. The increased frequency of counselling appointments may result in more positive student mental health, but the responses about counselling appointments speaks to the amount of knowledge that the students have about mental health and supportive services. The frequency of sessions is something impacted by treatment planning and may vary from practitioner to practitioner (Owen, Smith, & Rodolfa, 2009), so how much do students know about psychotherapy and what are their expectations when attending counselling? This is an important consideration when assessing the data of the current study as responses from students may be affected by lack of knowledge of mental health services. Although this has not been widely studied, future research examining students' understanding of how mental health services, such as counselling centres, operate and support student mental health may be beneficial.

**Accessibility of services.** Accessibility of the services was considered by some students, especially in regards to hours of service availability. The review by Mowbray et al. (2006)

considered accessibility to mental health services, stating that many campus services do not have accommodating hours (ie. outside of business hours), wait times are long, support is duplicated across many services, and institutions have ineffective systems for prioritizing urgent mental health concerns. The responses in the current study suggest that students want greater hours of operation for counselling services, with some students asking for availability during evenings and weekends, and one student wanting service availability at all times. Considering the dynamic and robust schedule of a post-secondary student which may include classes, extra-curricular activities, sports, and jobs, it is clear that gaining access to services may be affected by an inability to attend services due to limited hours.

University X has community resources and programs with greater accessibility to help mitigate the limitations of services that are accessible during business hours only. For example, the campus police services are available at all hours and is heavily promoted as a service that can support students who are in crisis. Further, connections to the community have been made to help support students in crisis. Specifically, crisis counsellors have been made available after business hours through a collaboration with CMHA to help support students. The continued development of community collaborations may create a robust system of support that would allow for student mental health support at all times.

Aligning with suggestions by Mowbray et al. (2006), students in the current study suggested that long wait-times are detrimental to student mental health. Students in the current study did not specify which services had long wait times, but some students stated that two to three weeks of waiting for an appointment to access services was not uncommon. Mowbray et al. (2006) stated that many institutions have been criticized for long wait times, so this is not



isolated to the university in this study. However, what possible impacts are there for long wait-times on student mental health?

A study by Blau, DeMaria, and DiMino (2017) examined the effects of perceived service promptness in university counselling centers, measured from a student perspective. They found that low levels of perceived service promptness (long wait times to access services) resulted in experiencing high distress when attending counselling, longer wait times for an intake appointment, and feeling bothered by having to wait for counselling to begin. Understanding the experience of students waiting for on campus counselling is important to consider in conjunction with how this experience impacts the students' behaviour in attending their appointment.

DiMino and Blau (2012) found that after a student accessed counselling triage services, long wait times for an intake appointment resulted in higher rates of not attending the intake appointment. As such, wait times to access services on campus as discussed by the students in the current study may lead to higher rates of “no shows” for counselling appointments. When this occurs, institutions are left wondering whether students were able to access services elsewhere, or if they decided to not seek help any more. Future research can explore how students “no showing” affects the counselling centres, considering that time that would be lost where other clients could be seen and any interventions the staff at the centre may take to ensure safety for the student who did not show up for their appointment.

One of the students in the current study suggested that long wait times are worrisome because students may complete suicide while waiting to access services. Student safety is an important consideration when supporting those struggling with mental health concerns. At University X, the counselling center operates on a triage model such that they assess for safety risks to the student and others during their first visit to the center. If there is risk present, they are

prioritized to help allow students to gain access faster. Furthermore, during this appointment, students may be referred to community agencies which will support these students more expeditiously, based on presenting concerns. Many post-secondary institutions have begun to create or change services in order to combat possible suicidality, especially when there are wait times to access on campus services (Jaworska et al., 2016). Jaworska et al. (2016) found that approximately 66 percent of Canadian institutions offered immediate availability of services in the form of walk-in appointments, and many large institutions offered triage services to prioritize student mental health concerns. These different approaches to supporting students and prioritizing concerns are meant to increase safety and decrease the level of risk as students wait to access counselling services.

**Reputability of services.** The reputability of services was discussed in the current study in two ways: mistrust towards campus mental health providers and perceived reputation of campus services. The students who spoke to mistrust of services provided anecdotal reports of interactions with staff at campus mental health services, with one student saying they felt “disgusted” by how they were treated by staff. Both responses focused on perceived judgement felt from the staff working at the campus services. Feelings of judgement are connected to the stigmatization of mental health, and instances where staff appear judgemental may lead to mistrust from students and a negative reputation of the service, possibly impacting utilization of services. This discussion falls within the review of service-related responses as experiences that cause discomfort and mistrust in services is pertinent, but it will also be informed by the stigma theme discussed.

One of the students questioned the qualifications of the mental health practitioner who the student was seeing. The level of training of staff for campus mental health services has been

critiqued in the past, including concerns about lack of training, inconsistent assessment use, lack of referral processes, and poor treatment planning (Mowbray et al., 2006). The student's response was not robust enough to speak to all of those concerns, but the comment focused on qualifications of campus mental health practitioners which would likely lead to increased feelings of trust toward the service provider if met. University X employs a staff with a variety of mental health backgrounds: psychologists, psychiatrists, psychotherapists, social workers, and general medical practitioners. Further, University X is a training site for students studying to be psychotherapists, social workers and psychologists. As such, there are a number of practitioner types, with varying levels of training and educational backgrounds available, so one must consider the knowledge students have of the differences between mental health practitioner roles to understand which roles inspire confidence in students when they are accessing support.

Although the response was general without added detail or context, the point that services and programs have a reputation among students is an important consideration. Many of the students offered anecdotes of when their peers had utilized services and the negative experiences their peers had. However, the students used these anecdotal reports to highlight a problem and suggest change with the service. If these students' perception of campus mental health services were affected by the experiences of their peers, they may choose to not utilize services if they do not trust them based on these alleged negative experiences. This interconnection between members of the campus community when transmitting information about the services is clear due to the reliance on peers, staff, and faculty for a student to navigate successfully through post-secondary education (Owen & Rodolfa, 2009).

As such, the perceived reputability of the service based on experiences may impact the help-seeking behaviour of many students. In a study by Yorgason et al. (2008), they found

approximately 29 percent of a 266 post-secondary student sample reported that they learned about student mental health services from a friend. This finding is approximately 10 percent higher than the next most frequent method of learning about the services, which was advertisements at 19 percent. These findings suggest that the impact of peer-to-peer word-of-mouth is very important when considering awareness and subsequent utilization of campus mental health services. Yorgason et al. (2008) found that about 76 percent of the sample would use services when told about them by a friend or fellow student, whereas about 51 percent would use services when learning about them by an advertisement. Although analysis of why there was a large difference in service use between the two ways of becoming aware of services was not discussed, a possible explanation is that the trust one has in a friend will lend reputability to the service being promoted. As such, when students have a negative experience with a service, the experience may be shared with peers, resulting in a decrease in help-seeking behaviour. Future research can focus on exploring the possible generalization of a negative experience with one campus mental health service to other institution-managed services.

As discussed throughout this section, there is significant overlap with this theme and themes to be discussed. What becomes apparent is the interconnectedness between student experiences that may impact help-seeking, attitudes, or level of understanding of mental health. In this way, considering one theme without recognizing the interaction of other themes would be short-sighted and would lack contextual factors. Therefore, when considering future directions with student mental health, one must treat the system as broad, all-encompassing, and inextricably connected, which means one must consider a system-wide approach (CACUSS & CMHA, 2013).

### **Validation of Mental Health Concerns**

The perceived validation of the students' mental health experiences during post-secondary education was reported by some of the students. The responses assert that the institution lacks an understanding of the factors that impact the mental health of students. One student spoke directly to the stress and pressures of academic requirements, stating that the university does not understand these pressures, which acts as a barrier to positive student mental health. The implication of this statement is that if the institution understood the pressure students were under, the institution would either be able to support students with these pressures or change academic requirements to mitigate the stress. However, an idea that underpins the idea of acting in a student's best interest, despite institutional policy and procedure, is an expectation or desire for compassion and caring from the institution.

The concept of a caring institution can be thought of as a part of campus culture, defined as "a set of deeply held meanings, beliefs, and values" (Chen, Romero, & Karver, 2016). Although the concept of campus culture regarding institutional caring and compassion has not been researched in the past, Chen et al. (2016) examined perceived campus culture in relation to mental health help-seeking. In their study, they found that perceived campus attitudes directly impacted students' personal attitudes, which in turn affected help-seeking intentions. Although students' personal attitudes mediated the impact between campus culture and help-seeking intention, this suggests campus culture does affect help-seeking, and can therefore affect student mental health. Specifically, if there is an institutional culture of uncaring or lack of compassion towards students, will they feel that their mental health concerns are valid in the eyes of the institution? If the institution does not appear to validate a student's mental health concerns, that could lead to students' undervaluing the importance of their mental health concerns.

Many students reported that the faculty and staff response to mental health concerns was a barrier to positive mental health. Specifically, one student noted that some faculty are unwilling to provide accommodations for students with mental health concerns, which may be affected by the campus culture. Academic experience and student mental health are inextricably connected for post-secondary students (Coniglio et al., 2005; Antaramian, 2014) and this experience is influenced by faculty members. Student-to-faculty connection has been shown to impact a students' persistence to graduate from their program (Hoffman, 2014), and that faculty can notice and intervene when students are struggling with mental health concerns (Kucirka, 2017). As such, students may view faculty as a source of support and accommodation because their role is supportive by nature. Therefore, if the respondents held this belief in the current study, the negative experiences they had with faculty members regarding mental health may have been surprising and confusing, based on the expectations students may hold for faculty members.

A study by Backels and Wheeler (2001) surveyed faculty members and found that approximately 50 percent of respondents believed mental health concerns (ie. stress, anxiety, family problems, etc.) had a significant effect on academics. Further, the likelihood to be flexible by changing assignment and test dates was found to be higher with crisis situations (ie. rape, death of a family member, suicidal ideation) than with other concerns (ie. anxiety and depression). The authors suggested that faculty members' lack of knowledge about mental health issues may lower the likelihood of accommodation and referral for non-crisis mental health issues. This study highlights the importance of faculty being knowledgeable of mental health concerns as it can affect the likelihood of supporting students by providing academic accommodations. These findings align with the results of the current study, where one student suggested that faculty are not aware of how to respond to student mental health concerns.

Considering the previous discussion of campus culture, faculty plays a role in developing and maintaining that culture (Chen et al., 2016). If students believe that faculty members are unaccommodating, despite being informed of mental health concerns, students may generalize this lack of caring to all of campus and campus staff. This can also impact the students' validation of mental health concerns if faculty members do not respond in a supportive manner, that may impact the likelihood they will seek help in the future.

The campus culture is likely affected by all of the themes found in the current study. However, for the theme of validation of mental health concerns, focusing on creating a campus that shows caring and compassion towards students seems to be a facilitator for positive student mental health. Further, faculty members are expected to be supportive of student mental health, suggesting that their reaction and likelihood of accommodation reflects on the overall campus culture of recognizing the importance of mental health.

### **Institutional Procedures and Environment**

The most common response reported by students was that having a break in the academic year, referred to as a "reading week," would be beneficial for their mental health. A "reading week" is a break for post-secondary students where classes do not run and academic requirements such as assignment and exam dates are not scheduled. University X, at the time of data collection, had a reading week in February during the academic year, but students indicated that having a reading week each term would be ideal. Since the time of data collection, University X has implemented a reading week in the fall term.

Students stated various reasons for suggesting that a reading week would positively impact student mental health, but their reasoning largely falls into one of three ideas: having time to return home to visit family, to complete readings and assignments, or other universities

offered a reading week in the fall term. Regardless of the reasoning, the students believed that having a break from academic commitments in the fall term would be a facilitator for positive student mental health. Although the desire for academic breaks have not been studied in the extant literature, there is a plethora of data showing the negative effect of academic stress and pressure on undergraduate students (Nordberg, Hayes, McAleavey, Castonguay, & Locke, 2013; Pedersen, 2012). With possibly high levels of academic stress, the break of a reading week may have a beneficial effect on student mental health.

The effect of breaks or vacations has not been studied in the extant literature, in regards to post-secondary students and the academic year. However, there has been research that has examined the effect of vacations on one's mental health which may be applicable to the experience of students during reading week. One study by Joudrey and Wallace (2009) found that experiences of depression decreased while taking vacations from work. If reading week is conceptualized as a vacation, as there are no academic requirements during this time, perhaps a similar decrease in negative mental health experiences would be found with post-secondary students.

However, in contrast to the possible positive effects of a reading week, it is important to consider the lasting effects of a vacation. A study by Strauss-Blasche, Ekmekcioglu, and Marktl (2002) examined the effects of vacation on participants' wellbeing and they found that, although the number of physical health complaints decreased and perceived life satisfaction increased after vacation, there was no change in mood or sleep patterns. The authors found that the workload (measured in the workforce, rather than the workload of post-secondary students) did not impact wellbeing before vacation, but it had a negative effect after vacation with a deterioration of sleep quality and mood. Further, the authors concluded that vacations do not act



as a buffer against the effect of workload stress on wellbeing, and that the amount of work required after vacation mitigates the positive impact of the vacation itself. Applying these findings to the study at hand, if academic breaks were implemented throughout the academic year and the students did not use the break to complete academic requirements (readings, assignments, studying, etc.) than they would continue to have high levels of work when they return from break, mitigating positive effects of the break. These findings suggest that while students believe that having academic breaks promote positive student mental health, the extant literature suggests that the benefits are not long-lasting or meaningful immediately following the break.

Consistent with previous findings, some students noted that there is a lack of understanding of what services would best support them or the processes to obtain help and accommodation are confusing and difficult to navigate. This aligns with findings from Mowbray et al. (2006) who stated that discomfort and lack of familiarity and understanding of the post-secondary system acts a barrier to accessing help. Further, past research has examined the outcome of streamlining services and increasing ease of access by merging different mental health services on campus (Federman & Emmerling, 1997; Readdean et al., 2010), suggesting that ease of accessing support is an important consideration for post-secondary institutions.

A couple of students noted the importance of physical environment on student mental health. Specifically, one student stated that having a “beautiful campus” was a facilitator for positive mental health, while another student reported that overcrowding on campus was a barrier for positive mental health. Although this has not been studied at post-secondary institutions, the extant literature suggests that the built environment (physical space) affects one’s mental health (Evans, 2003). The author notes that low levels of light, malodorous

pollutants, and overcrowding all negatively affect mental health, underscoring the importance of the physical environment. Furthermore, some research has shown that being able to access green spaces, such as parks and wooded areas, increases one's positive mental health, suggesting that having green spaces on campus may be beneficial for students (Windhorst & Williams, 2016; Hipp, Gulwadi, Alves, & Sequeira, 2016). These findings align with the students remarks about the benefit of having a beautiful campus and the detriment when experiencing overcrowding, suggesting that the physical space of campus affects student mental health.

The consideration of institutional policies and procedures appears to be a theme that impacts student mental health as both a facilitator and a barrier. Similar to the theme surrounding services, there are likely many factors that impact institutional policies beyond the student perspective. Moving forward, in order to create more supportive institutions, considering changes or compromises in policies, procedures, and environment may promote positive student mental health.

## **Stigma**

Stigma has been widely studied in the extant literature and the findings of the current study align with past findings. As previously discussed, public stigma has been defined as “the typical societal response that people have to stigmatizing attributes” which can be seen as “a form of prejudice, comprised of cognitive, affective, and behavioral reactions” whereas self-stigma has been defined as “the internalized psychological impact of possessing a stigmatizing characteristic” which may result in “losses in self-esteem and self-efficacy” (Bathje & Pryor, 2011). The responses from students speak both to public and self-stigma, with responses pertaining to public stigma more frequently. The strong theme of stigma impacting student mental health aligns with the findings in the extant research.

In a study by Wynaden et al. (2014), they found that both students and staff feel there is “silence” around mental health problems on campus. Further, they found that the stigma perceived on campus affects help-seeking behaviours. The effect of stigma decreasing students’ likelihood to seek help for mental health concerns underscores the importance of initiatives to decrease stigma, something that one student stated that University X was doing well. Interestingly, this study showed that staff on a post-secondary campus also experienced stigma while at work, suggesting that the stigmatizing factor is not solely affected by the age of maturing students who are navigating a difficult transition.

In a study by Eisenberg, Hunt, and Speer (2012), they found that among post-secondary students, the level of public stigma was often much higher than self-stigma, which aligns with the results of the current study. Further, the differentiation between public and self-stigma showed different effects in relation to help-seeking; specifically, self-stigma was significantly correlated with help-seeking behaviours while public stigma was not. This suggests that when considering how to destigmatize mental health, challenging and targeting the internalized stigmatization may have a more positive impact on help-seeking behaviour than targeting public stigma.

A study by Martin (2010) yielded findings similar to the previous studies discussed, showing that post-secondary students experience stigma which resulted in a barrier to seeking staff support. The author asserted that the impact of stigma is crucial for post-secondary institutions to consider and address to better support student mental health, although Eisenberg, Hunt and Speer (2012) suggested that stigma is only a factor in student mental health. Interestingly, stigma has been widely studied in the existing literature, but it is an area that is difficult to change when it comes to institutional planning. However, the effects stigma has on

help-seeking and disclosure of mental health concerns make it an important area to consider when promoting positive student mental health.

### **Implications**

The findings from the current study are robust and broad, acting as an important starting point for a holistic consideration of the facilitators and barriers that affect positive student mental health at the post-secondary level. One implication from these findings is the apparent interconnection among the themes identified. While all responses were sorted into different themes for ease of understanding and digesting the information that students provided, all of the themes overlap and connect with one another. For example, stigma was deeply felt by the responding students, which may have informed the trust they have towards mental health services and vice versa. Another possible connection is that awareness of services is only a facilitator of mental health insofar that the reputation of the services is positive. This interconnection shows that the systemic approach to understanding student mental health is not only helpful in developing mentally healthy campuses, but necessary (CACUSS & CMHA, 2013). This information is important when considering changes and additions to a campus mental health strategy, as positively affecting one factor, such as public stigma, may benefit other factors such as utilization of on campus mental health services. As such, although beyond the scope of this study, each institution may want to analyze the greatest impact of each factor and reassess after changes have been implemented, acting in a piecemeal process to enhance student mental health.

Another implication of the current research is the complexity of the student experience. Some students called on the university to change policies or improve existing ones, citing struggles with finances, relationships, concurrent jobs and so on. However, if these students were

not attending a post-secondary institution, they would likely still be experiencing these struggles. As such, when approaching student mental health, it is important to recognize the effects of the transition from high school to university, not strictly in the form of increased academic pressure, but that of activities and pressures of daily living that are associated with the independence accompanying the post-secondary experience. While these new responsibilities demonstrably impact one's mental health, students must also face the academic pressures of post-secondary education. The complex experience of students should not only be supported in part by institutions, but should try to be understood with the student experience to allow institutions to move in a direction that considers the students' perspective.

By the design of this study, students were asked to speak to institutional changes that would enhance mental health or to recognize what is stopping them from maintaining positive mental health. This design has the inherent assumption that student mental health is the responsibility of the institution. Institutions should consider what their understanding of student support is, as well as what is the responsibility of students, the community, and community agencies in supporting the mental health of post-secondary students. Further, considering that the transition to post-secondary education has a significant impact on mental health and functioning, there may be benefits from implementing initiatives and programs in high school to mitigate the negative experiences associated with this transition. In this way, the institutional level of Bronfenbrenner's Ecological Systems Theory (1994) is not the highest level to consider, but the community and previous experiences can impact the students' ability to manage mental health when they reach the post-secondary level.

Throughout the data, the responsibility of student mental health by the respondents has been placed clearly on the post-secondary institution. While it makes sense that the responses

focused on institutional responsibility because of the design of the questionnaire, it absolves the students of responsibility for their own mental health. For example, the common theme of wanting a break in the academic year is not supported in the extant literature as helpful, but many students believed it would positively affect their mental health. This suggests that there is an opportunity to develop a responsibility within students for their own mental health, for what they can control. For example, one respondent suggested that midterms are overwhelming which is why a break is required. A reframed perspective of this may be that students could focus on effective time management to create time off for themselves throughout midterm season. The implications from this is that a focus on health promotion and preventive approaches could educate students on how to mitigate negative mental health experiences before they begin, by empowering students to recognize how their own behaviour contributes to their own mental health. In this way, institutions can create programs to give students the ability to support themselves.

The findings of this study are broad, but contain important results that give institutions a starting place for considering institutional reform of mental health culture and services on campus. Some of these findings have aligned with previous research, whereas others are novel concepts impacting student mental health at the post-secondary level. Specifically, the impact of stigma (both public and private) and the perceived effectiveness and trust in mental health services has been studied in the past, and found to inform help-seeking and factors to student mental health. In contrast, validation of mental health concerns and institutional procedures and environment have not been as widely studied. While this suggests future research that can be performed, it highlights how institutions have currently been examining student mental health: considering and focusing on well researched factors which are only some of the contributory

factors to student mental health. This is comparable to institutions trying to put a puzzle together without having all of the pieces. As such, an implication of the current research is that when developing institutional change and mental health strategies, institutions must consider all contributing factors rather than only those that are well documented.

### **Limitations**

One limitation in the current study is that students may not have been able to meaningfully participate in the survey. Although the design of the study was used for the purpose of creating a mental health strategy, and the results may have informed the strategy as intended, the responses given lack the depth and clarity which would strengthen the understanding of student mental health. Specifically, questions were broad which allowed students to provide feedback in various areas of campus-related factors. However, many students chose to list barriers to positive mental health without considering the reason they act as a barrier or without offering anecdotal experiences. This may have limited the interpretations made in this study, relying on the extant literature and this writer's experience in student affairs to understand the thinking of the students, which may be inaccurate since each post-secondary institution has a different experience of student mental health. Further, the survey may have benefitted from psychoeducational material prior to completion to help prime the respondents with some foundational information, such as the feasibility of institutional change and how institutions allocate funds to student mental health. By doing so, this may have impacted the students' responses insofar that they could be grounded and realistic considering the inherent financial limitations of student mental health support at the post-secondary level.

Another limitation may be the recruitment of participants and those who chose to participate. Although the survey was sent to all students attending University X, students would

opt-in to complete the survey. This could mean that those choosing to complete the survey have a vested interest in student mental health, whether that be based on past experience with institutional policies or services, or using the survey and apparent importance of mental health as a platform to seek change. For example, many students requested a reading week in the fall term, despite evidence suggesting that having this break would not decrease mental health concerns long-term (Strauss-Blasche, Ekmekcioglu, & Marktl, 2002). However, a university-supported initiative may seem like an appropriate venue to make requests under the guise of the request being beneficial to students' mental health. Recruiting participants in this way may have led to a misrepresentation of students, as those that felt positively about mental health on campus may have had less of a desire to complete the survey, which means an important perspective of student mental health may have been missed in the data.

Furthermore, the number of respondents considering the student population of University X was low. The response rate was one percent which may limit the generalizability of the data and may not take into account a holistic perspective of the student experience. If the response rate had been higher, there would be greater confidence in the themes identified and that the student population had been adequately represented in the data.

Another possible limitation was using the data collected for the strategic plan for mental health at University X. As the strategy was being developed to enhance and improve mental health on campus, there may have been a suggestion to respondents that the status of student mental health on campus was poor. This may have resulted in respondents focusing on the negative factors on campus, rather than consider the current state of student mental health.

Finally, due to the design of the study, the themes identified in this study were not taken to the respondents to check and understand their perspective on these themes. This was not



possible, both because the participants were deidentified and this was a secondary analysis of the data so there was no opportunity to ensure that the participants felt accurately heard or that the themes align with their perspective of student mental health.

### **Strengths**

Despite the aforementioned limitations, there are a number of strengths in the current study. Much of the extant research has examined the student mental health experience from a quantitative and mental illness focused perspective. The current study allowed for students to focus on what experiences, barriers, and facilitators were important and perceived by them in a qualitative manner, allowing for a greater depth and robust understanding of the factors impacting student mental health. Further, there was no focus on mental illness of diagnosed disorders, which adheres to the Dual Continuum Model of Mental Health as previously discussed (Westerhof & Keyes, 2010). This allows for a more robust understanding of student mental health beyond previous research which considered the percentages of diagnosed mental disorders. Finally, the current research allowed for students to answer anonymously, which may have allowed for honest responses about the institution's current state of mental health culture and services.

The extant literature often focused on one or two main areas of student mental health, neglecting researching other areas. While this is understandable to give a clear and accurate picture of one variable, it is short-sighted insofar that some variables have not been uncovered and therefore cannot inform the discussion around these other variables. Due to the high amount of interconnection among barriers and facilitators of positive student mental health, as evidenced by the current research, exploring one facet of student mental health without being aware of others that may play a role is limiting.

## **Implications for Practice**

The current study suggests a number of things that can be implemented at the institutional level to support student mental health. Firstly, coordinating services among numerous mental health services would benefit the student population, as most services act independently of each other. The results suggest that accessibility, although focusing on longer hours and lower wait-times, underscores the importance of ease of access for services. Institutions can create a central office or hub that acts to refer and direct students to the proper service, or have all services housed in the same physical space. Secondly, cultivating a sense of support and compassion on campus from faculty, staff, and students appears important to the overall benefit of student mental health. This may be achieved by providing mental health training and psychoeducation for faculty and staff as a requirement of employment. A greater understanding of the mental health experience of students may lead to greater compassion and easier accommodation processes.

Thirdly, creating an understanding that students have some control in affecting their own mental health would align the institution with the students in a partnership, rather than having students expect mental health issues to be supported solely by the institution. This may be achieved by psychoeducation for students and workshops focused on skill development to support their own mental health. Fourthly, developing an understanding and agreement about what the institution expects from students and vice versa in regards to mental health support may mitigate misaligned expectations. This may be done by creating an overarching document or policy to ensure that all involved parties are aware of the extent that institutions can support students, and what the students' responsibility is, in regards to help-seeking and supporting themselves and their peers.

## **Future Directions**

Future research can focus on and explore the underlying reasoning and understanding of many of the themes identified in this study. Specifically, reputability of mental health services, compassionate responses from the institution, and academic breaks have been studied sparingly in past research and would benefit from in-depth examination. Further, understanding the interconnection between all of facilitators and barriers identified in this research and the level that they impact student mental health and help-seeking would be beneficial to understand how to prioritize these factors in terms of change and creation of better systems to support students.

## **Summary**

The current study holistically examined the facilitators and barriers to student mental health from the undergraduate students' perspective at an institutional level. The common themes which consider on campus mental health services, the validation of student mental health concerns, institutional policies and environments, and stigma were found to be associated with the student mental health experience. The interconnection between these themes is strong, with the presence and experience of one theme affecting other factors associated with student mental health. Future directions can continue to explore campus culture toward student mental health and the effects of breaks in the academic year on mental health.

## References

- American College Health Association. (2016). National college health assessment. Canadian reference group: Data report. Retrieved from: <http://www.achancha.org/docs/NCHAI%20SPRING%202016%20CANADIAN%20REFERENCE%20GROUP%20DATA%20REPORT.pdf>
- Antaramian, S. (2015). Assessing psychological symptoms and well-being: Application of a dual-factor mental health model to understand college student performance. *Journal of Psychoeducational Assessment, 33*(5), 419-429.
- Backels, K., & Wheeler, Inese. (2001). Faculty perceptions of mental health issues among college students. *Journal of College Student Development, 42*(2), 173-176.
- Bathje, G. J., & Pryor, J. B. (2011). The relationships of public and self-stigma to seeking mental health services. *Journal of Mental Health Counselling, 33*(2), 161-176.
- Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S., & Olfson, M. (2008). Mental health of college students and their non-college attending peers: Results from the national epidemiologic study on alcohol and related conditions. *Archives of General Psychiatry, 65*(12), 1429-1437.
- Blau, G., DeMaria, P. A., & DiMino, J. (2017). Correlates of a university counseling center's perceived service promptness. *Journal of Educational and Developmental Psychology, 7*(2), 24-32.
- Bronfenbrenner, U. (1994). Ecological models of human development. *International Encyclopedia of Education, 3*(2), 37-43.

- Byrd, D. R., & McKinney, K. J. (2012). Individual, interpersonal, and institutional level factors associated with the mental health of college students. *Journal of American College Health, 60*(3), 185-193.
- Canadian Association of College and University Student Services and Canadian Mental Health Association. (2013). *Post-Secondary Student Mental Health: Guide to a Systemic Approach*. Vancouver, BC: Author.
- Carr, S., Colthurst, K., Coyle, M., & Elliott, D. (2013). Attachment disorders as predictors of mental health and psychosocial well-being in the transition to university. *European Journal of Psychology of Education, 28*(2), 157-172.
- Chen, J. I., Romero, G. D., & Karver, M. S. (2016). The relationship of perceived campus culture to mental health help-seeking intentions. *Journal of Counseling Psychology, 63*(6), 677-684.
- Cleary, M., Walter, G., & Jackson, D. (2011). "Not always smooth sailing": Mental health issues associated with the transition from high school to college. *Issues in Mental Health Nursing, 32*, 250-254.
- Coniglio, C., McLean, G., & Meuser, T. (2005). Personal counselling in a Canadian post secondary context. Retrieved from: [http://www.cacuss.ca/\\_Library/documents/Personal\\_Counselling\\_in\\_a\\_Canadian\\_Post-Secondary\\_Context.pdf](http://www.cacuss.ca/_Library/documents/Personal_Counselling_in_a_Canadian_Post-Secondary_Context.pdf)
- Conley, C., Durlak, J., & Kirsch, A. (2015). A meta-analysis of universal mental health prevention programs for higher education students. *Prevention Sciences, 16*(4), 487-507.
- Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions*, Thousand Oaks, CA: SAGE Publications Inc.
- Creswell, J. W. (2003). *Research design: qualitative, quantitative and mixed methods*

- approaches* (2<sup>nd</sup> Ed.), CA: SAGE Publications Inc.
- Crozier, S., & Willihnganz, N. (2005). Canadian counselling centre survey. Retrieved from:  
[http://www.cacuss.ca/\\_Library/documents/SurveyResultsFeb05.pdf](http://www.cacuss.ca/_Library/documents/SurveyResultsFeb05.pdf)
- De Somma, E., Heck, E., MacQueen, G. M., & Jaworska, N. (2017). Campus mental health policies across Canadian regions: Need for a national comprehensive strategy. *Canadian Psychology, 58*(2), 161-167.
- DiMino, J., & Blau, G. (2012). The relationship between wait time after triage and show rate for intake in a non-urgent student population. *Journal of College Student Psychotherapy, 26*, 241-247.
- DiPlacito-DeRango, M. L. (2016). Acknowledge the barriers to better the practices: Support for student mental health in higher education. *The Canadian Journal for the Scholarship of Teaching and Learning, 7*(2).
- Eisenberg, D., Golberstein, E., & Gollust, S. (2007). Help-seeking and access to mental health care in a university student population. *Medical Care, 45*(7), 594-601.
- Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review, 66*(5), 522-541.
- Eisenberg, D., Hunt, J., & Speer, N. (2012). Help seeking for mental health on college campuses: Review of evidence and next steps for research and practice. *Harvard Review Psychiatry, 20*(4), 222-232.
- Evans, G. W. (2003). The built environment and mental health. *Journal of Urban Health, 80*(4), 536-555.
- Federman, R., & Emmerling, D. (1997). An outcome survey of mergers between university

- student counseling centers and student health mental health services. *Journal of College Student Psychotherapy*, 12(1), 15-27.
- Hicks, T., & Heastie, S. (2008). High school to college transition: A profile of the stressors, physical and psychological health issues that affect the first-year on-campus college student. *Journal of Cultural Diversity*, 15(3), 143-147.
- Hipp, J. A., Gulwadi, G. B., Alves, S., & Sequeira, S. (2016). The relationship between perceived greenness and perceived restorativeness of university campuses and student reported quality of life. *Environment and Behavior*, 48(10), 1292-1308.
- Hoffman, E. M. (2014). Faculty and student relationships: context matters. *College Teaching*, 62(1), 13-19.
- Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behaviour among college students. *Journal of Adolescent Health*, 46(1), 3-10.
- Hunt, J. B., Watkins, D., & Eisenberg, D. (2012). How do college campuses make decisions about allocating resources for student mental health? *Journal of College Student Development*, 53(6), 849-856.
- Jaworska, N., De Somma, E., Fonseka, B., Heck, E., MacQueen, G. (2016). Mental Health Services for Students at Postsecondary Institutions: A National Survey/Services de santé mentale pour les étudiants d'institutions post-secondaires: une enquête nationale. *Canadian Journal of Psychiatry*, 61(12), 766-775.
- Joudrey, A., & Wallace, J. (2009). Leisure as a coping resource: a test of the job demand-control support model. *Human Relations*, 62(2), 195-217.
- Katz, D. S., & Davison, K. (2014). Community college student mental health: A comparative analysis. *Community College Review*, 42(4), 307-326.

- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, 62(6), 593-602.
- Kucirka, B. G. (2017) Navigating the faculty-student relationship: interacting with nursing students with mental health issues. *Journal of the American Psychiatric Nurses Association*, 23(6), 393-403.
- MacKean. (2016). Dual Continuum Model of Mental Health and Mental Illness [Digital image]. Retrieved February 20, 2017, from <https://healthycampuses.ca/wp-content/uploads/2015/01/Screen-Shot-2015-02-13-at-4.42.50-PM.jpg>.
- Manwell, L. A., Barbic, S. P., Roberts, K., Durisko, Z., Lee, C., Ware, E., & McKenzie, K. (2015). What is mental health? Evidence towards a new definition from a mixed methods multidisciplinary international survey. *British Medical Journal Open*, 5(6), 1-11.
- Martin, J. M. (2010). Stigma and student mental health in higher education. *Higher Education Research & Development*, 29(3), 259-274.
- Mowbray, C. T., Megivern, D., Mandiberg, J. M., Strauss, S., Stein, C. H., Collins, K.,...Lett, R. (2006). Campus mental health service: Recommendations for change. *American Journal of Orthopsychiatry*, 76(2), 226-237.
- Mulvale, G., Chodos, H., Bartram, M., MacKinnon, M. P., & Abud, M. (2014). Engaging civil society through deliberate dialogue to create the first mental health strategy for Canada: Changing directions, changing lives. *Social Science and Medicine*, 123, 262-268.
- Nordberg, S. S., Hayes, J. A., McAleavey, A. A., Castonguay, L. G., & Locke, B. D. (2013). Treatment utilization on college campuses: who seeks help for what? *Journal of College Counseling*, 16(3), 258-274.



- Okanagan Charter: An International Charter for Health Promoting Universities and Colleges (2015).
- O’Keeffe, P. (2013). A sense of belonging: improving student retention. *College Student Journal*, 47(4), 605-613.
- Owen, J., & Rodolfa, E. (2009). Prevention through connection: creating a campus climate of care: to whom does the Millennial student in psychological stress reach out? *Planning for Higher Education*, 37(2), 26-33.
- Owen, J., Smith, A., & Rodolfa, E. (2009). Clients’ expected number of counseling sessions, treatment effectiveness, and termination status: Using empirical evidence to inform session limit policies. *Journal of College Student Psychotherapy*, 23, 118-134.
- Pedersen, D. E. (2012). Stress carry-over and college student health outcomes. *College Student Journal*, 46(3), 620-627.
- Readdean, K., Davidson, J., Greenleaf, C., De Maria, P., Levine, H.,...Balderrama, S. R. (2010). Considerations for integration of counseling and health services on college and university campuses. *Journal of American College Health*, 58(6), 583-596.
- Renshaw, T. L., & Cohen, A. S. (2013). Life satisfaction as a distinguishing indicator of college student functioning: Further validation of the two-continua model of mental health. *Social Indicators Research Journal*, 117, 319-334.
- Rosenthal, B., & Wilson, C. (2008). Mental health services: Use and disparity among diverse college students. *Journal of American College Health*, 57(1), 61-67.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55(1), 68-78.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects.

*Education for Information*, 22, 63-75.

Simpson, K. R. S., Meadows, G. N., Frances, A. J., & Patten, S. B. (2012). Is mental health in the Canadian population changing over time? *The Canadian Journal of Psychiatry*, 57(5), 324-331.

Statistics Canada. 2011. *Spending on post-secondary education*. Statistics Canada Catalogue no. 81-599-X. Ottawa, Ontario. <http://www.statcan.gc.ca/pub/81-599-x/81-599-x2011007-eng.pdf> (accessed March 26).

Statistics Canada. 2014. *List of post-secondary institutions*. Statistics Canada Catalogue no. 81-582-X. Ottawa, Ontario. <http://publications.gc.ca/Collection/Statcan/81-582-X/institution.pdf> (accessed February 19).

Statistics Canada. 2015. Canadian post-secondary enrolments and graduates, 2013/2014. Ottawa, Ontario. <http://www.statcan.gc.ca/daily-quotidien/151130/dq151130d-eng.pdf> (accessed March 26).

Statistics Canada. 2016. *Canadian post-secondary enrolments and graduates, 2014/2015*. Statistics Canada Catalogue no. 11-001-X. Ottawa, Ontario. <http://www.statcan.gc.ca/daily-quotidien/161123/dq161123b-eng.pdf> (accessed February 19).

Strauss-Blasche, G., Ekmekcioglu, C., & Marktl, W. (2002). Moderating effects of vacation on reactions to work and domestic stress. *Leisure Sciences*, 24(2), 237-249.

Tinklin, T., Riddell, S., and Wilson, A. (2005). Support for students with mental health difficulties in higher education: the students' perspective. *British Journal of Guidance and Counselling*, 33(4), 495-512.

Watkins, D. C., Hunt, J. B., & Eisenberg, D. (2011). Increased demand for mental health services

- on college campuses: Perspectives from administrators. *Qualitative Social Work*, 11(3), 319-337.
- Windhorst, E., & Williams, Allison. (2016). Bleeding at the roots: Post-secondary student mental health and nature affiliation. *The Canadian Geographer*, 60(2), 232-238.
- World Health Organization. (2014). *Mental health: A state of well-being*. Retrieved from [http://www.who.int/features/factfiles/mental\\_health/en/](http://www.who.int/features/factfiles/mental_health/en/)
- Wynaden, D., McAllister, M., Tohotoa, J., Al Omari, O., Heslop, K.,...Byrne, L. (2014). The silence of mental health issues within university environments: A quantitative study. *Archives of Psychiatric Nursing*, 28, 339-344.
- Yorgason, J. B., Linville, D., & Zitzman, B. (2008). Mental health among college students: Do those who need services know about and use them? *Journal of American College Health*, 57(2), 173-181
- Zivin, K., Eisenberg, D., Gollust, S.E., & Golberstein, E. (2009). Persistence of mental health problems and needs in a college student population. *Journal of Affective Disorders*, 117(3), 180-185.

\*References suppressed as to keep University X anonymous.

## Sheldon Hill

---

### EDUCATION

---

**Master of Arts (MA) Counselling Psychology** June 2018  
*Western University, London ON*

**Bachelor of Arts (BA) Honours Specialization Psychology, Major Biology** June 2014  
*Western University, London ON*  
Honours Thesis: *Familiarity-Based Object Recognition across Animacy and Real-World Size*

---

### HONOURS & AWARDS

---

Faculty of Education Entrance Scholarship 2016  
Dean's Honour List, Western University 2010 – 2014  
Queen Elizabeth II Aiming for the Top Scholarship 2010 – 2014

---

### RELATED WORK EXPERIENCE

---

**Psychotherapy Intern** September 2017 – Present  
*Psychological Services, Western University, London ON*

**Learning Skills Counsellor Intern** September 2017 – Present  
*Learning Skills Service, Western University, London ON*

**Group Co-facilitator** October 2017 – Present  
*Family Service Thames Valley, London ON*

**Group Co-facilitator** April 2017 – Present  
*Canadian Mental Health Association Middlesex, London ON*

**Residence Life Coordinator** June 2014 – August 2016  
*University of Calgary, Calgary AB*

**Residence Don** August 2011 – April 2014  
*Western University, London ON*

---

### PUBLICATIONS

---

Beks, T. A., Cairns, S. L., Smygwyty, S. L., Miranda Osorio, O. A. L., Hill, S. J. (in press).  
Counsellor-in-residence: Evaluation of a residence-based initiative to promote student mental health. *Canadian Journal of Higher Education*.

Hill, S. (2015). The effect of mimicry and in-group effect on helping behaviour. *Western Undergraduate Psychology Journal*: Vol. 3: Iss. 1.

Hill, S. (2014). The default network, task-positive network and goal-directed problem-solving. *Western Undergraduate Psychology Journal*: Vol. 2: Iss. 1.