

Attitudes towards online and face-to-face counselling among university students in
Newfoundland

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Abstract

This study investigated student attitudes towards online and face-to-face counselling at a university in Newfoundland. In addition, the variables 'self-stigma', 'perceived stigma from others' and 'practical barriers to treatment' were examined for their relationship with attitudes towards counselling. There were 166 students that participated in the study that included an online survey. While participants' attitudes towards online counselling were favourable ($M=39.34$), students still significantly preferred face-to-face counselling ($M=44.18$). Students did not associate discomfort with either mode of delivery. Relationships were also found between the variables tested. Students who reported practical barriers to treatment had more negative attitudes towards face-to-face counselling ($r=-0.167$, $p=0.038$) but neither positive or negative attitudes towards online counselling. Self-stigma was negatively associated with face-to-face counselling ($r=-0.526$, $p<0.001$), but not online counselling. Perceived stigma from others was negatively associated with face-to-face counselling ($r=-0.330$, $p<0.001$), and to a lesser extent, online counselling ($r=-0.0158$, $p<0.01$). Participants in the study reported facing multiple barriers to treatment, as well as, reported medium to high levels of stigma associated with seeking mental health services. Based on the findings, it is recommended that university counselling centres find ways of increasing access to face-to-face counselling as its students' preferred method of treatment. In addition, universities should provide outreach to decrease mental health stigma on campus. Since attitudes towards online counselling are favourable, introducing this service could be beneficial, but not with the intention that it will remove barriers to treatment. The implications of stigma and barriers to mental health treatment in these findings in light of students' attitudes towards counselling is addressed.

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CHAPTER 1: Overview

In recent years, student wellbeing has received considerable attention likely due to the prevalence of mental health disorders increasing in the last few decades (Twenge, Gentile, Dewall, Ma, Laceyfield, & Schurtz, 2010 as cited in Lipson, Lattie, & Eisenberg, 2019). Globally, it has been found that 20.3% of university students have a diagnosed mental health disorder (Auerbach et al., 2017) which typically develops between 14 and 24 years of age (Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005; Kessler, Foster, Saunders, & Stang, 1995). The majority of students will enter university with pre-matriculation on-sets, and many of these students will not receive treatment for their mental health issues (Auerbach et al., 2017). In Canada, the 2016 National College Health Association survey of Canadian post-secondary students found that 44.4% of students reported that they felt “so depressed that it was difficult to function” (p.3) and 13% of students considered attempting suicide (Canadian Alliance of Student Associations, 2018).

As university life is inherently stressful, there are a number of reasons why students will feel heightened psychological distress (Robinson, Jubenville, Renny, & Cairns, 2016). For instance, the transition from high school to university is difficult, and often takes place without proper institutional and/or family support (Pascarella, Pierson, Wolniak, & Terenzini, 2004, as cited in Giamos, Lee, Suleiman, Stuart, & Chen, 2017). Relationship problems (Field, Diego, Pelaez, Deeds, & Delgado, 2012), substance use (Tembo, Burns, & Kalembo, 2017), and poor academic functioning (Bruffaerts et al., 2018) can all impact mental health among students.

These issues can have serious consequences for secondary and postsecondary students. For example, they decrease students’ likelihood of graduating from high school, as well as their likelihood of entering college (Auerbach et al., 2017; Kessler et al., 1995). Mental health

disorders have also been associated with financial stress (Eisenberg, Hunt, & Speer, 2013), drug use (Han, Compton, Blanco, & Colpe, 2017), low academic performance (Bruffaerts et al., 2018), absence from work (Institute of Health Economics, 2007 as cited in Centre for Addictions and Mental Health [CAMH], 2019), and even suicide (Downs & Eisenberg, 2012; Goldsmith, Pellmar, Kleinman, & Bunney, 2002). In addition, mental health issues have economic consequences, and cost the Canadian economy roughly \$51 billion per year through costs to health care and losses in productivity (Lim et al., 2008, Smetanin et al., 2011 as cited in CAMH, 2019).

For postsecondary students, their institutions' counselling centres are the first point of contact for seeking assistance with their mental health issues (Minami et al., 2009). Students can benefit from university counselling services that are generally provided free of charge, although some institutions offer low-fee services (Gallagher, 2009 as cited in Downs & Eisenberg, 2012). In a study conducted by Minami et al. (2009) on treatment effectiveness at university counselling centres, the findings revealed that campus counselling was effective for treating clients with clinically significant distress. Using benchmarking, the researchers were able to determine that the treatment effect for clients who had at least one additional session (after intake) was equivalent to treatment effects seen in clinical trials for clients suffering from major depression. Students who participated in two or more sessions were also better off than students who were waitlisted (Minami et al., 2009).

The benefits of campus counselling services go beyond its improvements in mental health issues. In a study by Bilodeau and Meissner (2018), students who participated in weekly counselling sessions, over a 1-year period, saw improvements not only in their mental health, but also in their academic functioning and grade point averages. Lee, Olson, Locke, Michelson, &

Odes (2009) found that students who used campus counselling services had improved academic performance, and were less likely to drop out of university. Schwitzer et al. (2018) also found similar results in their study. Students who participated in the number of counselling sessions advised by counsellors, received higher grade point averages than students who terminated after their first meeting. It would seem in the best interest of universities to ensure students have access to campus counselling if needed.

However, students report multiple barriers to accessing these services, even when facing severe psychological distress (Robinson et al., 2016). Some students with mental health issues simply chose not to seek counselling on campus, in spite of its benefits (Eisenberg, Golberstein, & Gollust, 2007). Early termination of treatment is another common occurrence among students who have sought assistance from their universities counselling centres (Hall, Brown, & Humphries, 2017). Yet, there are a large majority who do want access to counselling but not will not be able to receive immediate treatment due to over exceeding demands on campus counselling centres (Cornish et al., 2017).

This last problem is particularly relevant to this thesis. To reach more students and reduce institutional barriers, universities must find innovative strategies for improving access to student mental health services (Cornish et al., 2017). One-on-one online counselling services has been proposed as a possible solution to this problem (Fang, Tarhis, McInroy, & Mishna, 2017). According to students who have used these services, there are a lot of benefits associated with their mode of delivery (Navarro, Bambling, Sheffield, & Edirippulige, 2019).

Although little research exists specifically on online counselling treatment outcomes, research conducted by Marcelle, Nolting, Hinshaw, & Aguilera (2019) show promising treatment outcomes for adults who have used online counselling services in the form of email, chat, and

videoconferencing. According to the Higher Education Mental Health Alliance (HEMHA) (2018), online counselling has the potential to reduce physical barriers to treatment and assist students who feel stigmatized by face-to-face services. This mode of delivery also can appeal to students because research shows youth are more likely to disclosure mental health concerns over the internet than in person (Ivancic, Perrens, Fildes, Perry, & Christensen, 2014, Rice et al., 2014, as cited in Cornish et al., 2017).

Statement of the Problem

Before implementing distance counselling, there are a lot of factors that university stakeholders must consider (Higher Education Mental Health Alliance, 2018). Clinicians would have to be trained on how to efficiently incorporate these services into their practice (Mallen, Vogel, & Rochlen, 2005). Online counselling is typically void of facial cues and verbal communication (with exception to videoconferencing), therefore counsellors would have to adapt their interactions to meet the needs of their clients online (Mallen et al., 2005). Universities must also have the capability to incorporate the technological equipment and infrastructure into their current practices (HEMHA, 2018). Another consideration would be the ethical and legal implications of counselling students online; counselling centres would have to develop plans and procedures in emergency cases where a student is at risk (HEMHA, 2018). Therefore, prior to its implementation, university counselling centres would have to understand and address the “cost, need, and potential reach” (p.1003) of telemental health services (Toscos, Carpenter, Drouin, Roebuck, Kerrigan, & Mirro, 2018).

One major factor to consider is whether students are open to these kinds of online counselling services. First, understanding attitudes of these services can help university stakeholders to make informed decisions about its implementation. The relationship between help-

seeking attitudes and intentions to seek mental health services (Mojtavai, Evans-Lacko, Schomerus, & Thornicroft, 2016) could potentially guide stakeholders about whether students may be interested in participating in counselling services online.

Few studies have investigated whether Canadian students are open to online counselling services. Furthermore, claims are being made that students who feel stigmatized by current traditional services would find this service to be appealing to use (HEMHA, 2018). In addition, proponents of this service delivery also assert that online counselling has the potential to remove barriers to access that students typically face (HEMHA, 2018). However, research is lacking to demonstrate that these relationships hold.

Research Purpose

The purpose of this study was to examine attitudes towards online counselling among university students. Special attention was placed on the role of stigma and practical barriers, to see if a relationship exists between these variables and students' attitudes towards both face-to-face and online counselling. The aim of this study was to determine if students were open to using online counselling, and if a relationship existed between stigma, practical barriers, and attitudes towards counselling.

Research Questions

Research Question 1: What are the attitudes students have towards online counselling in comparison to face-to-face counselling?

Hypothesis 1: Student attitudes towards face-to-face counselling will be more favourable, but students will nevertheless have positive attitudes towards online counselling.

Research Question 2: What is the relationship between practical barriers to treatment and attitudes towards online and face-to-face counselling?

Hypothesis 2: Students who report high levels of practical barriers will have positive attitudes towards online counselling.

Research Question 3: What is the relationship between self-stigma, perceived stigma from others, and attitudes towards online counselling and face-to-face counselling?

Hypothesis 3: Self-stigma will negatively influence attitudes towards face-to-face counselling, and to a lesser extent, online counselling. Perceived stigma from others will negatively influence face-to-face counselling attitudes, and positively influence online counselling attitudes.

Significance to the Field

This study adds to the literature on students' attitudes towards online counselling, as well as to the broader literature on online counselling. It can be used to inform dialogue about the potential need to integrate online counselling services into university counselling centres. This research also examines the relationship between online counselling and perceived stigma from others, self-stigma, and practical barriers to treatment. Advocates of online counselling have noted its potential to remove barriers (HEMHA, 2018) but there has been little research that has examined this relationship (e.g. Ballesteros & Hilliard, 2016; Bird, Chow & Freeman, 2018). This research will provide empirical evidence for, or against these claims. Lastly, this study builds on previous research on the potential clients who may be inclined to use online counselling due to practical barriers (Rochlen, Land, & Wong, 2004b).

Definitions

Online counselling. Online counselling is “the practice of professional counselling and information delivery that occurs when client(s) and counsellor are in separate or remote locations and utilize electronic means to communicate over the internet” (NBCC, 1997, p.1 as cited in Mishna, Bogo, & Sawyer, 2015, p.170). This process is analogous to the “talk therapy” that is

typically conducted face-to-face in a mental health professional's office (Rochlen, Beretvas, & Zack, 2004a, p. 96). Online counselling can also go by other names such as cyber counselling (Mishna et al., 2015), cybertherapy, e-therapy, and computer-mediated interventions (Barak, Klein, & Proudfoot, 2009). While there are numerous definitions of online counselling, agreement exists in that they all take place through the use of telecommunications (Barak et al., 2009). Typical modalities of online counselling include asynchronous e-mail, synchronous chat, and videoconferencing (Mallen et al., 2005). Those who have used online counselling typically praise the accessibility and flexibility associated with this mode of delivery (Chester & Glass, 2006, Oravec, 2000, as cited in Mishna et al., 2015).

Stigma. Stigma is “the perception of being flawed because of [a] personal or physical characteristic that is regarded as socially unacceptable” (Blaine, 2000 as cited in Vogel, Wade, & Haake, 2006, p.325). In relation to mental health illness, stigma involves negative societal or individual perceptions of a person who has a mental illness, or a person seeking treatment for their mental health issues (Jennings et al., 2017). Stigma is broken down into two categories that individuals may experience in their lives: self-stigma or public stigma (Corrigan, 2004; Vogel et al., 2006). Public stigma is defined as the “perception held by a group or society that an individual is socially unacceptable and often leads to negative reactions towards them” (Vogel et al., 2006, p.325). Self-stigma is when the individual internalizes public stigma, which can diminish their self-esteem, self-efficacy, and confidence (Corrigan, 1998; Corrigan, 2004). Self-stigma of mental illness would be believing societies' views and notions of mental illness, and feeling less valued because of them (Link, 1987, Link & Phelan, 2001, as cited in Corrigan, 2004).

Practical barriers to Treatment. Practical barriers (also called physical barriers) to treatment are barriers that prevent people from seeking help for their mental health issues (Jennings et al., 2017). This includes but is not limited to, financial restraints, transportation issues, and/or not having enough time to get treatment (Jennings et al., 2017). Cost and lack of time are practical barriers to treatment that are often reported by university students (Robinson, et al., 2016). According to Jennings et al. (2017), these barriers are more practical in nature and do not include stigma associated with seeking help, or negative attitudes about treatment (Jennings et al., 2017).

Ethical Considerations

This study was not funded by any parties, and received approval from Memorial University's Interdisciplinary Committee on Ethics in Human Research (ICEHR). This study took place in accordance with the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2) and was granted full clearance until June 30th 2020. There was no physical harm to any participants involved, and the participants' identities were protected.

CHAPTER 2: Literature Review

Introduction

This literature review provides an overview of issues students face when seeking treatment on campus, and the potential of online counselling to eliminate barriers to treatment. First, the function and current practices of university counselling centres in Canada is addressed. The second section discusses barriers to accessing the counselling centre, divided between practical barriers to treatment and stigmatization associated with help-seeking. The third section discusses online counselling and its implications for improving access to counselling services for university students. The final section will conclude the research presented in this literature review and how this study will address gaps in literature.

The Role of University Counselling Centres

The primary function of university counselling centres are to counsel students whose personal problems affect their ability to function accordingly in an academic environment (Bishop, 2010; Lockard, Hayes, Mcleavey, & Locke, 2012). In addition to its main function, prevention and outreach are other key components of the many university counselling centres across Canada (Jaworska, De Somma, Foneska, Heck, & MacQueen, 2016). Students who use counselling services come from diverse backgrounds (e.g. age, sexual orientation, ethnicity) and reasons for accessing services vary considerably (Mishna et al, 2015). In a study conducted by Cairns, Massfeller, and Deeth (2010), the most reported reasons for seeking counselling were relationship issues, anxiety, stress, depression, academic concerns, and career concerns. Less reported issues were trauma, addictions, and eating problems (Cairns et al., 2010).

The demand for treatment has put strain on campus counselling centres. These centres often operate at full capacity, with shortages of staff available, and long waiting lists for students

(Xiao et al., 2017 as cited in Lipson et al., 2019). In a study conducted by Reetz, Barr, and Krylowicz (2013), counselling centre directors reported that 88% of students did not receive timely treatment, and 73% of staff had to work overtime in attempts to meet demand. This did not remove the presence of waiting lists for students who could not be seen (Reetz et al., 2013; Cornish et al., 2017). In response to this high demand, scholars have argued digital mental health services can help counselling centres and improve access for students (Lattie, Lipson, & Eisenberg, 2019).

For example, some universities incorporate the Stepped Care 2.0 model (Mental Health Commission of Canada, 2019) which aims to eliminate the need for waitlists, and revamp traditional psychotherapy services (Cornish et al., 2017). This is because this model involves less face-to-face interaction with a counsellor, and more independent and self-directed strategies for targeting mental health issues in students (Cornish et al., 2017). Students have rapid access to self-help materials and peer support when they need it; they do not have to wait to see a therapist to gain insight about how to handle their issues (Cornish et al., 2017). These services are said to benefit young people, who “now socialize, communicate, and discuss their fears, insecurities, and problems online.” (Cornish et al., 2017, p. 429). For students experiencing higher levels of distress, the Stepped Care 2.0 model has steps which involve face-to-face activities such as skill-building workshops, group therapy, face-to-face therapy and crisis management (Cornish et al., 2017). For those with lower levels of distress, it also includes web-based programming such as online self-help resources, and therapist-assisted e-mental health programming (Cornish et al., 2017).

While there has not been a lot of empirical research on its treatment outcomes in students, the model has shown to be as least as effective as traditional methods for depression in a sample

of adults (Firth, Barkham, & Kellet, 2015; Van Straten, Hill, & Cuijpers 2015). Since this model does not include online psychotherapy (see Cornish et al., 2017 for description of model), it may not be suitable for students looking for email, or chat based psychotherapy. For those interested in this type of delivery, they may prefer the Cyber Counselling program offered at the University of Toronto (Mishna, 2019). Some students may still prefer to discuss their issues with a counsellor but may not be able to access face-to-face counselling. In addition, some students may not be inclined to use self-directed strategies for treating their mental health issues.

The Cyber Counselling program is a pilot project that was started in 2012, and offers online counselling services in the form of asynchronous email and synchronous chat to university students (Mishna, Tufford, Cook, & Bogo, 2013). This type of delivery is not to be confused with the Stepped Care 2.0 Model, which does not include this type of service. There appears to be no published data on its effectiveness of the program, but its existence suggests that students are willing to use these services. In addition, several published qualitative articles have investigated the experiences of those who have used the service, as well as, those who have interned in the pilot program (e.g. Fang et al., 2017; Mishna et al., 2015). Many students have reported favourable experiences, especially the flexibility and accessibility associated with accessing these services (Fang et al., 2017). This Cyber Counseling program seems to be the only service of its kind offered to students attending university in Canada.

Accessibility of University Counselling Services

Even though university counselling centres are having a hard time meeting the demand for services, it's interesting to note that only a small proportion of students in psychological distress actually seek treatment for their problems (Robinson et al., 2016). In a study conducted by Robinson et al. (2016), only 8% of the sample of students (n=400) attending university in

Western Canada reported that they accessed their counselling centre. Empirical research has investigated the issues that affect students' unwillingness and/or inability to access to university counselling centres (e.g. Eisenberg, Hunt, Speer, & Zivin, 2011; Eisenberg et al., 2007; Marsh & Wilcoxon, 2015; Nash, Sixbey, An, & Puig, 2017). Findings from these studies have suggested that some students face practical barriers to access while others students feel stigmatized when seeking treatment (Jennings et al., 2017). Furthermore, some students simply have negative or skeptical views towards help-seeking, which impedes their willingness to use services (Czyz, Horwitz, Eisenberg, Kramer, & King, 2013; Eisenberg et al., 2007; Eisenberg et al., 2011; Robinson et al., 2016).

Practical Barriers to Treatment

There have been a reported number of practical barriers to treatment for university students. These barriers include but are not limited to, lack of time, lack of financial resources, and a fear of psychological treatment being documented on academic records (Givens and Tija, 2002 as cited in Jennings et al., 2017). Jennings et al. (2017) differentiate practical barriers from issues relating to one's attitudes and stigma. This section will discuss three practical barriers to treatment that can be reduced by the introduction of online counselling services (HEMHA, 2018).

Lack of time. Many students report a lack of time as a significant barrier to accessing services (Czyz et al., 2013; Eisenberg et al., 2007; Nash et al., 2017; Robinson et al., 2016).

Within a large sample of students (n=7992) across nine universities, Nash et al. (2017) found that a large proportion of students (75.5%) indicated that they did not have enough time to receive treatment on campus. This problem was particularly evident among those who spent more time at work; these students were less likely to receive treatment even if they perceived a need for it

(Nash et al., 2017). According to Nash et al. (2017), previous literature has focused too much on economic status as the influencer of low treatment rates. These researchers argue that time constraints and work requirements (i.e., additional time at work, inability to take time off work) are the true barriers to seeking help.

Robinson et al. (2016) found comparable results in their study examining the mental health needs of Canadian students. Their findings indicated that '*lack of time*' (43.5%) was a significant barrier to accessing counselling services. Among students who reported suffering from psychological distress, a lack of time to receive treatment was the most commonly identified reason for not seeking help (54.3%). The researchers attributed these findings to students not feeling it was worth their time and effort to engage in help-seeking because other demands in their life were considered more important. Eisenberg et al. (2011) concluded this based on their findings as well, stating that students may not view treatment as urgent a priority as coursework and social activities.

There may be accurate reasons why students feel this way about obtaining treatment. According to Cornish et al. (2017), traditional psychotherapy is time-consuming and often requires multiple sessions. Robinson et al. (2016) argue that students likely perceive psychotherapy as requiring too much time, therefore not accessing it even when they are feeling distressed. This is why university counselling centres need to consider moving away from traditional psychotherapy services, which do not meet the needs of "today's students" (Cornish et al., 2017, p.430). Even for those up to the challenge, there are other time constraints to consider such as the time it takes for students to travel to campus for therapy, particularly relevant to those who live far away and in rural settings (HEMHA, 2018). Incorporating online counselling services allows universities to potentially reach students who are faced with the burden of time,

and/or who simply live too far to engage in treatment on campus (Haberstroh, Duffey, Evans, Gee, & Trepal, 2007).

Costs. Financial difficulties and/or costs associated with counselling act as a deterrent to treatment for some students in need of treatment (e.g. Downs & Eisenberg, 2012; Eisenberg et al., 2007; Marsh & Wilcoxon, 2015; Nash et al., 2017; Robinson et al., 2016). This particular barrier has surprised researchers, as most universities offer free or very low cost counselling services for students (Gallagher, 2009 as cited in Downs & Eisenberg, 2012). Robinson et al. (2016) found that 12.5% of students (11.4% of non-distressed participants and 14.6% of distressed participants) reported cost as reason for not accessing services, despite free services at the institution where Robinson et al. (2016) surveyed participants. In a study by Marsh and Wilcoxon (2015), costs associated with treatment (\$15 per session) was more of a significant deterrent than help-seeking attitudes and stigmas associated with seeking help.

Robinson et al. (2016) recommends that university counselling centres clarify the costs (or lack thereof) of counselling services in order to improve access to students. In addition, university counselling centres need to find ways of addressing the hidden costs associated with treatment. In particular, hidden costs such as gas for travelling, public transportation fees, and/or arranging childcare act as barriers to students participating in counselling (HEMHA, 2018). This is another way in which introducing online counselling services can serve to assist university counselling centres in removing barriers to treatment.

Distance education. For obvious reasons, distance learning is another barrier to receiving campus mental health services (HEMHA, 2018). The experiences of distance students with mental health disorders is rarely addressed in the literature on learning barriers for online students (McManus, Dryer, and Hennings (2017). To date, McManus et al. (2017) appear to be

the only researchers who have studied the experiences of students with mental health disorders who undertake their studies online. The researchers interviewed 12 distance students who reported multiple difficulties involved in balancing mental health issues and student life in an online environment. These students reported that the absence of a physical campus led to feelings of disconnect from their host institution. Isolation was attributed to the absence of face-to-face contact with staff, peers, and the physical academic environment that traditional students may take for granted (McManus et al., 2017). According to McManus et al. (2017), the very nature of distance education itself, acts as significant barrier to academic functioning and success for students in this study. The researchers provided several suggestions to combat this issue; one of them was for on-campus services to be made available online for distance learners, including access to counsellors and trained facilitators.

Stigma

Stigma has a complex relationship with mental health services; some research has found it to increase treatment seeking behaviours (Downs & Eisenberg, 2012), some research has found it has no significance on treatment seeking (Czyz et al., 2013), and others have found it to negatively impact treatment seeking behaviours (Gaddis, Ramirez, & Hernandez, 2018). There are two types of stigma conceptualized by Corrigan (2004): public stigma and self-stigma. In the case of groups such as students, public stigma is more specific and typically called *perceived stigma from others*, which is a “belief that important others in one’s social group would think less of an individual if he or she were to seek treatment” (Corrigan, 2004, Vogel et al., 2006, as cited in Jennings et al., 2017, p.514). Self-stigma is the internalization of beliefs about mental health problems, typically defined as “an individual's personal perception that it is unacceptable or undesirable to seek treatment” (Vogel et al., 2006 as cited in Jennings et al., 2017, p.514).

According to Corrigan (2004), these types of stigma influence each other, and often lead to reduced social opportunities, and negative impacts on the individual's self-identity, and self-esteem (Corrigan, 2004).

Vogel, Wade, and Hackler (2007) found a complex relationship between stigma and help-seeking behaviours. First, the researchers found perceived public stigma to be positively associated with self-stigma. Second, self-stigma was negatively associated with counselling attitudes. Third, the negative relationship existed between self-stigma and counselling attitudes. Finally, negative counselling attitudes was positively associated with participants' willingness to seek help (Vogel, Wade, & Hackler, 2007). To summarize, this meant that those who felt public stigmatized, were also likely to feel self-stigma, which led to less favourable attitudes towards help-seeking, which then decreased the likelihood that these individuals would seek help (Vogel et al., 2007).

Gaddis et al. (2018) also found a relationship between stigma and help-seeking behaviours. The researchers studied *school-level stigma* (public stigma within the context of the school environment) over a period of six years in a large sample (n=62,756) of students at 75 institutions. Gaddis et al. (2018) found a negative trend between students' school-level stigma scores and accessing counselling services. Along with decreased likelihood for seeking counselling, students who were found to have high school-level stigma were also less likely to seek help from family members, friends, partners, or any informal support (except for religious groups) (Gaddis et al., 2018).

Based on these findings, stigma can be a significant barrier to accessing treatment. Luckily, research by Lipson et al. (2019) shows that stigma has decreased over a 10-year period, and, treatment use has increased on campus. Using data collected from the Healthy Minds Study

(n=155,026), researchers found that treatment diagnosis and use increased from 19% in 2007 to 34% in 2019. Decreases in perceived stigma from others (from 64.2% to 46%) and personal stigma (from 11.4% to 5.7%) were also observed over the 10-year period. Lipson et al. (2019) has speculated that there is a relationship between the two; particularly that treatment seeking has increased because student's personal stigma (self-stigma) has reduced over time (Golberstein, Eisenberg, & Gollust, 2008; Lipson, Kern, Eisenberg, & Breland-Noble, 2018). This was the case, except in students experiencing depression who did report significant reductions in stigma associated with seeking treatment (Lipson et al., 2019). Therefore, stigma still seems to be an influence for certain individuals in need of treatment. In order to address continued barriers to treatment, Lipson et al. (2019) recommends the use of digital mental health programs to increase access to more students.

Online Counselling

With the many recommendations for university counselling centres to incorporate digital mental health services to improve access to treatment (Dunbar, Sontag-Padilla, Kase, Seelam, & Stein, 2018; Lattie et al., 2019; Lipson et al., 2019), it is important to distinguish what online counselling is, and what it is not. While the definition of online counselling varies by location and time period, it often involves the use of email, synchronous chat, and video-conferencing (Mallen, Vogel, and Rochlen, 2005). Another aspect of online counselling is that it involves direct communication between a counsellor and client(s) (Rochlen et al., 2004a). The counsellor and client(s) address mental health concerns, in a similar fashion to psychotherapy (or “talk therapy”) that would occur in mental health professionals’ office (Rochlen et al., 2004a). This was how online counselling was described to participants in this study, distinguishing from other digital mental health services.

According to Rochlen et al. (2004a), online counselling excludes online assessments, online coaching, and online career coaching. It would also exclude any type of web-based mental health programming, since it does not include a therapist and/or doesn't involve the "talk therapy" process (Rochlen et al., 2004a). This would include the Stepped Care Model 2.0 currently being offered at some postsecondary institutions. For a comprehensive review that categorizes and defines internet-supported interventions, Barak et al. (2009) provides a detailed explanation of online counselling, in comparison to web-based interventions, internet-operated software, and other online activities.

Although technological advancements have led to the advent of online counselling, this mode of delivery is not entirely new. Interacting with someone through an online counselling service like email, is similar to how Freud communicated with clients through long distances (Skinner & Zack, 2004). Some of Freud's' clients were exclusively treated through letters, such as the well-known analysis of the child "Little Hans" (Freud, 1955 as cited in Skinner & Zack, 2004). The expansion of distance counselling grew from letters, to telephones, to video-conferencing (Skinner & Zack, 2004). Now, distance counselling can include online and modern text-based communications that appeal to the current generation of students and "meet them where they are" (Lipson et al., 2019, p.2).

Students who have had the opportunity to use online counselling have reported many benefits with its service (Mishna et al., 2015). In addition, one of the few major studies that have investigated the effectiveness of online counselling, has found reduction in symptoms of depression (Marcelle et al., 2019). This was regardless of the platform used, which included combinations or singular uses of email, chat, or videoconferencing (Marcelle et al., 2019). Some distinguishing benefits of online counselling has been made about its journal-like quality (Fang

et al., 2017). It has been associated with positive influences on mood, physical health, mental well-being, and even grade point averages (Greenberg and Stone, 1992, Pennebaker & Beall, 1986, Pennebaker, Colder, & Sharp, 1990, as cited in Pennebaker, 1997). Additionally, the anonymity of the internet has made it easier for individuals to share intimate details and express oneself more openly than they would in person (Fang et al., 2017; Joinson, 2001, Leung, 2002 as cited in Suler, 2004).

Individuals who do not have the opportunity to disclose their feelings, or who chose to inhibit them, face declines in their emotional, mental, and physical health (Ullrich & Lutgendorf, 2002). Yet, students may not have opportunities to speak to someone about their mental health issues. While there are current popular platforms such as BetterHelp; these services are quite expensive, especially when compared to the free services offered by students' university counselling centres. As previously discussed, cost has been found to be a significant barrier to access for students (Marsh and Wilcoxon, 2015; Robinson et al., 2016). Therefore, university counselling centres could improve access to treatment by offering these online services themselves, or through third party telemental health companies (HEMHA, 2018).

The Implications of Online Counselling on Practical Barriers to Treatment

While there is no empirical research that examines the relationship between practical barriers to treatment and online counselling, there are first hand student experiences that highlight the potential of online counselling for barrier removal. Three studies that address barrier removal in online counselling services (e.g. Fang et al., 2017; Mishna et al., 2015; Navarro et al., 2019) are discussed in this section. It is important to note that data collected from the studies by and Fang et al. (2017) and Mishna et al. (2015) involve experiences of the same cyber counselling program offered at the University of Toronto (Mishna, 2019). Mishna et al.'s

(2015) study included data collected from 2008-2012, and Fang et al.'s (2017) study used data collected from 2008-2015. The researchers do not indicate if an overlap exists in the data used for these studies.

Students in the study conducted by Fang et al. (2017) found that accessibility was a major advantage in online counselling. In particular, the findings indicated that online counselling was beneficial for students "busy with school, work and personal commitments, or [those] struggling with individual challenges or mental difficulties that would otherwise made it difficult to participate in counselling" (p.7). Students found that online counselling provided them with more flexibility in their schedule (Fang et al., 2017). Students in Mishna et al.'s (2015) study agreed that online counselling increased accessibility, as they did not have to leave their houses to receive counselling. Mishna et al. (2015) found that the "[e]asy access of cyber counseling was value added for students who typically travelled long distances to and from the campus" (p.173).

Young adults (74%) aged 15-25 years old in the study conducted by Navarro et al. (2019) also indicated that 'accessibility' was a major reason for seeking online counselling services. Particularly, many participants found online counselling to be convenient and flexible to use regardless of time or location. In contrast to traditional face-to-face services, participants found that online counselling could be accessed in moments of crisis or distress. For those living in areas of low service density, online counselling provided them with services that they would not otherwise have access to due to the scarcity of clinicians in their area. Participants also indicated that the affordability of online counselling drew them in. The service was offered for free in this particular study, removing "financial barriers young people experience to accessing paid counselling services" (p.7).

Research does not exist on distance students' experiences of online counselling. Based on the research discussed that shows online counselling improves accessibility for participants living far from counselling services, one can infer that this benefit could also be transferred over to distance students, who generally don't have access to any type of campus counselling service. To date, online mental health interventions are rarely utilized by university counselling centres (Kern, Hong, Song, Lipson, & Eisenberg, 2018; Lattie et al., 2019; Toscos et al., 2018;). While online counselling has been shown in the literature to improve accessibility, it still does not show if an association exists between perceived barriers to treatment and online counselling attitudes in students who have never experienced these services. Regardless of whether online counselling improves access, if students do not perceive this relationship, then they may not pursue these services when they become available.

The Implications of Online Counselling on Stigma

It has been argued that online counselling has the potential to help students who feel stigmatized seeking treatment for their mental health issues (HEHMA, 2018). Previous research that looks at the relationship between stigma and online counselling is limited; and the findings are inconsistent. For example, Ballesteros and Hilliard (2016) examined the relationship between self-stigma, perceived stigma from others, and counselling attitudes in Latino/Latina students attending university in the United States. The researchers were interested in seeing if online counselling had the potential to reduce stigma in this ethnic group, based on previous speculation that online counselling could help alleviate feelings of embarrassment associated with discussing personal concerns (Young, 2005).

Ballesteros and Hilliard (2016) found that both perceived stigma and self-stigma negatively influence attitudes towards face-to-face counselling. However, a small, significant,

but weak relationship was found between self-stigma and online counselling. This suggested that students with higher self-stigma reported less favourable attitudes toward online counselling. This finding was not surprising to the researchers, as previous research indicates a negative relationship between self-stigma and attitudes towards help-seeking (Zivin, Eisenberg, Gollust, & Golberstein, 2009; Pederson and Vogel., 2007). Ballesteros and Hilliard's (2016) explain that their findings contrast previous research by Joyce (2012) that found a positive relationship between self-stigma and attitudes towards online counselling.

Bird et al.'s (2018) study also looked at the relationship between stigma and attitudes towards counselling. These researchers compared levels of stigma and attitudes in a sample of athlete students and non-athlete students. The findings in the study by Bird et al. (2018) were different than the results in Ballesteros and Hilliard's study (2016). One reason could have been that Bird et al. (2018) study provided more in-depth look into counselling attitudes by using subscales (value and discomfort), rather than simply relying on a one total positive or negative number that signifies participants' attitude towards counselling.

Bird et al. (2018) found that in both groups, perceived stigma from others was associated with increased value in online counseling. Self-stigma negatively predicted value in face-to-face counselling, but positively predicted discomfort with face-to-face counselling. No relationship existed between the student's value and discomfort in online counselling and their levels of self-stigma. Bird et al. (2018) suggested that the relationship between perceived stigma from others and value in online counselling highlights the benefits of anonymity seen in online counselling (Young, 2005). According to Bird et al. (2018), students who felt stigmatized by others might have seen the benefit of receiving treatment from their own "private location rather than being seen entering a campus counselling centre" (p.360).

Studies by Bird et al. (2018), as well as, Ballesteros and Hilliard (2016) provide contrasting data about the relationship between stigma and online counselling. In the literature that focuses on client experiences, more speculation about the relationship between stigma and online counselling exists. For example, in the study conducted by Navarro et al. (2019), 74% of participants chose online counselling services due to its increased privacy, control, and anonymity. Additionally, 30% of participants indicated their preference for online counselling was to “avoid being overheard or seen attending a service” (Navarro et al., 2019, p.7). Particularly, the researchers found that participants feared being discovered accessing counselling services “due to its social consequences, mostly from parents” (p.7). Judgement, or threatening reactions, on behalf of the counsellor was also a fear for 15% of participants in Navarro et al.’s (2019) study.

Fang et al. (2017) and Mishna et al. (2015) also noted that privacy and anonymity was a predominant reason for seeking online counselling for postsecondary students. Pursuing an anonymous online counselling experience is certainly not indicative that an individual feels stigmatized in traditional face-to-face services. Yet, one can see how avoiding face-to-face services, and the counselling centre in general, may be desirable to students who do feel stigmatized by help-seeking (HEMHA, 2018). However, this is speculative, and with the research on stigma and online counselling attitudes being inconsistent, this research hopes to provide some more insight into the relationship between these two variables.

Summary

Students face multiple barriers to treatment that can have devastating impacts on their well-being and academic functioning (Bruffaerts et al., 2018; Han et al., 2017). While stigma has appeared to decrease over the last ten years, there are still those who feel stigmatized by

others, or even stigmatize themselves for their mental health issues (Lipson et al., 2019). Some universities across Canada have incorporated digital mental health services such as the Stepped Care model 2.0 (Mental Health Commission of Canada, 2019). However, there are students who may want access to one-on-one online counselling with a therapist in the form of email or chat services (Mishna et al., 2015). Especially without having to first access the counselling centre or use web-based mental health modules.

Previous research indicates that students who have used online counselling have found it to increase accessibility, decrease discomfort associated with face-to-face services, and provide a safe space for students to discuss their personal problems (Fang et al., 2017; Mishna et al., 2015). Yet, most students have not accessed these services and therefore may not be aware of the benefits associated with this mode of delivery (Dunbar et al., 2018). Research needs to examine whether students, especially in the cases of those without prior exposure, would want to access this service if it was offered. Based on the gaps in previous literature, this study aims to identify what the attitudes are towards online counselling among students attending university in Canada. In addition, this study would like to fill in the gaps concerning the relationship between online counselling and its association with stigma and practical barriers to treatment. This can help to backup or dismiss claims that introducing online counselling will increase treatment use.

The Current Study

There has not been a study in Canada that looks at students' attitudes towards online counselling, and there is uncertainty about whether students perceive these services to remove barriers and accommodate stigma associated with help-seeking. In addition, many studies that have explored online counselling attitudes, either focused on broad terms such as "online mental health services" (e.g. Dunbar et al., 2018) or have not indicated in their studies which definition

of online counselling was provided to students (e.g. Lewis, Coursol, Bremer, & Komarenko, 2015; Ballesteros & Hilliard, 2016). This has made it hard to generalize the results of these studies to student's specific opinions of 'online counselling', in addition to these studies taking place in a different country from where this current study is taking place.

The current study will attempt to investigate students' willingness to use online counselling by examining the attitudes they have towards this mode of delivery, and comparing it to face-to-face counselling for frame of reference. Furthermore, this research will investigate the relationship between perceived barriers to treatment and counselling attitudes, as well as, stigma and counselling attitudes, to see if students who face these circumstances have higher opinions of online counselling than those who do not. As previously mentioned, Bird et al. (2018) did find an association between online counselling value and perceived stigma from others, but Ballesteros and Hilliard (2016) did not a relationship between stigma and online counselling attitudes. To date, it appears that no existing literature has investigated the relationship between online counselling attitudes and perceived barriers to treatment, other than qualitative research. This research hopes to uncover if students who perceive barriers to treatment will have positive attitudes towards online counselling.

CHAPTER 3: Methodology

Overview

This study used a cross-sectional survey research design to identify attitudes (Creswell, 2015) surrounding online counselling, as well as which variables influence attitudes. A questionnaire was used to assess the attitudes towards online counselling and face-to-face counselling. Additionally, the questionnaire asked students to report physical barriers to seeking treatment, stigma associated with mental health services, and their demographics. The data were collected and analyzed using descriptive and inferential statistics using SPSS.

Materials and Methods

Participants

The sample included students enrolled at a university located in Atlantic Canada. Students could be living on campus, off campus, or pursuing their studies through distance education. Students were recruited from the Faculties of Education, Ocean Sciences, Computer Science, Human Kinetics and Recreation, Pharmacy, Music, Engineering, the Department of Psychology, and the Centre for Innovation in Teaching and Learning. The sampling procedure used for this study was convenience sampling.

Procedure

This study took place online through the use of a survey on the Qualtrics website. Students accessed the survey by clicking the link provided in the recruitment email sent out from administrative staff. Two departments (Psychology and the Centre for Innovation in Teaching and Learning) could not access students through email and instead posted the survey link via social media platforms, Twitter and Facebook, in June and September 2019. Students in other departments received an email for recruitment in June and a second email reminder in

September. Those recruited were informed that participation was optional and that they could enter the cash prize draw without having to fill out the survey.

When students clicked the link, they were brought to the consent form on the Qualtrics website. Students indicated their consent to participate by clicking an arrow that brought them to the first page of the survey. On the first page, the definition of online counselling was provided, followed by the survey questions. To ensure anonymity with the prize draw, this form was separate from the survey itself. Students had to access another Qualtrics link which was located at the bottom of the survey. Students did not have to fill out the survey to proceed to the separate link to enter the contest. This allowed their data to remain separate from the email they provided to enter the prize draw.

Measures

Demographics. Participants were asked to provide details on their age, gender, ethnicity and employment status. Additional questions included whether students were international students and/or distance education students. Participants were also asked if they ever received any type of mental health services before, and if so, to indicate if it was online or face-to-face.

Attitudes towards online counselling. To assess student attitudes towards online counselling, the Online Counselling Attitudes Scale (OCAS) by Rochlen et al. (2004a) was used. This measure consists of 10-items measured on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) (Rochlen et al., 2004). Two subscales comprise the OCAS scale: the 5-item Value of Online Counselling (OV-V) and the 5-item Discomfort with Online Counselling (OC-D) (Rochlen et al., 2004a). The Value of Online Counseling scale (OC-V) includes questions such as “Using online counselling would help me learn about myself” and the Discomfort with Online Counselling scale includes questions such as “I would feel uneasy

discussing emotional problems with an online counsellor.” Higher scores on the Value of Online Counselling scale (OC-V) indicate more positive attitudes towards online counselling (a stronger sense of value toward online counselling) (Rochlen et al., 2004a; Bird et al., 2019). A higher score on the Discomfort with Online Counselling scale (OC-D) indicates higher levels of discomfort associated with online counselling (Rochlen et al., 2004a). Participants were told at the beginning of the survey that online counseling could encompass any type of communication (email, chat, or videoconferencing) (Rochlen et al., 2004a, p. 96) to allow them to provide their general views of online counselling. Scores on the subscales will range from 5 to 30 (Bird et al., 2018). The total score for OCAS ranges from 10 to 60, after reversing the Discomfort subscale. Test-retest reliability was established in the study conducted by Rochlen et al. (2004a) and replicated studies (e.g Ballesteros & Hillard, 2016; Bird et al, 2018; Lewis et al., 2015).

Attitudes towards face-to-face counselling. To assess student attitudes towards face-to-face counselling, the Face-to-Face Counselling Scale (FCAS) by Rochlen et al. (2004a) was used. This measure consists of 10-items measured on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) (Rochlen et al., 2004a). The FCAS scale consists of two subscales: the 5-item Value of Face-to-Face Counselling (FC-V) and the 5-item Discomfort With Face-to Face Counselling (FC-D) (Rochlen et al., 2004a). The FCAS is identical to the OCAS scale, except the word “online” in the OCAS scale is substituted with the word “face-to-face.” Higher scores on the FC-V indicate more positive attitudes towards face-to-face counselling, while higher scores on the FC-D indicate higher levels of discomfort with face-to-face counselling. Scores on the subscales will range from 5 to 30, and total FCAS score will range from 10-60 after reverse scoring the Discomfort subscale. Consistent with the FCAS scale, test-

retest reliability was established in the study by Rochlen et al. (2004a) and replicated studies (Ballesteros & Hilliard, 2016; Bird et al, 2018; Lewis et al., 2015)

Self-Stigma of Seeking Help (SSOSH) scale. The self-stigma for seeking help (SSOSH) is a 10-item measure developed by Vogel et al. (2006) which assesses the self-stigma associated with seeking psychological help. The measure is a 5-point Likert scale that ranges from 1 (strongly disagree) to 5 (strongly agree). The item includes questions such as “It would make me feel inferior to ask a therapist for help” (Vogel et al., 2006). The scores can range from 10 to 50. The SSOSH scale is reliable ($r=0.86$ to 0.90) and has high internal consistency with university students as participants ($.89$ to $.91$) (Bird et al., 2018; Vogel et al., 2006).

Perceived Stigma Scale. To assess stigma associated with treatment seeking, the Perceived Stigma Scale (Jennings et al., 2017) was used. This scale was adapted from Britt et al.’s (2008) Perceived Stigma and Barriers to Care scale, which was used for college and military samples. The shortened scale, which focuses on perceived stigma, includes 7 items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) (Jennings et al., 2017). An example item is “My professors might treat me differently if I received mental health treatment.” Jennings et al. (2017) found the scale to have a Cronbach’s alpha of $.84$.

Practical Barriers Scale. Jennings et al. (2017) adapted the Practical Barriers Scale from Britt et al. (2008). It includes eight items that “reflect practical challenges that students may face in seeking treatment” (Jennings et al., 2017, p.517). The scale is a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). An example item is “I don't have adequate transportation.” In the study conducted by Jennings et al. (2017), Cronbach’s alpha was $.80$. With permission from the authors, the measure was slightly modified. Given the number of distance education students, an item was included pertaining to “not having access to treatment

on campus”. Also, the item “Having to drive too far for treatment” was changed to “Having to travel too far for treatment” in order to include students who use public transportation. The Cronbach alpha was calculated for the scale with the modification and addition, and increased from .822 (8 item scale) to .832 (9 item scale).

Data Analysis

Descriptive statistics and paired samples t-tests were used to answer the research questions. For the total of the OCAS and FCAS scales, the discomfort subscales were reversed and then combined with the value subscales. All data in this study was analyzed using SPSS v. 24.

CHAPTER 4: Results

Background and Demographics

There were 170 participants who completed the survey, however after removing participants who skipped over 5% of the survey, there were 162 participants left in the study. The final sample included 66 males (41%), 89 females (55.3%), 2 (1.2%) other or non-binary, and 4 (2.5%) preferred not to answer. There were 105 participants (64.8%) aged 18-24 years old, 40 participants (24.7%) aged 25-31 years old, 9 participants (5.6%) aged 32-38 years old, and 8 participants (4.9%) aged 38+ years old. The majority of participants were Caucasian (n=111, 68.5%), followed by Asian (n=27, 16.7%), Black/African (n=7, 4.3%), Hispanic (n=4, 2.5%), Aboriginal (n=2, 1.2%), and 11 'other/prefer not to say' (3.8%). There were 42 (25.9%) international students who participated in the survey. A small percentage (8%) of the participants were distance students. Fifty-five participants (34%) worked full-time, sixty-three participants worked part-time (38.9%), and forty-four participants were not employed (27.2%). A large majority of participants (n=96, 59.3%) had previous experience with mental health services, while 40.7% (n=66) of participants had never used a mental health service before. There were 94 participants (58%) who used face-to-face mental health services and 14 participants (8.6%) who used online mental health services.

Stigma and barriers were categorized into three levels: low, medium, and high. For practical barriers to treatment, a score of 0-15 was considered low, 16-30 was considered medium, and 31-45 was high. Both public and self-stigma were broken down into scores of 0-13 for low, 14-27 for medium, and 28-40 for high. For practical barriers to treatment, 13% scored 0-15, indicating little or no barriers to treatment, 83% scored 16-30, indicating they faced medium barriers to treatment, and 66% scored 30-45, indicating high barriers to treatment. For

perceived public stigma, 30% scored 0-13, indicating little or no perceived stigma from others, 75.9% scored 14- 27, indicating that they experience medium levels of perceived stigma from others. Only 5.6% scored 28-40, indicating high levels of perceived stigma from others. Self-stigma was more prevalent in this sample: 11.7% of participants scored 0-13, indicating little or no self-stigma, 59.3% scored 14-27, indicating medium levels of self-stigma, and 29% of participants scored 28-40, indicating high levels of stigma. A positive relationship between perceived stigma from others and self-stigma was found ($r=0.544$ $p=0.001$), consistent with previous research (Bird et al., 2018; Vogel et al., 2007).

Items were analyzed and respondents who answered “agree” or “somewhat” agree were combined to make one percentage. Roughly 26% of students felt that they did not have adequate transportation; 32% felt they had to travel too far for treatment; 46% of participants did not know where to receive services; 57% of participants found it difficult to schedule an appointment; 61% felt it would be difficult to get time off of work and/or school; 66.7% felt that getting treatment cost too much money; 50.6% indicated that they did not have time to look for treatment options; and 53% felt they did not have time for the treatment itself.

Participants who had previous experience with mental health services had more positive attitudes towards face-to-face counselling ($M=45.57$, $SD=8.918$) than those who had no previous exposure ($M=42.24$, $SD=6.187$). However, previous experience with mental health services did not affect attitudes towards online counselling (previous experience $M= 39.20$, $SD= 9.470$, no previous experience $M=39.74$, $SD=39.74$). This was expected as participants were generally unfamiliar with online counselling (only 8.6% had used online mental health services before). Gender did not significantly influence attitudes towards online and face-to-face counselling

(OCAS male $M=39.17$, $SD=7.59$, OCAS female $M=40.03$, $SD=9.05$, FCAS male $M=43.33$, $SD=7.3$, FCAS female $M=44.92$, $SD=8.492$).

Missing Data

The first analysis was checking the data set using frequency tables to inspect missing data points. Missing data that was assumed to be missing at random was replaced with -9 in SPSS. Participants missing a large portion of their data were excluded from the analyses ($n=8$).

Attitudes Towards Online and Face-to-Face Counselling

Participants had favorable attitudes towards both online and face to face counselling. Out of a possible range of 10 to 60 (midpoint 35), the participants OCAS mean score was 39.34, suggesting a neutral to slightly positive attitude toward online counselling, consistent with previous findings (e.g. Ballesteros & Hilliard, 2016; Bird et al., 2018; Lewis et al., 2015; Rochlen et al., 2004a). This was also evident in the OC-V subscale (online counselling value), which had a range of 5 to 30 (midpoint 17.5); participants had a mean of 20.58, suggesting a neutral to positive perception of the value of online counselling (Rochlen et al., 2004a). Given the range for the OC-D (online counselling discomfort) subscale, where higher scores would indicate more discomfort associated with online counselling (range 5 to 30, midpoint 17.5, score not reversed), participants associated low discomfort with online counselling ($m=16.26$, $SD=5.488$).

The total FCAS mean score was 44.18, suggesting a positive attitude towards face-to-face counselling. The FC-V subscale (face-to-face value) had a mean of 24.97, which like the total FCAS score, suggests positive attitude towards face-to-face counselling. Similar to online counselling, participants found low discomfort with face-to-face counselling ($M=15.81$, $SD=5.825$, score not reversed). A relationship between face-to-face and online counselling

discomfort exist ($r=.229$, $p=0.004$, $n=159$), meaning that students who felt discomfort with one modality, also found discomfort with the other.

A paired samples t-test was used to compare attitudes towards face-to-face and online counselling. The results indicated that participants had more favourable attitudes towards face-to-face counselling ($M=44.18$, $SD=8.071$) than online counselling ($M=39.34$, $SD=8.772$) (Mean difference= 4.842 , $SD=10.979$, $t(157)=-0.824$, $p<0.001$). Analyses of the subscales showed that participants valued face-to-face counselling ($M=24.97$, $SD=3.585$) more than online counselling ($M=20.58$, $SD=4.892$) (Mean difference= 4.385 , $SD=5.778$, $t(160)=9.629$, $p<0.001$). The discomfort subscales scores were not reversed; therefore, higher scores would indicate more discomfort associated with counselling. Results showed that face-to-face discomfort ($M=15.81$, $SD=5.825$) and online counselling discomfort ($M=16.26$, $SD=5.488$) were roughly the same (Mean difference= $.459$, $SD=7.030$, $t(158)=0.824$, $p<0.001$).

Table 1

Paired Sample Statistics

	Mean	N	Std. Deviation	Std. Error of Mean
Total FCAS	44.18	158	8.071	.642
Total OCAS	39.34	158	8.772	.698
F2F-Discomfort	15.81	159	5.825	.462
OC-Discomfort	16.26	159	5.488	.435
F2F-Value	24.97	161	3.585	.283
OC-Value	20.58	161	4.892	.386

Table 2

Paired Sample Correlations

	N	Correlation	Sig.
Total FCAS & Total OCAS	158	.152	.056
OC-Discomfort & F2F-Discomfort	159	.229	.004
F2F-Value & OC-Value	161	.097	.221

Relationship between Practical Barriers and Attitudes

A significant small negative relationship was found between face-to-face counselling and practical barriers to treatment ($r=-0.167$, $p=0.038$, $n=155$). This indicates that the more participants perceived practical barriers to treatment, the less positive their attitudes towards face-to-face counselling. In regards to online counselling, there was no relationship between online counselling attitudes and practical barriers to treatment.

When exploring the relationship between the OCAS/FCAS subscales and practical barriers to treatment, some significance was found for face-to-face counseling discomfort but not for online counselling. Face-to-face discomfort (FC-D) was positively correlated with practical barriers to treatment ($r=0.226$, $p=0.005$, $n=155$). Therefore, the more a participant reported practical barriers to treatment, the more discomfort they associated with face-to-face counselling. There was no relationship between face-to-face value and practical barriers to treatment. For the online counselling subscales, no relationship existed between practical barriers and either value or discomfort associated with online counselling was found.

Relationship between Stigma with Treatment and Attitudes

There were small but significant relationships found for both self-stigma and perceived stigma from others. A negative relationship was found between face-to-face counselling and

self-stigma ($r=-0.526$, $p<0.001$, $n=151$) and perceived stigma from others ($r=-0.330$, $p<0.001$, $n=159$). This indicates that the more participants reported self-stigma and perceived stigma by others, the less positive their attitudes were towards face-to-face counselling. A negative relationship was found between online counselling and perceived stigma from others ($r=-0.158$, $p<0.01$, $n=157$). This indicates that the more participants perceived stigma from others, the less positive their attitudes were towards online counselling, though it was not as strong as the relationship with face-to-face counselling. No relationship was found between online counselling attitudes and self-stigma.

When looking to the relationship between the OCAS and FCAS subscales, significant associations were found. Online counselling discomfort (OC-D) was found to be positively correlated with perceived stigma from others ($r=0.162$, $p<0.001$, $n=159$). This indicates that the more a participant perceived stigma from others, the more discomfort they associated with online counselling. Face-to-face discomfort (FC-D) was positively correlated with perceived stigma from others ($r=.325$, $p<0.001$, $n=159$), and self-stigma ($r=0.545$, $p<0.001$, $n=151$). This indicates that the more a participant reported perceived stigma from others, the more discomfort they associated with using face-to-face counselling. Additionally, the more participants reported self-stigma, the more discomfort they associated with face-to-face counselling.

Face-to-face value (FC-V) was negatively correlated with perceived stigma from others ($r=-0.210$, $p=0.008$, $N=160$) and self-stigma ($r=-0.305$, $p<0.001$, $n=152$). This indicates that the more participants perceived stigma from others, the less value they associated with face-to-face counselling. Additionally, the more self-stigma a participant reported, the less value they associated with face-to-face counselling. No relationship existed between online counselling value and self-stigma, and perceived stigma from others.

Table 3

Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	T	Df	Sig. (2-tailed)
Total FCAS & Total OCAS	4.842	10.979	.873	3.117	6.567	5.543	157	.000
OC-Discomfort & F2F-Discomfort	.459	7.030	.557	1.560	-.642	.824	158	.411
F2F-Value & OC-Value	4.385	5.778	.455	3.486	5.284	9.629	160	.000

***95% confidence interval of the difference**

Table 4

Correlations

		Total FCAS	Total OCAS	F2F-Value	OC-Value	F2F-Discomfort	OC-Discomfort
Physical barriers	Pearson Correlation	-.167*	-.049	-0.005	0.077	0.226**	0.132
	Sig. (2-tailed)	0.38	.547	.949	0.344	0.005	0.100

	N	155	155	156	155	155	156
Perceived Stigma	Pearson Correlation	-0.330**	-0.158*	-0.210**	-0.068	0.325**	0.162
	Sig. (2-tailed)	0.000	0.048	0.008	0.391	0.000	0.042
	N	159	157	160	159	159	158
Self-Stigma	Pearson Correlation	-0.0526**	-0.055	-0.305	0.039	0.545**	0.0126
	Sig. (2-tailed)	0.00	0.0502	0.000	0.0636	0.000	0.124
	N	151	150	152	151	151	151

** Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

CHAPTER 5: Discussion

This study examined student attitudes towards online counselling, and their association with stigma and practical barriers to care. The research supports the hypothesis that student attitudes towards face-to-face counselling are more favourable than online counselling, however attitudes to online counselling remain neutral to positive (e.g. Ballesteros & Hilliard, 2016; Bird et al., 2018; Rochlen et al., 2004a; Rochlen et al., 2004b). The second hypothesis was not supported; students with high levels of practical barriers did not have more positive attitudes towards online counselling. Hypothesis 3 was partially supported; while this study found a relationship between self-stigma and counselling attitudes, it did not find an association between perceived stigma from others and online counselling attitudes. The findings will be discussed in detail below.

Attitudes towards Counselling

Previous research has shown that while students have neutral to slightly positive attitudes towards online counselling, their attitudes towards face-to-face counselling are significantly more favourable (Ballesteros & Hilliard, 2016; Bird et al., 2018; Lewis et al., 2015; Rochlen et al., 2004a). The same results were found in this study. Researchers who have since replicated the original study by Rochlen et al. (2004a) have agreed with his belief that participants higher value with face-to-face counselling can be due to a lack of familiarity with online counselling (Ballesteros & Hilliard, 2016; Bird et al., 2018; Lewis et al., 2015).

It is worth noting that students' overall attitudes towards online counselling were higher than those found by Bathje et al. (2014), Ballesteros & Hilliard (2016), and Wong et al. (2018), using the same survey measures. Since Bathje et al. (2014) surveyed Korean students in South

Korea, Wong et al. (2018) surveyed Malaysian students in Malaysia, and Ballaestero and Hilliard (2016) surveyed Latino/Latina students in America, it could be that cultural differences and demographics influence the differences found between the results in those studies and the results found in this study. In addition, Bathje et al. (2014) asked students to envision online counselling as video-based, which in a society known for discomfort with seeking help (Lee & Son, 2007 as cited in Bathje et al., 2014), this might have contributed to their less positive views of online counselling.

In terms of the subscales, students' sense of the value of online counselling was rated higher than previous research on online counselling attitudes (Bird et al., 2018; Lewis et al., 2015; Rochlen et al., 2004a). Students in this sample also rated online counselling discomfort slightly lower than in previous research (e.g. Bird et al., 2018; Lewis et al., 2015; Rochlen et al., 2004a). It could be that students are more familiar with the concept of online counselling as platforms such as BetterHelp gain popularity. Conversely, it could be that students attending university in Newfoundland are more open to online counselling than students attending university in the other countries where previous research took place. Further research on Canadian students' attitudes towards online counselling is needed for comparison.

Counselling Attitudes and Practical Barriers to Treatment

Overall, a small relationship was found between practical barriers to treatment and face-to-face counselling. This finding makes sense given the previous association between practical barriers and face-to-face counselling (Eisenberg et al., 2011; Robinson et al., 2016). Even if students were in distress, they were not likely to take advantage of their university counselling centre (Robinson et al., 2016). This could be that students do not believe that seeking counselling treatment is not as urgent a priority as other demands on their time such as school

work and social activities (Eisenberg et al., 2011; Robinson et al., 2006). They may also perceive counselling as time-consuming (Cornish et al., 2017; Robinson et al., 2006), and therefore have more negative attitudes towards face-to-face counselling.

There was no relationship between online counselling and practical barriers to treatment. Students who reported high practical barriers to treatment did not find online counselling to be more favourable, or more valuable. While a clear relationship exists between face-to-face counselling and practical barriers to treatment, it appears that students aren't sure if online counselling will meet their treatment needs. This could be due to the lack of online counselling services being offered at the university where this study took place.

Even if university counselling centres introduce online counselling to improve access; it does not necessarily mean students who face practical barriers to treatment will use these services. Perhaps students would prefer longer hours of operation at the university counselling centre for face-to-face therapy, rather than having them turn to the internet for treatment. It could be that students simply need to be educated about how online mental health services can remove barriers to treatment (Dunbar et al., 2018). Offering a trial period of online counselling at universities may provide useful feedback about the types of clientele interested in this distinct service.

Counselling Attitudes and Stigma

Previous research has found mixed findings on the relationship between stigma and online counselling attitudes (e.g. Ballesteros & Hilliard, 2016; Bird et al., 2018). The findings in this study have similarities and differences to both Ballesteros and Hilliard (2016) and Bird et al.'s (2018) findings. Ballesteros and Hilliard's (2016) findings were that online counselling had a significant but weak relationship with self-stigma. In addition, the researchers found face-to-

face counseling had a negative relationship with perceived stigma and self-stigma. Bird et al. (2018) found a relationship between self-stigma and face-to-face counselling. Particularly, reported self-stigma reduced value in face-to-face counselling and increased discomfort using face-to-face counselling. It did not influence value or discomfort with online counselling. Perceived stigma did not influence face-to-face counselling, but there was a positive relationship with online counselling value which indicated that those who felt publically stigmatized found more value in online counselling.

In the present study, face-to-face counselling attitudes were negatively impacted by self-stigma and perceived stigma from others. Yet, the only relationship found for online counselling attitudes was a negative relationship with perceived stigma from others. This would indicate that those who feel stigmatized by others do not have favorable attitudes towards either mode of delivery. Nevertheless, the relationship between online counselling and perceived stigma from others was much smaller in comparison to perceived stigma and face-to-face counselling.

The reasons why online counselling may be associated with perceived stigma from others could be influenced by the relationship that exists between perceived stigma from others and self-stigma (Bird et al., 2018; Vogel et al., 2007). If a personal internalizes stigmatic views from society (in this case, most likely other students, professors, and university staff), they are less likely to seek help for their mental health issues (Vogel et al., 2007). This could be true for online counselling as well, since students may feel that accessing it justifies societal negative views surrounding mental health issues. However, since self-stigma did not have a relationship with online counselling, we cannot conclude that this is the reason why students who perceived stigma from others have slightly negative views towards online counselling. Regardless, it

would appear that the introduction of online counselling may not necessarily increase treatment use for students who perceive stigma from others.

For a more comprehensive examination, the subscales were used to understand the relationship of stigma with students' sense of the value of or their discomfort with counselling. Face-to-face discomfort was associated with self-stigma and perceived stigma, and online counselling discomfort was associated with perceived stigma from others. The relationship between online counselling discomfort and perceived stigma from others was small, but it still indicates some discomfort with online counselling for those who feel publically stigmatized.

Lastly, the relationship between value in counselling and stigma was examined. While those who felt self-stigma and perceived stigma from others rated face-to-face counselling less favourably, no relationship existed between online counselling value and stigma. Therefore, that the negative relationship between perceived stigma from others and online counselling attitudes was not to do with its perceived value, but more to do with discomfort with its services. This could mean that introducing online counselling may not necessarily appeal to those who feel perceived stigma from others because they will still feel uncomfortable accessing these services. This is in contrast to Bird et al. (2018) who found that those who perceived stigma from others had more favourable attitudes towards online counselling value. In this sample, students simply did not perceive online counselling as more valuable based on feeling self or perceived stigma from others.

University counselling centres cannot assume that introducing online counselling will solve all problems associated with stigma and help-seeking. This study shows that students who feel stigmatized do not perceive online counselling as more valuable. They do, however, have clear negative attitudes towards face-to-face counselling. This is especially evident as they

associate less value and more discomfort with face-to-face counselling based on their reported stigma. Their neutrality towards online counselling may lie in the fact that most students do not have previous exposure with online counselling, therefore they cannot make judgements about how the service will influence their lives. Counselling centres could offer trial services to see if students who feel stigmatized find this mode of delivery to be more appealing once they are familiar with it.

Additional Findings

There are some other important findings that are note-worthy. For example, compared to Dunbar et al. (2018) who found that only 3% of students who have used online mental health services; 8.6% of students in this sample reported previous online mental health services usage. This finding could mean that as the year's progress, online mental health services will continue to grow and improve access for those with mental health issues. Currently, some Canadian universities offer the Stepped Care model 2.0 which is an example of this, as this service provides online access to mental health resources and services.

Another important finding was that many students faced obstacles to receiving treatment: 83% of students reported medium barriers to treatment, and 66% reported high barriers to treatment. This means that a large majority of this study do not feel they have adequate access to the counselling centre. To further understand this, the frequencies for each practical barrier was explored. Consistent with previous research (e.g. Robinson et al., 2016), some of the most significant barriers were costs and time. However, some students reported barriers related to travelling, and others reported that they did not know where to receive counselling services on campus. Counselling centres should provide outreach about where to access services, including

information about where to get counselling services for those who live off campus and far away from the university.

Another interesting finding was that many participants in this study reported feeling self and perceived stigma from others. Almost 76% of students experienced medium levels of perceived stigma from others, and 88.3% of students experienced medium to high levels of self-stigma. A strong relationship between perceived stigma and self-stigma indicates that these variables influenced one another, consistent with previous research (e.g. Bird et al., 2018; Vogel et al., 2007). However, the high level of stigma in this sample is alarming, and not consistent with previous research that explores this issue (e.g. Eisenberg, Speer, and Hunt, 2012; Lipson et al., 2019). For example, Lipson et al. (2019) found that 46% of students felt perceived stigma from others, and 5.7% of students felt personal stigma (self-stigma) in 2017. It could have been that the way stigma was measured in the current study (low, medium, high) might be the reason it differs from the results found by Lipson et al. (2019). Alternatively, it could be that students in Atlantic Canada differ from students located in universities across the United States. Given the results found in this study, it would seem that outreach aimed at decreasing stigma on campus would be the best way to increase access to treatment for students.

Strengths and Limitations

This study included a small sample (n=166) of students at a university located in Newfoundland, and may not be generalizable to students across other campuses in Canada. The incentive of a cash prize draw may have also led to participation bias (Creswell, 2015), although other studies on this topic also included cash prizes (e.g. Ballesteros & Hilliard, 2016). The study asked students to rate their opinions of online counselling as it encompasses chat, email, and videoconferencing; it is possible that students would have rated their attitudes differently if

they had the opportunity to rate their attitudes based on their individually preferred method. Lastly, this survey was only available online and therefore could have excluded those who had limited access to a computer or phone.

The online counselling and face-to-face counselling scales have not been updated since 2004. As many online new mental health platforms exist, this scale may not be suitable for students because they associate other mental health services with their ratings on the scale. While this study defined online counselling, it is unclear if participants envisioned online counselling as it was intended, or in ways which they are familiar. In agreement with Dunbar et al. (2018), future research should look at student attitudes towards different types of online mental health services. Since the university where the study takes place offers the Stepped Care model 2.0, it is possible that students confused online counselling with this service, and therefore rated their views based on their experiences with this model. Since this model is quite popular across campuses (Canadian Mental Health Alliance, [CMHA] 2019), further research should consider comparing students' experiences of this service with other online counselling modalities.

In agreement with Bird et al. (2018), the way self-stigma was measured in this study could have led to the non-significant relationship. Participants could have associated the wording of each item on the SSOSH measure with face-to-face counselling in mind and not online counselling (Bird et al., 2018). Bird et al. (2018) recommends the development of an online counselling self-stigma measure; however, it might be useful to make an additional online counselling measure for perceived stigma by others as well. Despite these limitations, there are strengths to this study. For example, this appears to be the first study in Canada that investigates, and compares, attitudes towards online and face-to-face counselling. In addition, this is the first

study of its kind that investigates the relationship between practical barriers to treatment and online counselling, using quantitative methods.

Future Directions

Students attitudes towards online counselling were favourable in this study, more so than previous research indicates (e.g. Bird et al., 2018; Rochlen et al., 2004a). Students rated online counselling as valuable and did not associate discomfort with its use. This suggests that online counselling could be an alternative service delivery to face-to-face counselling, or could be used in conjunction with more traditional methods.

However, as expected, students rated face-to-face counselling more favourably overall and more valuable. In addition, online counselling was not more valuable for those who reported barriers to treatment and/or feeling stigmatized. Therefore, while online counselling may appeal to some students, it should not be assumed that its delivery is a catalyst for increasing treatment usage with those who perceive treatment barriers and/or feel stigmatized accessing counselling services.

Participants in both and Fang et al. (2017) and Mishna et al.'s (2015) study reported that online counselling removed barriers to treatment, and allowed them to discuss embarrassing topics. However, in this sample, students did not make the association between online counselling and these variables. It's possible that these students cannot perceive these benefits since they've never tried online counselling. Future research should investigate this issue further to understand why students do not perceive these benefits prior to use. Conversely, it could be that these students associate online counselling with the current Stepped Care model 2.0 being offered at the university where the study took place, despite defining what online counselling encompasses to participants in this study. The Stepped Care model 2.0 does not include online

therapy and is quite distinct from service asked participants to envision in our study. This study asked students if they were received online mental health services before, but did not specify which services. Further research should distinguish these two services, and gain feedback about students' attitudes towards both modalities for comparison.

While online counselling may not remove barriers, the associated benefits found in previous studies (Marcelle et al., 2019; Navarro et al., 2019) and the favourable attitudes towards this service found in this study indicate that it can still be impactful for improving student mental health. It may also be useful for future studies to explore attitudes in other parts of Canada to see if differences exist based on regions. In addition, it would be interesting to see if attitudes differ among students who have a diagnosed mental health disorder. Lastly, there is a considerable amount of students who not only reported treatment barriers, but who also feel both medium to high levels of public stigma and self-stigma. It is unknown why this sample included such high ratings of these variables. These variables influenced students' attitudes towards face-to-face counselling more so than online counselling. It seems that university counselling centres need to focus on ways to decrease stigma on campus, as well as, increase access to face-to-face counselling services, rather than simply trying to solve the problem through introducing digital services.

CHAPTER 6: Conclusion

The purpose of this study was to investigate the attitudes towards online counselling among students attending university in Newfoundland. In addition, this study focused on how stigma and practical barriers to treatment influence attitudes towards counselling. The research questions were, “what are the attitudes students have toward online counselling in comparison to face-to-face counselling?”, “what is the relationship between practical barriers to treatment and attitudes towards online and face-to-face counselling?” and “what is the relationship between stigma and attitudes towards online counselling and face-to-face counselling?” These findings will be concluded below. The reason for studying online counselling attitudes was to understand if this mode of delivery would be a useful addition to current counselling services that could potentially assist students who face obstacles to getting help for their mental health issues.

Within a sample of 166 university students, attitudes towards online counselling were fairly positive. Still, the overall preference was for face-to-face counselling, which students found to be more valuable than online-based therapy. This could possibly be due participants unfamiliarly with online counselling, which makes it difficult to determine if they would or would not benefit from its services. Based on these findings, it may be beneficial for university counselling centres to offer a variety of services to appeal to students’ individual preferences for counselling modalities.

When examining the relationship between practical barriers to treatment and counselling attitudes; it was found that the more practical barriers one faced, the less favorable their attitudes towards face-to-face counselling. They also associated more discomfort with face-to-face counselling. No relationship existed between online counselling attitudes and students reported practical barriers to treatment. This could be due to students lack of familiarly with online

counselling, therefore they do not associate it with removing barriers. Conversely, students may want reduced barriers to treatment (e.g. longer hours at the counselling centre) and improved access to face-to-face counselling, instead of online counselling services. Based on these findings, students may not perceive online counselling as being a solution to meet their unmet treatment needs.

Students who felt perceived stigma from others, and self-stigma, had negative attitudes towards face-to-face counselling. However, for online counselling, only a small relationship existed with perceived stigma from others. As previously mentioned, students lack of familiarity with online counselling could explain why they did not have strong feelings towards this mode of delivery in light of their beliefs about mental health stigma (Ballesteros & Hilliard, 2016). Without experience using this mode of delivery, students cannot predict if they would feel less stigmatized using online counselling.

Lastly, this sample included a large number of participants who expressed feeling self and perceived stigma from others. The level of stigma was higher than found in previous research on mental health stigma (e.g. Eisenberg et al., 2012; Lipson et al., 2019). They also indicated high practical barriers to treatment. Future research should further explore stigma and practical barriers in the Atlantic Canadian student population and look for strategies to improve access to counselling services. The final conclusion drawn from this study is that students are open to online counselling services, but do not necessarily believe that these services will have impacts on their practical barriers to treatment or feelings of stigma. It is up to university counselling centres to have adequate outreach about the benefits associated with online counselling for reducing barriers to treatment.

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CHAPTER 8: Appendix

Appendix A: Ethics Approval



Interdisciplinary Committee on
Ethics in Human Research (ICEHR)

St. John's, NL, Canada A1C 5S7
Tel: 709 864-2561 icehr@mun.ca
www.mun.ca/research/ethics/humans/icehr

ICEHR Number:	20100206-ED
Approval Period:	June 12, 2019 – June 30, 2020
Funding Source:	Not Funded
Responsible Faculty:	Dr. Greg Harris Faculty of Education
Title of Project:	<i>Investigating factors that influence attitudes towards online counselling among university students</i>

June 12, 2019

Mrs. Lisa De Paola
Faculty of Education
Memorial University of Newfoundland

Dear Mrs. De Paola:

Thank you for your correspondence of June 5, 2019 addressing the issues raised by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) concerning the above-named research project. ICEHR has re-examined the proposal with the clarification and revisions submitted, and is satisfied that the concerns raised by the Committee have been adequately addressed. In accordance with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, the project has been granted *full ethics clearance* to June 30, 2020. ICEHR approval applies to the ethical acceptability of the research, as per Article 6.3 of the *TCPS2*. Researchers are responsible for adherence to any other relevant University policies and/or funded or non-funded agreements that may be associated with the project.

The *TCPS2* **requires** that you submit an Annual Update to ICEHR before June 30, 2020. If you plan to continue the project, you need to request renewal of your ethics clearance and include a brief summary on the progress of your research. When the project no longer involves contact with human participants, is completed and/or terminated, you are required to provide an annual update with a brief final summary and your file will be closed. If you need to make changes during the project which may raise ethical concerns, you must submit an Amendment Request with a description of these changes for the Committee's consideration prior to implementation. If funding is obtained subsequent to approval, you must submit a Funding and/or Partner Change Request to ICEHR before this clearance can be linked to your award.

All post-approval event forms noted above can be submitted from your Researcher Portal account by clicking the *Applications: Post-Review* link on your Portal homepage. We wish you success with your research.

Yours sincerely,

Kelly Blidook, Ph.D.
Vice-Chair, Interdisciplinary Committee on
Ethics in Human Research

KB/lw

cc: Supervisor – Dr. Greg Harris, Faculty of Education